

Kansas 4-H Rabbit Leader Notebook

 KANSAS 4-H

Rabbit LEADER NOTEBOOK

(LN-2)

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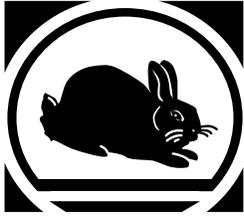


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KANSAS 4-H LEADERS NOTEBOOK

Introduction

This notebook is designed to help you as a 4-H rabbit leader do the best job that you can to make the rabbit project a fun, interesting, and valuable experience for the 4-H youth that you teach. The rabbit project is one of several projects within the Animal Sciences 4-H Curriculum Division. The rabbit project becomes the vehicle through which we can teach profitable rabbit production practices and necessary life skills to the youth who enroll. Other 4-H project areas such as meats, veterinary science, marketing, computer, health, and safety are incorporated where appropriate.

OBJECTIVES

The objectives of the rabbit project are as follows:

1. Learn and apply recommended principles of rabbit production.
2. Demonstrate a knowledge of sound breeding, feeding, and management practices.
3. Identify types and grades of animals and employ efficient marketing methods.
4. Develop integrity, sportsmanship, decision-making capability, and public speaking skills through participation in demonstrations, tours, judging, and/or exhibits.
5. Appreciate the value of rabbits in the scientific research.
6. Practice leadership skills and roles, take part in community affairs, and demonstrate citizenship responsibility.
7. Explore career, job and productive leisure opportunities.
8. Develop skills, knowledge and attitudes for lifelong use.
9. Learn to use accepted practices for mental, physical and emotional health, and to respect yourself and others.

MAJOR CONCEPTS

To help meet the above objectives, 10 general 4-H rabbit project concepts or topics were identified by the Rabbit Design Team. Each of the specific lesson plans falls under one of these major 10 concepts—Feeds and Feeding, Health Practices, Kindling Practices, Records and Recognition, Selection and Judging, Fitting and Showing, Management and Practices, Reproduction and Genetics, Meats/Marketing, and Careers.

LIFE SKILLS

Kansas 4-H life skills have been articulated to help define the youth development outcomes of our 4-H program. It is the goal of 4-H to develop youth who are contributing, productive members of society. Youth may achieve this goal when these five life skills are developed and applied.

1. Positive self-concept
2. Sound decision-making
3. Positive interpersonal relationships

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4. Desire for lifelong learning
 5. Concern for community

These five life skills are incorporated throughout the lesson plans and in the educational design of the project meetings. The “Dialogue for Critical Thinking” Section leads the group through the experiential learning process.

AGES AND STAGES

Leaders can best achieve these desired outcomes with their members when they have well-prepared leader material and understand how to structure a stimulating learning environment for the age of youth they are leading. We know and believe that each child is unique, yet we also know that there are generalities about certain age groups that help us program more effectively.

These lesson plans have been developed to target four general age groups:

- Level I—ages 7 and 8
- Level II—ages 9, 10, 11
- Level III—ages 12, 13, 14
- Level IV—ages 15 and older

A review about the physical, mental, social and emotional characteristics of these age groups will prepare the leader for a successful project experience. It should be understood by the leader that the levels are also based on corresponding skill levels of youth. Thus, a 12-year-old youth enrolling in rabbit for the first time should probably begin with lessons in Level I, and not take Level III until the member has mastered some basic knowledge and skills.

Ages 7 and 8

Physical growth can be described as slow and steady. Mastering physical skills is important to self-concept. This includes everything from printing with a pencil to large muscle skills like catching a ball. Activities need to be just that—active! Provide opportunities to practice skills, but use projects that can be completed successfully and quickly by beginners.

Typical second or third graders think in concrete terms. If they have never seen it, heard it, felt it, tasted it, or smelled it, they have a hard time thinking of it. Leaders should show and tell, rather than giving instructions verbally. Early elementary children are learning to sort things into categories. This makes collecting things important and fun at this age. Most are more interested in the “process”—what? why? how?—than in the resulting product.

As children move away from dependence on parents at this age, they need to transfer that dependence to another adult, so the leader may become very important in their eyes. Building friendships occurs easily and generally by the end of this period, boys prefer playing with boys and girls

with girls. Peer opinion now becomes very important. Small group activities are effective, but children still need an adult to share approval.

Seven and 8-year-olds need and seek the approval of adults, because they are not yet confident enough to set their own standards. Play or making believe is one way they increase their ability to imagine what other people think and feel. Rules and rituals are important, but it is very hard for children this age to lose. This is why success needs to be emphasized, even if it is small. Failures should be minimized. Cooperative games and activities are especially enjoyable. When an activity fails, the leader should help children interpret the reasons behind the failures, which teaches that failing is not always bad. Learning to cope with problems is a skill the 4-H leader can encourage for all members. **The usual practice of awarding competitive ribbons should be minimized or avoided for this age.**

Ages 9, 10, 11

Physically, most children at this age are in a holding pattern, although puberty may be starting for some very early-maturing girls. Activities should encourage physical involvement, because 9- to 11-year-olds are anything but still and quiet.

Hands-on involvement with objects is helpful. Children this age like field trips, but only if they are not expected to stay confined or to do one thing for a long period of time. Upper elementary children need opportunities to share their thoughts and reactions with others. They are still fairly concrete thinkers and will give more attention if they are seeing and doing things.

Children at this stage are beginning to think logically and symbolically and are beginning to understand abstract ideas. As they consider ideas, they think it is either right or wrong, great or disgusting, fun or boring. There is very little middle ground.

The role of the leader is most crucial at this stage, as these children look to the adult for approval and follow rules primarily out of respect for the adult. Individual evaluation by adults is preferable to group competition where only one can be the best. They want to know how much they have improved and what they should do to be better next time. Encouragement from an adult can have remarkable accomplishments.

This is the age of the “joiners.” They like to be in organized groups of others similar to themselves. If you have both boys and girls of this age in your project groups, you will do best if small group work is done in same-sex groups. They generally are concerned with immediate self-reward; however, the satisfaction of completing a project comes from pleasing the leader or parent rather than from the value of the activity itself.

Toward the end of this age range, children are ready to take responsibility for their own actions. Giving these youth opportunities to make decisions

should be encouraged. Leaders should move from dictating directions to giving reassurance and support for members' decisions.

Nine, 10- and 11-year-olds have a strong need to feel accepted and worthwhile. School and other pressures become demanding. Successes should continue to be emphasized. Comparison with the success of others is difficult for these children. It erodes self-confidence. Instead of comparing children with each other, build positive self-concepts by comparing present to past performance for the individual.

Ages 12, 13 and 14

This is a time of developmental variety among peers. Growth spurts beginning with adolescence occur at a wide range of ages, with girls maturing before boys. These rapid changes in physical appearance may make teens uncomfortable. Slower developing teens may also be uneasy about the lack of changes.

Young teens move from concrete to more abstract thinking. Playing with ideas is as much fun as playing sports. Ready-made solutions from adults often are rejected in favor of finding their own solutions. Leaders who provide supervision without interference will have a great influence on these youth.

Small groups provide the best opportunity for young teens to test ideas. Justice and equality become important issues. Judging of projects is now viewed in terms of what is fair, as well as a reflection of the self-worth of the individual.

These youth enjoy participating in activities away from home as they begin to develop independence. Opinions of peers become more important than opinions of parents or other adults. Close friendships begin to develop, and group experiences provide opportunity for social acceptance.

As puberty approaches, emotions begin a roller coaster ride. Young teens begin to test values and seek adults who are accepting and willing to talk about values and morals. This period seems to present the biggest challenge to a young person's self-concept. These youngsters face so many changes that they hardly know who they are. Adults can help by providing self-knowledge and self-discovery activities such as the "dialogue for critical thinking" portion of these lesson plans.

Continue to avoid comparing young people with each other, being careful not to embarrass them. They want to be a part of something important that provides opportunity to develop responsibility.

Ages 15, 16 and 17

Most teens of this age know their own abilities and talents. In most cases, they have adjusted to the many body changes by now. Many develop athletic talent and devote hours to training and competition. Learning to drive a car further moves the teen from family into the community as independent people.

Mid-teens begin to think about their future and make realistic plans. Their vocational goals influence the activities they select. Teens set goals based on feelings of personal need and priorities. **Any goals set by others are generally rejected.** As they master abstract thinking, they can imagine new things in ways that sometimes challenge adults.

These teens can initiate and carry out their own tasks without supervision. A leader can be helpful by arranging new experiences in areas of interest to teens, but must be sure to allow for plenty of input from them. Leader-member relations should change from director/follower to that of advisor/independent worker.

Mid-teens tend to be wrapped up in themselves. Relationship skills are usually well-developed. Dating increases and acceptance by members of the opposite sex is now of high importance. Sports and clubs are important, but these teens now want to be recognized as unique individuals within that group.

Two important emotional goals of the middle-teen years are independence and identity. Time is precious. If activities are perceived as busywork, teens soon will lose patience and interest. Middle teens are learning to cooperate with others on an adult level. They will pride themselves on increased ability to be responsible in the eyes of themselves, peers, and adults.

Ages 18 and 19

These young adults are completing their 4-H careers and moving on to college, jobs, marriage, and other adult responsibilities. If continuing involvement at the local level, they will be self-directed learners or assume adult leadership roles.

This information on child development has been taken from the North Central Regional Extension Publication No. 292, *Ages and Stages of Child and Youth Development: A Guide for 4-H Leaders*, written by Jeanne Karns, graduate assistant and Judith Myers-Walls, Extension Specialist, Human Development, Purdue University.

YOUTH AT RISK

Some child development specialists and educators have noted every child of the '90s is at "some risk" because of the complex social forces affecting our country since the early 1950s. In 1991, The National Commission on Children estimated that fully one-quarter of all children are "at severe risk" in relation to substance abuse, school failure, delinquency, etc., and another quarter are "moderately at risk." H. Stephen Glenn and Jane Nelsen document these changes in their book, *Raising Self-Reliant Children in a Self-Indulgent World*. Four major factors necessary for the development of capable young people have been identified that are generally missing from our culture—networks, meaningful roles, on-the-job training, and parenting resources. 4-H project meetings can help restore these vital missing pieces.

Glenn's definition of a network, in the simplest sense, defines the 4-H project meeting: "two or more individuals who engage in dialogue about the world and the life they are living and who occasionally collaborate to achieve some mutually desirable end." The dialog for critical thinking portion of these lesson plans directly address this definition.

Many youth today are growing up in families and communities without any significant role to play. They just don't seem needed until they become an adult. Research indicates that a primary cause of decline in motivation, discipline, and achievement is this perceived lack of need or value. Glenn and Nelsen challenge us to deal with youth actively in ways that affirm their contributions. **We must treat youth as contributors and assets rather than passive objects to be done for or to.** As 4-H project leaders, when we listen to members, we must take them seriously and treat them as significant, we will begin to restore the dialogue and collaboration necessary to link youth with the larger society.

On-the-job training with "hands-on" involvement has been the cornerstone of 4-H project work. It is important for youth to have this opportunity because that is where they learn patience, personal initiative, hard work, and deferred gratification. If they don't learn about real life in this way, they receive its impressions passively from the media, generally through five hours of television each day.

"Learning by doing" is one of the primary reasons why 4-H has been recognized in the field of informal education. If we, as parents or leaders, think we are helping when we do their work for them, we need to stop and consider that, "The best way to destroy self-esteem and a sense of worth in young people is to do too much for them. This robs them of a sense of personal capability. The greatest gift of all is to help them validate themselves as agents in their own lives." (Glenn and Nelsen, pg. 47)

Today's parents need all the help they can get. According to the Ewing Marion Kauffman Foundation report, *Reweaving the Tattered Web—Socializing and Enculturating our Children*, by Basil J. Whiting in June 1993, "Three generations and extended families in the same house are not so common. Grandparents and aunts and uncles live longer distances away, and often alone (only five percent of American children now see a grandparent regularly)... Divorce is common. Half of those who remarry will experience a second divorce. Half of all children will spend some of their childhood with a divorced parent." As a 4-H project leader, you become a parent resource, both to the child and the child's parent.

Today's parents are concerned and fearful for their children. Why? Dr. Bruce Baldwin, nationally known psychologist and author says, "They wonder if their kids have what it takes to succeed as they have. Parents know that in the future, even menial positions will require well-developed cognitive skills: reading, writing, math, computer literacy, and the ability to process information quickly and efficiently." (*TEAM, The Early Adolescence Magazine*, Vol. IV, No. 5, May-June 1990)

The same magazine noted that a large metropolitan education trust reported the types of requirements for employees comparing the past with the future:

| PAST | FUTURE |
|-------------------------------|--------------------------|
| Doers | Thinkers |
| Single repetitive functions | Quality circle approach |
| Individual piecework | Team centered |
| Autocratic | Participatory |
| Single job in lifetime | Flexible learners |
| Familiar with simple machines | Technology knowledgeable |
| Single task orientation | Information processors |

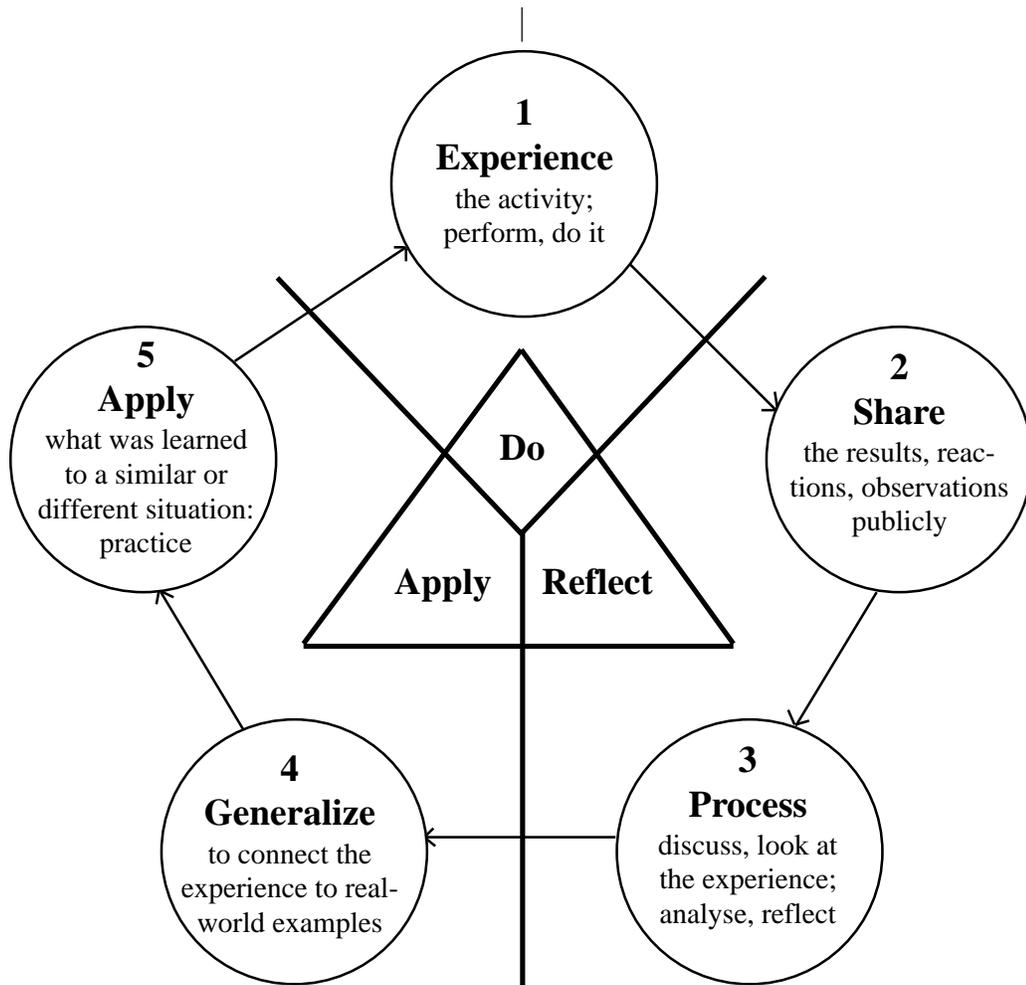
The January 1990, issue of *Prevention Forum* magazine offers hope for today's youth when it reports that research on youth who have become healthy adults in spite of adversity have had the opportunity, somewhere in their lives, to experience a caring, nurturing environment that encourages their active participation in problem-solving, decision-making, planning, goal-setting, and helping others in meaningful activities.

According to the Kauffman Foundation report, "child and youth development by natural osmosis is no longer an effective strategy. We can rely no longer on child development to occur as a natural by-product of family and community functioning because too many families and communities no longer function the way they used to.

This means reweaving the web to do what the family and community no longer do, and perhaps no longer can do adequately. It means constructing new institutions and new ways for children and youth to sustain relationships with a variety of caring adults.... Yet this must be supplementation, not replacement. We dare not leave out strands of parent-strengthening services in the many ways and places where traditional parenting is, at bottom, the still-to-be-preferred approach."

The project lesson plans contained in this leader's notebook have been designed to incorporate the components critical to the development of capable, contributing young people. By following these plans, leaders will help prepare their members to function and live productively in the world which they will soon inherit and direct. They are also designed to help you, as the leader, quickly and easily prepare for the lesson, conduct the activity, and facilitate the discussion and dialogue.

EXPERIENTIAL LEARNING MODEL



Example questions used to complete the Experiential Learning Model

A. Share—What Happened?

1. What did you do?
2. What happened? What did you see? Hear? Touch? Taste?
3. How did you feel?
4. How did it feel to . . . ?
5. What was most difficult? Easiest?

C. Generalize—So What?

1. What did you learn about yourself through this activity?
2. What did you learn about a life skill?
3. How do the major themes or ideas relate to real life and not just the activity?
4. How did you go about making your decision?

B. Process—What's Important?

1. What problems or issues seemed to occur over and over?
2. What similar experiences have you had?
3. What was most important?
4. Why was that significant?
5. Why do you think it happened?

D. Apply—Now What?

1. How can you apply what you learned (life skill) to a new situation?
2. How will the issues raised by this activity be useful in the future?
3. How will you act differently in the future as a result of this activity?
4. How can you do it differently for different results?

APPLYING THE EXPERIENTIAL LEARNING PROCESS

Hands-on involvement (learning by doing) is the most effective method for learning this material. It helps youth learn personal initiative, hard work, patience and deferred gratification. By doing the work for the youth, parents, teachers and leaders may destroy the young person's self-esteem and sense of worth. They may rob youth of learning by trial and error, practicing skills and becoming competent and capable. The greatest gift leaders can give is to help youth validate themselves as capable people. These lessons were designed using a model known as the *experiential learning process* which was adopted as the national curriculum development model for Extension Youth Development in 1992.

Experiential learning takes place when a person is involved in an activity, looks back and evaluates it, determines what was useful or important to remember, and uses this information to perform another activity.

The Experiential Learning process encourages youth involvement through dialogue and strengthens adult-child relationships. To enhance the goal of learning; an atmosphere of friendliness, trust, and unconditional acceptance is required.

In each lesson, the "Dialogue for Critical Thinking" questions help complete the experiential learning steps. Except for the content review questions, most of these leading questions do not have a "right" or "wrong" answer. In addition to providing feedback to the leader, their purpose is to affirm and validate the perceptions of the members.

Take time to begin to feel comfortable with this process. It may seem awkward at first, but remember, Latin for "to teach" means to draw forth through dialogue and understanding. When the Experiential Learning process is used to help youth share the process of discovery, leaders will be developing them as critical thinkers, concerned for others, with the wisdom to function successfully in their future world.

FORMAT OF KANSAS 4-H RABBIT PROJECT

Each lesson plan in this notebook follows the same general outline which includes:

TITLE generally descriptive of the rabbit skill to be learned.

LEVEL describes which age level it is written for.

What Members Will Learn . . .

ABOUT THE PROJECT indicates what rabbit subject matter will be learned.

ABOUT THEMSELVES indicates what personal or life skills will be learned. These specific objectives can be used to evaluate if the lesson was successful and learning goals accomplished by the members.

MATERIALS NEEDED tells the leader what equipment, supplies, visuals or handouts will be needed in preparation for the lesson.

ACTIVITY TIME NEEDED gives the approximate time needed to complete the activity. Most lessons can be completed in 30 to 60 minutes.

ACTIVITY information is what the leader needs to know to teach the activity. This portion can be used as a leader's script for the leader if necessary.

LEADER NOTES give directions or instructions for the leader which go with the "Activity" information. Space is available for leaders to write their own notes also. Member activity sheets or handouts are provided for the leader to copy and give to members to work on at the meeting or take home so parents can reinforce the learning.

DIALOGUE FOR CRITICAL THINKING questions are provided for the leader to help enhance life skill development and generalize the subject information to the real world of the youth participant.

GOING FURTHER ideas such as tours, demonstrations, handouts, and things to do at home, are for the leader and members to consider if they want to learn more about this particular lesson content.

REFERENCES credit the source used to develop this lesson activity in addition to the author.

AUTHOR is the source of information plus names of Kansas State University faculty who reviewed and adapted this lesson including specific ideas from volunteers.

The rabbit project is one of several Kansas 4-H projects to undergo a major change in the way the project materials have been designed and used. Leaders need to realize that members will no longer receive member resource books or materials through the County Extension Office. Members will receive a "Rabbit Member Guide and Annual Report" which describes the concepts to be learned, suggests where they can find more information, provides space for beginning goals and ending evaluations, and a year-end rabbit summary record. All other printed materials for members will be given to them by their rabbit project leader.

In order for members to have a successful project experience, it is **imperative** that a leader meet with members. These lessons work best with an adult and/or teen leader working with a small group of members. Several youth in the group will stimulate the discussion and dialogue, which is so important to the success of this process. If members are unable to meet in a group, the parent may serve as a leader to his/her child by requesting copies of the appropriate lesson plans from the Extension office and completing them at home.

The rabbit project has been restructured to feature a series of sequential learning experiences based on members' age and skill level, which will challenge them with new skills each year they remain in the project. Our goal is to make them knowledgeable of the entire rabbit industry rather than specialize in one type of project exhibit. In fact, owning an animal and exhibiting at a show need not be required. It is possible for a member to participate in the group lessons without owning an animal. Owning, caring for, and exhibiting an animal should be considered a special bonus to the total project experience.

The project exhibit should be decided by the member, parent and leader, based on member's age, skill level, facility and financial needs, and what local exhibit opportunities have been identified. Most counties provide county fair classes for meat pens and breeding classes for does and bucks. Others may have fur classes. This approach to the rabbit materials provides maximum flexibility for counties to establish exhibits that meet the needs of their rabbit members. Rabbit shows across the state offer all three of these exhibit opportunities.

Ideally, members should progress through all levels in order, but it is not necessary. If project members vary in age and skill levels and the group is large enough, splitting into like age groups with additional leaders is recommended. Older members might be used as assistant leaders with beginning levels which then allows teens to be self-directed learners for advanced skills, or teens might meet together as a multi-club or county-wide group.

ROLE OF THE 4-H PROJECT LEADER

Your major roles are that of teacher, facilitator and encourager.

Your Role as Teacher:

- Help members set goals.
- Share your knowledge of the project through meetings, tours and home visits. Having five to 10 meetings works well. Set meeting dates and times with the participants. Remind participants of upcoming meetings.
- Invite and involve parents and other leaders when appropriate.
- Keep your skills current through trainings, consultations, and reading. Ask for help or advice as needed.

Your Role as Facilitator:

- Use techniques to facilitate (assist) learning. See "Teaching with Discussion."
- Be sensitive and respond to individuals' needs, beliefs and family circumstances. Do not judge.
- Help members find additional learning opportunities and resources. (Using "Going Further" in the lessons.)
- Relate project to everyday life and career possibilities.

Your Role as Encourager:

- Recognize the personal growth of members and help them celebrate their successes.
- Lead (not push) participants into new skills and new ways of thinking. Encourage and challenge them to become better persons, yet always accept them and love them as they are now.

Your classroom is wherever the member must be in order to learn—in the home, meeting room, or on a field trip. Your subject matter, what you teach, is rabbit and youth development.

TEACHING WITH DISCUSSION

Why Use Discussion?

Discussion is part of every lesson. Discussion questions appear in the “Dialogue for Critical Thinking” section. Discussion is most effective when you want to:

1. Give participants practice thinking in terms of the subject matter.
2. Help participants evaluate their beliefs.
3. Stimulate participants to apply principles.
4. Help participants learn to anticipate or solve problems.
5. Use the resources of the group members.
6. Gain acceptance of new information.
7. Develop motivation for further learning.
8. Get feedback on how well participants learned the material.

How Can I Get People to Talk?

Discussion can be difficult at first simply because few participate. Sometimes, all that is necessary to improve the situation is time, your smiles and encouragement, and practice. Many participants are used to being talked **at**, not **with** in educational situations. The fear of being embarrassed is another major factor. Not knowing the other participants, being unsure of one’s idea, being afraid of sounding silly—these make participants feel that the safest thing to do is remain silent.

How Can I Help Them Overcome Their Fear?

The first step is making sure participants become acquainted with each other and with you. Begin by having get-acquainted activities at the organizational meeting. Continue by providing games, refreshments, time to talk, and other opportunities for friendship building throughout the project meeting period. Get to know each participant personally. Take a special interest in them; they will come to trust you.

When asking a question, call on participants by name. This seems to promote freer communication.

Sitting in a circle also encourages exchange.

Eliminate the fear of being wrong. (This is a tremendous barrier to discussion.) Avoid questions where there is only one right answer. Do not judge participants’ answers about beliefs and preferences. Do not allow any participant to make unkind comments about another’s answer.

At times, give participants opportunities to talk in small groups to work out answers together. If your group seems to have difficulty responding to questions, allow them to write out their answers first. This seems to give them added confidence to share their thoughts with others. As much as possible, ask questions that can have no wrong answers: How do you feel about this? What do you think?

What if Someone Talks Too Much?

There are several effective ways to work with a person who monopolizes the discussion. You might ask this person and at least one other to observe the discussion and report their observations to the group; for example: Did we solve the problem? Did everyone get a chance to participate? Another option is to divide into smaller discussion groups. Ask one person from each group to report the results of the discussion. Do not choose the monopolizer to report. You also could talk to this person privately. Explain that you appreciate the participation and insights, but you believe other people also should be given the opportunity to learn how to talk in a group. Ask this participant to help the group by allowing others more time for discussion and perhaps saving personal insights for more difficult questions.

Reference: *Teaching Tips* by Wilbert J. McKeachie (1986)

THE FIRST MEETING OF THE YEAR

The first meeting is usually an organizational one to plan for the project year. It is a good idea to have parents attend this first meeting with the members. Parents should be encouraged to take part in any or all activities.

As members arrive, plan something for them to do. Perhaps a teen leader can be prepared with a get-acquainted game or activity. Make sure every member knows everyone else. Do not assume this is the case. Taking time now to build group trust will have payoffs later in commitment, discipline and encouraging discussion. Share some of the broad objectives you have for the rabbit project. Set dates with members and parents for future meetings. Schedule any demonstrations with members and discuss other special activities for the entire year. Discuss your expectations for recovering costs of materials, copying, etc.

Young people deserve to be treated as contributors and assets instead of passive objects to be done for or to. Your job is to involve your participants and challenge them toward learning and personal growth. They should be involved in the planning and preparation of meetings. A map helps to give us direction, keep us on track and know when we've reached our destination. We've designed a MAP—Member Achievement Plan—to help you and your 4-H members plan, as a group and as individuals, what they want to learn, make and do in this project. This is called goal-setting. It also teaches decision making.

Ask members to bring their Rabbit Member Guide and Annual Report to the first meeting along with pocket folder or binder to put it in. They will use it to begin to develop their “MAP” by completing Steps 1-7. The leader and project group decide on four to six lessons they would like to learn about. Provide members a list of lesson titles from the appropriate level and let them choose. There should be plenty of choices to choose from different topics within the same Level if the same members enroll next year. As members get older, it is appropriate for them to choose less from a given list and become skilled at identifying and writing their own learning goals.

Goals may be divided into two groups: short-term and long-term. Short-term goals can be accomplished during the project year, while long-term goals take one or more years. Members will need to work with both types; however, a base for success and confidence will be established quickly with short-term goals.

Short-term goals:

- Must be specific and attainable
- Have a measurable outcome
- Specify time of completion
- Often related to long-term goals

Examples:

- A. By the end of the summer, I will know how to do rabbit showmanship.
- B. By May 1, I will know how to carry a rabbit without getting scratched.

Long-term goals:

- Must be believable
- Give direction and motivation
- Describe conditions one hopes to achieve

Examples:

- A. To be the champion rabbit showperson at the county fair.
- B. To expand my rabbitry to include five different breeds.

It is easy for a member to list long-term goals. If your members tend to think of only long-term goals, simply ask them, “What will you need to learn or do in order to accomplish this goal? How will you make this happen?” Answering these questions will provide many short-term goals. As a leader, you are aware of many of your member’s capabilities. You can help identify which goals are realistic for this year and which might have to become long-term goals.

After setting goals, review them periodically with members to see what progress is being made or what needs to be altered to reflect current situations. Hearing genuine praise or concern from interested adults is essential in helping members obtain their goals.

Explain other parts of the Member Guide and Annual Report as necessary. Discuss expectation of members and parents. Complete a short lesson activity from the appropriate level.

MAP STEP 1

At the project meeting, or at home with their family, members identify two things they would like to learn in their rabbit project this year.

MAP STEP 2

List three to five steps that will help you complete your first goal.

MAP STEP 3

List a date or deadline that shows when you plan to complete each step toward your goal.

MAP STEP 4

As you complete a step or meet a deadline, give yourself a boost, energizer or reinforcer for your success.

MAP STEP 5

List one energizer for each step accomplished toward a goal. After finishing a step, record the “date completed.”

MAP STEP 6

Repeat Map Steps 2 through 5 for your second goal.

MAP STEP 7

Share with a project friend what you have planned. Talking helps generate new ideas to improve your plans. After explaining your goals ask your friend to sign your plan as well as your leader. This will help confirm your plans and be a source for assistance.

MAP STEP 9

Take notes in the journal to help remember your project experiences. Tell what you did, what you learned, and how you felt about each project activity (meeting, trip, demo, etc.). Note: Leader may want to keep journals and plan for each member to make an entry as part of each activity.

MAP STEP 9

At the end of the year take time to reflect with your project friend and leader. Record your thoughts and ideas. How did the goals work? What was learned? What needs to be accomplished next? Members may not have accomplished what they set out to do, but they may have learned many things in the process. Setting a goal to reach a partial number of total goals isn't a bad idea, since it enables the younger member to feel successful.

The member and the leader, or in the case of the parent leader, the member and the parent, should complete Step 7 of the MAP as soon as the member has completed his/her short-term plans. All members who complete this step should be given immediate recognition for their project goal-planning accomplishments. Kansas 4-H has created a new recogni-

tion system for recognizing 4-H members for reaching annual project goals. Check with your County Extension Agent to see if this special recognition is offered in your county.

When properly used, incentives can be an effective way to encourage good project work and enhance personal development of the members. One of the strongest human incentives is that inner feeling of accomplishment and achievement.

Public recognition in news articles or at meetings, a word of encouragement or pat on the back from leaders are also effective in promoting desirable performance.

Group recognition should be used at the end of the project to recognize the accomplishments of each member who completed the project, attended a certain number of meetings, demonstrated certain acquired skills, etc. Recognize not only the member who might have won the championship, but use your imagination to recognize the most improved showperson, best caretaker, best records, most improved rabbit judge.

REFERENCES

Portions of this introduction section have been adapted from the *Beef Cattle Leader Guide* published by the Texas Agricultural Extension Service, and from *Celebration!*, Nebraska Cooperative Extension Service, 4-H publication 262.

Reweaving the Tattered Web—Socializing and Enculturating our Children, by Basil J. Whiting, is published by Ewing Marion Kauffman Foundation, 4900 Oak, Kansas City, MO 64112-2776.

Raising Self-Reliant Children in a Self-Indulgent World, by H. Stephen Glenn and Jane Nelsen, Ed. D., is published by Prima Publishing and Communications, P.O. Box 1260SR, Rocklin, CA 95677, (916) 624-5718, and can be ordered from St. Martin's Press, 175 Fifth Avenue, New York, NY 10010 (212) 674-5151.

A video presentation by Stephen Glenn, which summarizes much of *Raising Self-Reliant Children in a Self-Indulgent World*, can be requested through your county Extension office. Ask for the video, *Developing Capable Young People*, available from Kansas State University, Department of Communications, Production Services/Instructional Media.

PLANNING HELPS

The following forms may be used by the leader to help in planning for their rabbit project experience.

- Project Member Enrollment Record
- Project Leader Meeting Record
- List of Members and Their Goals
- Volunteer Support Form
- Project Meeting Checklist



**Cooperative Extension Service
Kansas State University
Manhattan, Kansas**

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PROJECT LEADER MEETING RECORD

| name of project | | phase(s) | | | | | | | | | | project leader | |
|-----------------|-------|--------------------------------|---|---|---|---|---|---|---|--|--|-------------------------------|-------|
| PROJECT MEMBERS | | ATTENDANCE AT PROJECT MEETINGS | | | | | | | | | | PRESENTATIONS MADE BY MEMBERS | |
| Name | Phone | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | Demonstrations | Talks |
| 1. | | | | | | | | | | | | | |
| 2. | | | | | | | | | | | | | |
| 3. | | | | | | | | | | | | | |
| 4. | | | | | | | | | | | | | |
| 5. | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | |
| 11. | | | | | | | | | | | | | |
| 12. | | | | | | | | | | | | | |
| 13. | | | | | | | | | | | | | |
| 14. | | | | | | | | | | | | | |
| 15. | | | | | | | | | | | | | |
| 16. | | | | | | | | | | | | | |
| 17. | | | | | | | | | | | | | |
| 18. | | | | | | | | | | | | | |
| 19. | | | | | | | | | | | | | |
| 20. | | | | | | | | | | | | | |

LIST OF MEMBERS AND THEIR GOALS

1. **NAME:** _____

Plans or wants to do: _____

Assistance, resources, or materials needed: _____

2. **NAME:** _____

Plans or wants to do: _____

Assistance, resources, or materials needed: _____

3. **NAME:** _____

Plans or wants to do: _____

Assistance, resources, or materials needed: _____

4. **NAME:** _____

Plans or wants to do: _____

Assistance, resources, or materials needed: _____

5. **NAME:** _____

Plans or wants to do: _____

Assistance, resources, or materials needed: _____

6. **NAME:** _____

Plans or wants to do: _____

Assistance, resources, or materials needed: _____

7. **NAME:** _____

Plans or wants to do: _____

Assistance, resources, or materials needed: _____

VOLUNTEER SUPPORT FORM

Volunteer I name _____

Volunteer II name _____

Address _____

City _____ Home phone _____

Volunteer I occupation _____ Business phone _____

Volunteer II occupation _____ Business phone _____

Other volunteer obligations _____

I would be willing to assist the 4-H program by:

Volunteer I Volunteer II

- | | | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Helping members with demonstrations. |
| <input type="checkbox"/> | <input type="checkbox"/> | Helping members with project talks or public speaking. |
| <input type="checkbox"/> | <input type="checkbox"/> | Helping provide transportation to project meetings. |
| <input type="checkbox"/> | <input type="checkbox"/> | Assisting members with project records. |
| <input type="checkbox"/> | <input type="checkbox"/> | Helping provide transportation for project tours or field trips. |
| <input type="checkbox"/> | <input type="checkbox"/> | Assisting with project meetings when needed. Special skills I have: _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | Help bring refreshments. |
| <input type="checkbox"/> | <input type="checkbox"/> | Developing a "calling tree" for meeting reminders. |
| <input type="checkbox"/> | <input type="checkbox"/> | Making my home available for a project meeting if needed. |
| <input type="checkbox"/> | <input type="checkbox"/> | Helping provide special supplies if needed. |
| <input type="checkbox"/> | <input type="checkbox"/> | Others, please explain: _____ |

PROJECT MEETING CHECKLIST

A MEETING EVALUATION INSTRUMENT

After your project meeting, take a few minutes to consider each of the following questions. This checklist should also serve as a reminder of ideas to incorporate in future project meetings.

| | MEETINGS HELD | | | | | |
|---|---------------|-----|-----|-----|-----|-----|
| | 1st | 2nd | 3rd | 4th | 5th | 6th |
| 1. Were the objectives of the meeting clear to members? | | | | | | |
| 2. Did I give each member a chance to actively participate? (sharing ideas, assisting, presentations) | | | | | | |
| 3. Did I commend or encourage each youth in some way? | | | | | | |
| 4. Did I plan for differences in ages, abilities, and interests of members? | | | | | | |
| 5. Did I observe progress of individual members? | | | | | | |
| 6. Did I involve other volunteers in some way? (planning, leadership assistance, transportation, refreshments) | | | | | | |
| 7. Did I give members a chance to assume responsibility when it was appropriate? | | | | | | |
| 8. Did I incorporate some fun activity or game into the project meeting? | | | | | | |
| 9. Did I summarize the new information shared and skills learned at the close of the meeting? | | | | | | |
| 10. Most of all, did I enjoy working with the young people involved? | | | | | | |

**Seven or more positive responses denotes an excellent meeting rating!*

NOTES:



RABBIT MEMBER GUIDE AND ANNUAL REPORT

Welcome to the 4-H Rabbit Project! The purpose of this Rabbit Member Guide and Annual Report is to help you journey through your Rabbit Project. This guide will:

- Identify how to set goals on things to learn and begin your rabbit project,
- Identify 4-H learning opportunities,
- Identify 4-H recognition system,
- Provide you with an annual summary for your Kansas 4-H Rabbit Project.

EXAMPLES OF GOALS ON THINGS TO LEARN

- Level I - Identify 10 parts of a rabbit
- How to show a rabbit
- Level II - How to make a nest box
- How to judge rabbits
- Level III - How to give medicines
- How rabbits digest their food
- Level IV - How to conduct a skillathon
- How to balance a ration

In addition, there is a note to your parents/guardian at the bottom of this page, so that they can help you with your rabbit project.

LEARNING OPPORTUNITIES IN 4-H

- Attending project meetings with your friends
- Learn record keeping skills
- Giving rabbit presentations at club and county 4-H Days, State Fair, school or civic groups
- Attending judging clinics and contests to observe, evaluate and make decisions
- Exhibiting at local, county, state or at American Rabbit Breeders Association (ARBA) sanctioned shows.

4-H RECOGNITION SYSTEM

4-H's Recognition System is diverse and provides you with many learning opportunities:

- Participation: attending project meetings, helping others at project meetings, show and share at State Fair
- Progress toward goals: meeting deadline you set on MAP sheet (see page 2)
- Standards of excellence: meeting a high percentage of learning goals for each level of the project
- Peer competition: judging and showmanship contests at rabbit shows and fairs
- Team/cooperative efforts: community service activities

NOTES TO PARENTS/GUARDIANS:

The Rabbit Project is one of several projects in the Animal Sciences Division of Kansas 4-H projects. It is an ideal project for both rural and urban youth, as well as all age groups. Rabbits are a good beginning project because they adapt to many different environments, require minimal investment and teach responsibility.

If your youth does not have a group leader, check with your Extension Office to see if your youth can participate in a neighboring club. If this is not available, you will need to act as the leader or helper. The Extension Office has a copy of the "Rabbit Leader's Notebook" that you may wish to use.

Insert all member handouts and activity sheets in the 4-H Record Book after this Rabbit Member Guide and Annual Report. These "records" are a recording of what was done. List costs, hours spent, etc. on your journal page created in MAP STEP 8. Financial and performance records may be found in: Level II pages 27 to 30; Level III pages 51 to 62 and 95 to 98; Level IV pages 51 to 60. Using records before the youth is capable of understanding the concept or doing the math computations is strongly discouraged!

HOW TO SET GOALS AND BEGIN YOUR RABBIT PROJECT USING THE MEMBER ACHIEVEMENT PLAN—MAP

This is your **Member Achievement Plan—MAP**. This plan will help you begin to decide what goals, deadlines, and energizers you want to use for the upcoming year.

MAP STEP 1

Identify as goals two things you would like to learn this year. Your leader will give you a list that might help you think about what you want to learn in your rabbit project.

Goal 1: _____

Goal 2: _____

MAP STEP 2

After you identify each goal, let's break them into steps. You can list 3 to 5 steps for each one of your goals.

| Steps for Goal 1: | MAP STEP 3 Deadline | MAP STEP 4 Energizer | MAP STEP 5 Date Completed |
|-------------------|------------------------|-------------------------|------------------------------|
| 1st _____ | _____ | _____ | _____ |
| 2nd _____ | _____ | _____ | _____ |
| 3rd _____ | _____ | _____ | _____ |
| 4th _____ | _____ | _____ | _____ |
| 5th _____ | _____ | _____ | _____ |

MAP STEP 3

Now that you've put Goal 1 into steps, go back and put a deadline next to each step. The deadline shows when you plan to complete the step. Every step should have a different deadline or date.

MAP STEP 4

Sometimes goals are hard to stick to. It takes a long time to see results. So as you complete a step and meet a deadline you need to give yourself a boost. Let's call this boost an energizer or reinforcer. An energizer can be anything that you like and enjoy: going to a movie with a friend, talking on the phone, listening to a CD, taking your dog for a walk, eating a healthy snack, playing ball, etc.

What are other things that you might use as energizers? List them here: _____

Now, place one energizer for each step under the column marked, "Energizer."

MAP STEP 5

When you've finished a step in your goal, place the date completed in the column marked, "Date Completed."

MAP STEP 6

Now that you've identified your steps, deadlines, and energizers, do the same for Goal 2.

| Steps for Goal 2: | MAP STEP 3 Deadline | MAP STEP 4 Energizer | MAP STEP 5 Date Completed |
|-------------------|------------------------|-------------------------|------------------------------|
| 1st _____ | _____ | _____ | _____ |
| 2nd _____ | _____ | _____ | _____ |
| 3rd _____ | _____ | _____ | _____ |
| 4th _____ | _____ | _____ | _____ |
| 5th _____ | _____ | _____ | _____ |

MAP STEP 7

Your goals, steps, deadlines, and energizers are written. It's time to share with one of your project members. When we talk to others about our goals, it helps us get a better idea of what we are going to do. Sometimes talking will help us get a better idea, so don't worry about changing any part of your MAP if you want to. After you've explained your goal to a project friend, have them sign and date it in the space provided below.

Project Friend's Signature _____ Date _____

Have your project leader sign below:

Project Leader's Signature _____ Date _____

MAP STEP 8

Keep a journal of everything you do in the project to help you remember these experiences. (Create a page with these headings and add it to this record.)

| Date | What you did, learned, how you felt, costs, time spent, etc. |
|-----------|--|
| Ex. Nov 5 | Attended a project meeting and learned parts of a rabbit. Now I know why a rabbit hops instead of walks. |
| Dec. 6 | Spent 5 hours building a nest box at a cost of \$10. |

MAP STEP 9

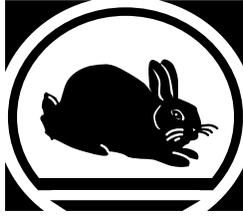
You've spent a whole year on your rabbit project. You should have learned many new things. Take some time to think back and review your journal (STEP 8). Write one or two main things you learned about rabbits. What is something you learned about yourself while studying rabbits? (Add a page if you need more space.)



Kansas 4-H Rabbit Leader Notebook

Level I

| | |
|--|----|
| Identifying Parts of a Rabbit | 3 |
| Identifying Breeds of Rabbits | 11 |
| Beginning to Set Goals in Your Rabbit Project | 13 |
| Handling a Rabbit | 17 |
| Selecting Your Project Rabbit | 19 |
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| Caring for Rabbits During Extreme Weather—Hot/Cold | 35 |
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| Preparing for a Rabbit Show | 41 |
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| Weaning the Rabbit Litter | 69 |
| Giving a 4-H Presentation | 71 |



Identifying Parts of a Rabbit

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to identify body parts of the rabbit

ABOUT THEMSELVES:

- Importance of understanding their preferred learning style

Materials Needed:

- Activity Sheet 1, Rabbit Parts Match
- Leader's Key, Activity Sheet 1, Rabbits Part Match
- Live rabbit (optional)
- Rabbit parts poster and labels (Copy before using)

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Let us see how well you know parts of a rabbit.

Can you identify the parts of a rabbit?

Parts of a Rabbit—Definitions — Key for Leaders

BELLY—The lower part of the body—abdomen. From the bottom of the last rib to the pelvis. Contains the intestines.

CHEST—The front portion of the body between the forelegs and neck—the breast.

CHEEKS—The sides of the face below the eyes.

FOREHEAD—The front part of the head between the eyes and the base of the ears.

HIND (Rear) LEG—Consists of the foot, hock, stifle (knee), and hip joint; the portion behind the attachment of the hind leg to the pelvis.

HINDQUARTERS—The rear portion or section of the body; composed of the loin, hips, hind legs and rump. From the last rib posterior.

HIP—The joint that attaches the hind legs to the trunk of the body.

HOCK—The joint in rabbits that corresponds to the ankle in humans. The joint below the stifle.

Leader Notes

If this is the first meeting, it will be important to help the group get to know each other better. Have members divide into pairs. Have them introduce each other to the total group by telling these three things about their partner: name, school, and why they are interested in rabbits.

Divide the group into teams. Using the large picture of a rabbit, point out the various parts. See which team can give the correct answer.

Give each member Activity Sheet 1, Rabbit Parts Match. Ask the members to match the parts of a rabbit.

Use the live rabbit, if available, to show parts.

Leader Notes

KNEE—The second joint of the hind leg—connects the thigh to the leg. Also known as the stifle.

LOIN—The portion of the back on each side of the vertebrae from the last rib posterior to the hip joint.

NECK—The part of the rabbit connecting the head to the body.

NOSTRILS—The two openings of the nose leading to the internal structures of the head.

RIBS—The curved portions of the sides immediately back and under the shoulders and above the belly.

RUMP—The upper, rounded part of the hindquarters.

SHOULDERS—The upper joint of the foreleg, connecting it to the body.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What parts of the rabbit are biggest? Smallest?
2. What parts of the rabbit are easiest to identify? Hardest to identify?

Process:

3. How many of the rabbit's parts can you remember?
4. Why is it important to know the rabbit's parts?
5. What rabbit parts have distinct shapes?
6. How does the shape of a rabbit's part change as it gets older?

Generalize:

7. How do shapes help you identify other non-animal objects? (Example: stop signs, etc.)

Apply:

8. Did you prefer the game or the matching activity? Why?

GOING FURTHER:

- Attend a Rabbit Show

REFERENCES:

American Rabbit Breeders Association (ARBA) Standard of Perfection,
Box 426, Bloomington, Illinois 61702

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P.
Adams, Extension Specialist, 4-H Youth Programs, Kansas State
University

Reviewed by:

Rabbit Design Team



Cooperative Extension Service
Kansas State University
Manhattan

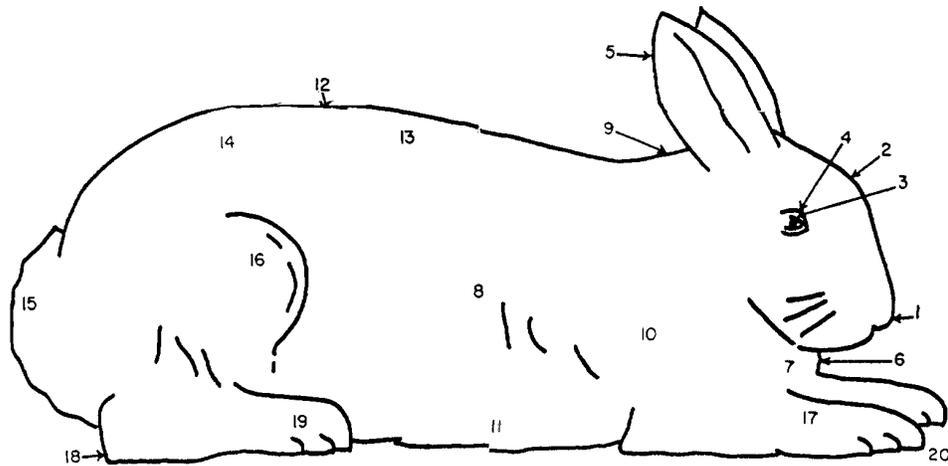
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IDENTIFYING PARTS OF A RABBIT

RABBITS, LEVEL I

Activity Sheet 1, Rabbit Parts Match

Draw a line from each term to the correct number on the rabbit outline or write the correct number beside each term.



Hock

Knee

Tail

Rump

Loin

Saddle

Belly

Foreleg

Foot

Nose

Forehead

Eye

Eye Circle

Ear

Dewlap

Breast

Body

Neck

Shoulder

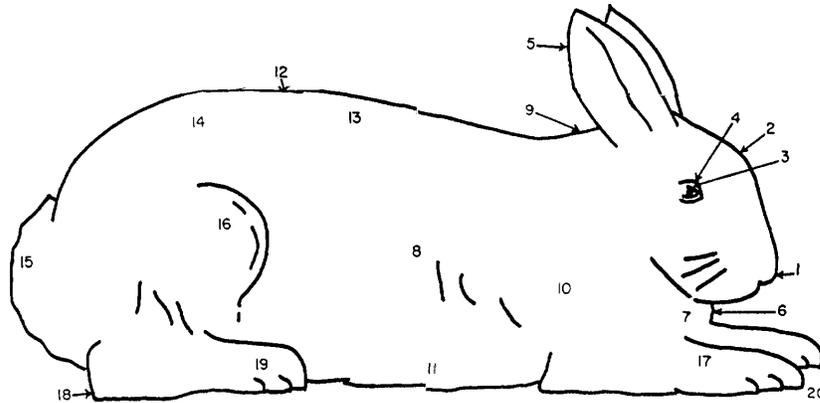
Toes

IDENTIFYING PARTS OF A RABBIT

RABBITS, LEVEL I

Leader's Key, Activity Sheet 1, Rabbit Parts Match

Draw a line from each term to the correct number on the rabbit outline or write the correct number beside each term.



Hock
Knee
Tail
Rump
Loin
Saddle
Belly
Foreleg
Foot

Nose
Forehead
Eye
Eye Circle
Ear
Dewlap
Breast
Body
Neck
Shoulder
Toes

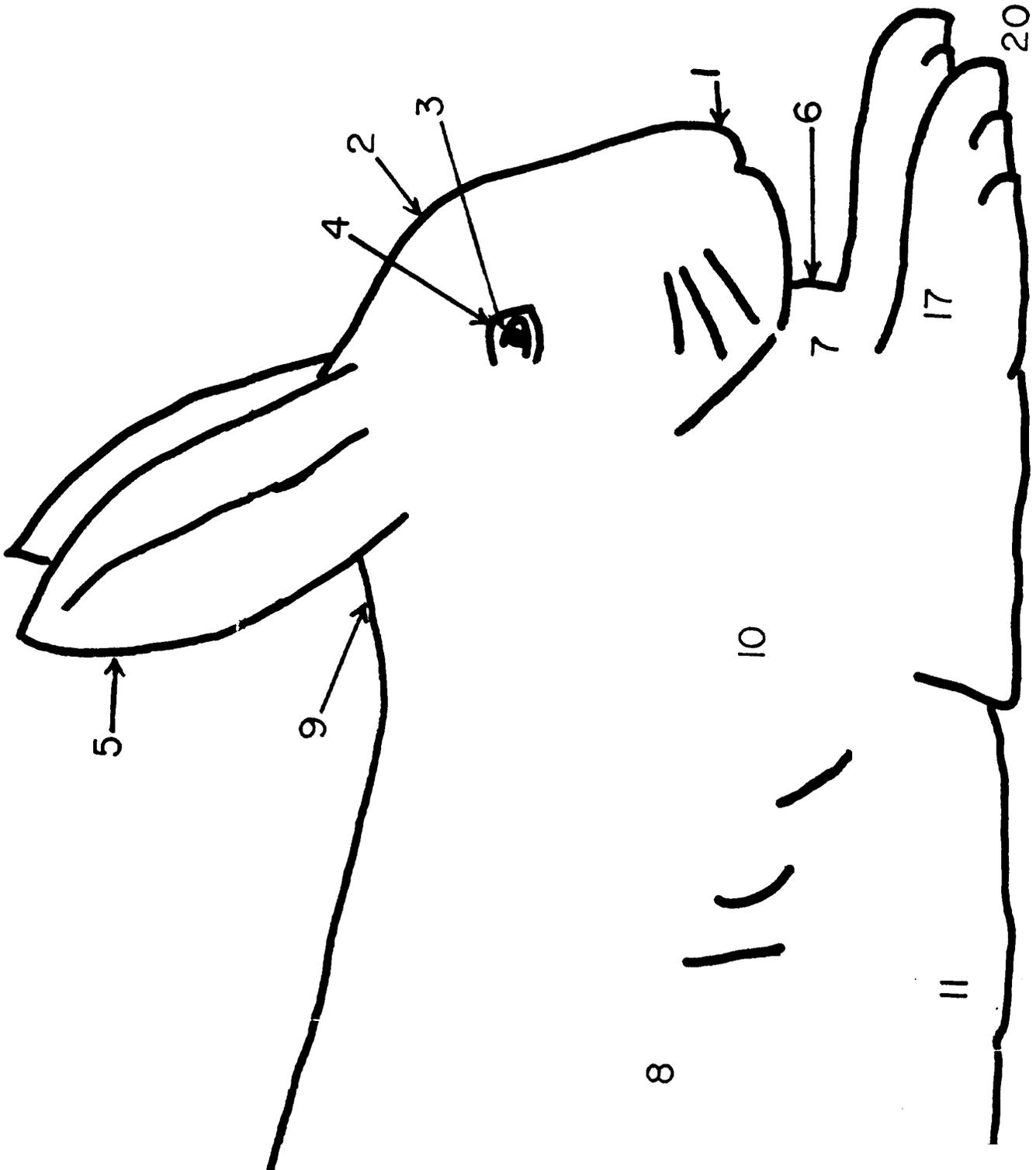
- | | |
|--------------|------------|
| 1 Nose | 11 Belly |
| 2 Forehead | 12 Saddle |
| 3 Eye | 13 Loin |
| 4 Eye circle | 14 Rump |
| 5 Ear | 15 Tail |
| 6 Dewlap | 16 Knee |
| 7 Breast | 17 Foreleg |
| 8 Body | 18 Hock |
| 9 Neck | 19 Foot |
| 10 Shoulder | 20 Toes |

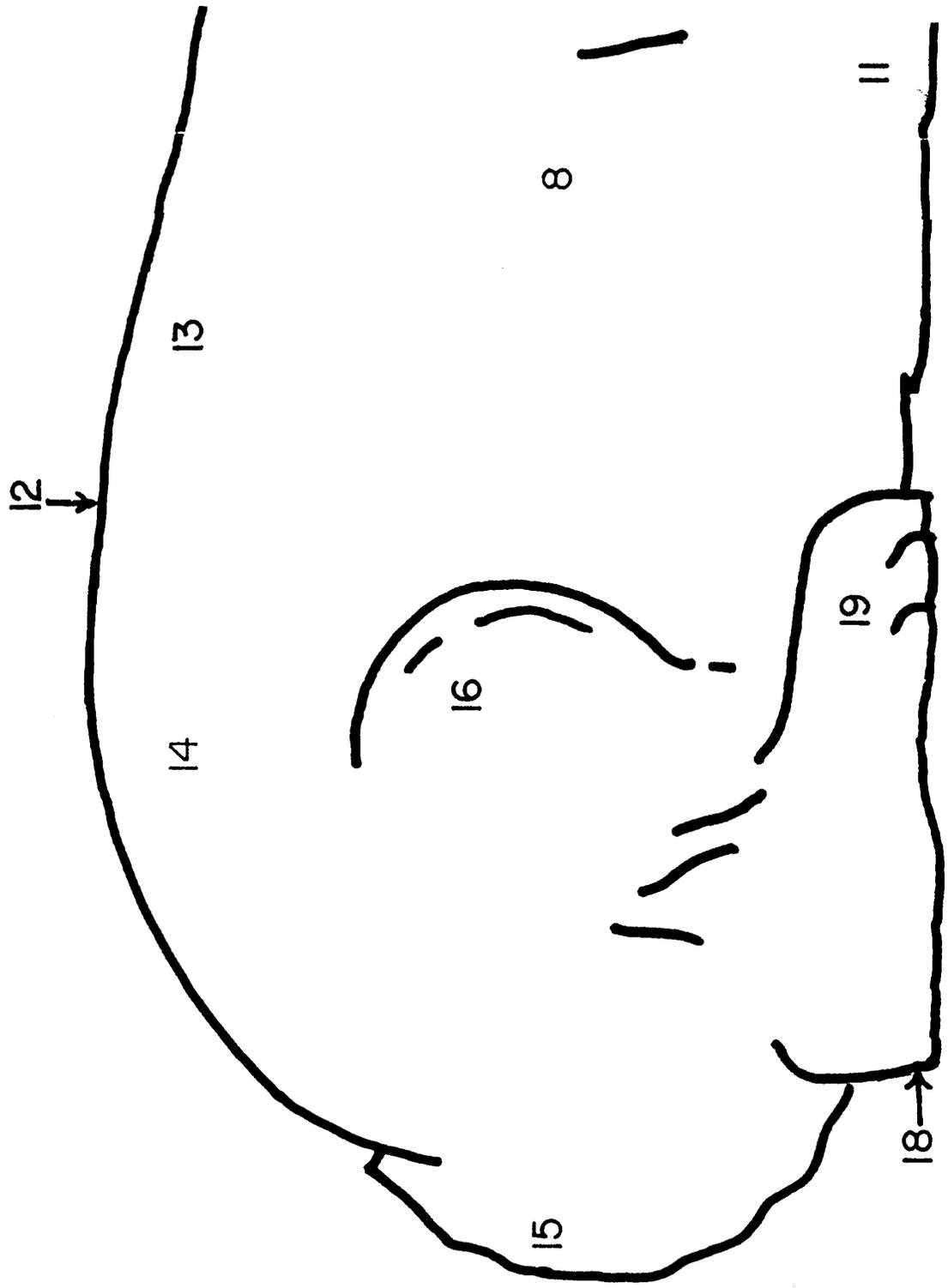
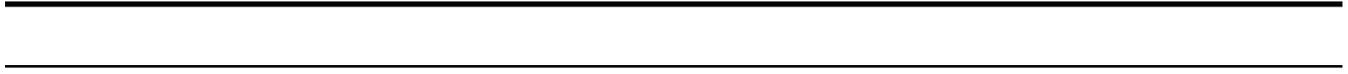
IDENTIFYING PARTS OF A RABBIT

RABBITS, LEVEL I

Poster, Rabbit Parts

Trim edge and overlap pages to make rabbit poster for use in front of group.





IDENTIFYING PARTS OF A RABBIT

RABBITS, LEVEL I

Poster, Rabbit Parts

Note: Parts for group or individual to use with large poster.

Nose

Forehead

Eye

Eye Circle

Ear

Dewlap

Breast

Body

Neck

Shoulder

Belly

Saddle

Loin

Rump

Tail

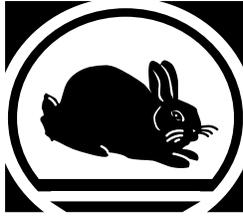
Knee

Foreleg

Hock

Foot

Toes



Identifying Breeds of Rabbits

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to identify at least 10 breeds of rabbits
- How to select a breed to raise for the project according to purpose

ABOUT THEMSELVES:

- The use of rules for identification purposes

Materials Needed:

- Pictures of various breeds of rabbits
- A short description of each breed
- American Rabbit Breeders Association (ARBA) Standard of Perfection or a reference book on rabbit breeds
- Large cardboard, paper or chalkboard
- Live rabbits, if possible

ACTIVITY TIME NEEDED: 30 TO 45 MINUTES

ACTIVITY

The choice of a breed of rabbit often is determined by the purpose for which one wishes to raise rabbits—fur, meat, fancy, show or pets. The American Rabbit Association recognizes more than 40 breeds. Some breeds have over 20 varieties. With a little understanding of some of the more common breeds, you will be able to wisely select a breed of rabbit to raise.

Leader Notes

See how many breeds the group can name in two minutes. Keep a list of the breeds named on a large sheet of paper.

Select 10 breeds of rabbits to discuss. Show picture of breed and discuss purpose (fur, meat, fancy); weights; general description.

Divide the group into teams of three or four members. Provide each group with pictures, names and descriptions of at least 10 breeds. Descriptions should be separate from pictures. Have the teams match pictures and descriptions. Allow five minutes for the teams to complete this task.

After teams have matched pictures with descriptions, discuss the breeds as you check the group's placings for correctness.

Leader Notes

Give each team pictures and names of at least 10 breeds and have them identify breeds for primary use (meat, fur, fancy).

After the teams have categorized the breeds into meat, fur or fancy breeds, discuss as you check the group's classification. (Note that all rabbits can be classified as show rabbits and some are used for both fur and meat.)

Ask each member to select a breed that they would be interested in raising.

Each member will tell the breed of rabbit selected and why.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. How many breeds were you able to identify in two minutes?
2. What was the easiest breed for your team to identify? Hardest? Why?
3. What breed of rabbit would you be interested in raising? Why?

Process:

4. What are some ways rabbit breeds are identified?
5. What are some of the purposes of raising rabbits?

Generalize:

6. How is rabbit identification different from other project animals?
7. What do rules tell us about measurements that various animals must meet?

Apply:

8. What are other examples of rules you might use in your everyday life?

GOING FURTHER:

- Visit a rabbit show to view different breeds of rabbits.
- Have members categorize breeds based on weight, color, etc.

REFERENCES:

Lessons On:

- Identifying Parts of A Rabbit
- Using Rabbit Breed Standards
- Judging Rabbits
- Identifying Types of Rabbit Fur

Standard of Perfection, American Rabbit Breeders Association, Box 426, Bloomington, Illinois 61702

Author:

G. Lee Baeth, County Extension Agent, Minnesota; Clarence W. Linsey, Kansas State Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

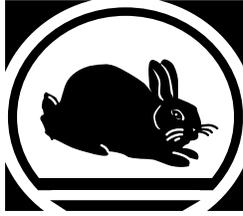
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Beginning to Set Goals in Your Rabbit Project

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to set project goals

ABOUT THEMSELVES:

- The importance of setting goals

Materials Needed:

- Chalkboard or flip chart
- Rabbit Member Guide and Annual Report (MG-16)
- Member Handout 1, Learning Topics

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Each year you will set several goals to accomplish during the project year. Goals help you get where you want to go.

If this is your first year, you might want to have just one goal, to select your project rabbit. Remember that before you select a rabbit, you must decide the purpose of the rabbit (meat, fur, show, pet or a combination).

List one or two goals (MAP Step 1) on page 2 for this project year.

Breaking a goal into steps (MAP Step 2) helps you better understand the action needed to make that goal a reality. Some goals have many steps, some have a few.

With each step you need to set a deadline (MAP Step 3). Deadlines are when you expect to have that step of your goal done. As you meet the deadline you set for each step, you need to use an energizer (MAP Step 4). Energizers encourage you to move toward your goals by offering a small reward for meeting your deadline.

Now complete MAP Steps 6 to 7. You have set your goals for Year 1 of your rabbit project.

Leader Notes

Put participants into groups of three or four. Mix new project members with youth who have had some experience with rabbit or other animal projects. Hand out Member Guide and Annual Report (MG-16) plus Member Handout 1, Learning Topics. Let them help each other decide what their goals for the year will be.

Allow time for them to share their goals with a project friend and sign each other's MAP Worksheets.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What is your first goal for the project year?
2. What goal do you like best? Why?

Process:

3. Why are these goals important?
4. Why is it important to set goals?

Generalize:

5. What are the advantages of working in a group when setting goals?

Apply:

6. What other groups have you worked in where you needed to set goals to help you make decisions?

GOING FURTHER:

- Use the goal setting process to set group goals

REFERENCES:

Lessons on:

- Selecting Your Project Rabbit
- Identifying Breeds of Rabbits
- Handling a Rabbit

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



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Manhattan

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BEGINNING TO SET GOALS IN YOUR RABBIT PROJECT
RABBITS, LEVEL I
Member Handout 1, Learning Topics

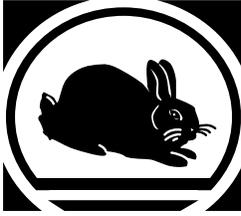
Place a check mark next to five of the most interesting topics you would like to learn about in your rabbit project.

- _____ Identifying Parts of a Rabbit
- _____ Identifying Breeds of a Rabbit
- _____ Handling a Rabbit
- _____ Selecting Your Rabbit
- _____ Feeding Your Rabbit
- _____ Identifying Watering Devices
- _____ Selecting Rabbit Equipment
- _____ Caring for Rabbits During Extreme Weather
- _____ Sanitizing Your Rabbit Cage and Equipment
- _____ Preparing for a Rabbit Show
- _____ Grooming Your Show Rabbit
- _____ Showing Your Rabbit
- _____ Preparing Your Rabbit for Kindling
- _____ Caring for the New Rabbit Litter
- _____ Determining the Sex of a Rabbit
- _____ Tattooing a Rabbit
- _____ Weaning the Rabbit Litter
- _____ Giving a Presentation

Think Back:

Please write one or two things you have learned about rabbits so far. What is something you have learned about yourself while studying rabbits?





Handling a Rabbit

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to properly pick up a rabbit
- How to handle a rabbit

ABOUT THEMSELVES:

- How to work in a gentle and calm manner
- How to treat others with respect

Materials Needed:

- Rabbits (Have each member bring a rabbit if possible)
- Carpet for table

ACTIVITY TIME NEEDED: 15 MINUTES

ACTIVITY

Steps to Pick Up and Carry a Rabbit:

1. Grasp the loose skin over the shoulders, enclosing the ears with one hand. Put your other hand under the rabbit's rump.
2. Lift the animal and pull it toward you so its body rests on your forearm and against your body.
3. Tuck the rabbit's head under your arm, while still grasping the neck skin for security.

Many people prefer not to pick up a rabbit by the back of the neck as this can cause the fur to break. You can gently place a hand under the belly of the rabbit, lift up and at the same time place the other hand under the hindquarters to support the rabbit. This method should only be used on a gentle rabbit—you don't have as much control of the rabbit and it can easily scratch you. You may want to try this method when you become more experienced.

Leader Notes

Let youth practice or try different methods with a stuffed animal (rabbit) or model. Ask the members how they would move a rabbit from one hutch to another?

After youth have handled a stuffed rabbit, demonstrate with a live rabbit how to pick up a rabbit and carry it.

Have the members practice picking up a rabbit and carrying it.

Demonstrate how to pick up a rabbit without grasping the fur back of the neck.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. How do you pick up a rabbit?
2. How do you carry a rabbit?

Process:

3. Why do you tuck the rabbit's head under your arm?
4. Why do you continue to grasp the neck skin when picking up the rabbit?
5. Why is it important to handle a rabbit the correct way?

Generalize:

6. What other animals require special handling? Why?
7. Why is it important to be gentle and calm when handling animals?

Apply:

8. Why is it important to treat all animals with care?

GOING FURTHER:

- Attend a rabbit show

REFERENCES:

Ohio Cooperative Extension Service, The Ohio State University

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

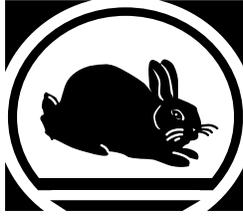
Reviewed by:

Rabbit Design Team



Cooperative Extension Service
Kansas State University
Manhattan

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Selecting Your Project Rabbit

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- The qualities of the ideal rabbit
- How to select a project rabbit

ABOUT THEMSELVES:

- Importance of doing things in a specific order

Materials Needed:

- Member Handout 2, Selecting Animals for Replacement or Show
- Live rabbits
- Carpet to put on table

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

Steps in selecting a rabbit:

1. Decide for what purpose you will raise rabbits—pet, show, meat, fur, or a combination.
2. Select a breed to suit your interest, financial means, and one you feel you will enjoy.
3. Check with your club leader, county extension agent, Kansas State Rabbit Breeders Association, or a local rabbit breeder about where to find the breed you want.
4. Buy from a reputable rabbit breeder near your home, if possible.
5. Buy a rabbit free of defects and disease.

Give members Member Handout 2, Selecting Animals for Replacement or Show, to discuss.

Have each member tell what breed they plan to raise and why.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. For what purpose(s) did you decide to raise a rabbit?
2. What are two ideal qualities of a good rabbit?
3. What are two undesirable qualities of a rabbit?

Process:

4. Why is it important to follow the steps for selecting a rabbit in the order discussed?

Generalize:

5. Why is doing things in a specific order sometimes necessary?

Apply:

6. What are some examples in your life where doing things in a specific order is important?

GOING FURTHER:

- Attend a rabbit judging contest or school.

REFERENCES:

Lessons on:

Identifying Rabbit Faults and Disqualifications

Identifying Rabbit Breeds

Pacific Northwest Cooperative Extension Service

Ohio Cooperative Extension Service, The Ohio State University

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

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SELECTING YOUR PROJECT RABBIT

RABBITS, LEVEL I

Member Handout 2, Selecting Animals for Replacement or Show

What to Look for in a Rabbit

You can spot potential problems by taking a careful look at breeding stock before you buy or keep a rabbit. If a rabbit has weak characteristics, such as low shoulders or narrow head and body, those traits can be transmitted to the young. Eliminate potential problems at the beginning. The American Rabbit Breeders Association (ARBA) has a standard of perfection for each breed, which is available for purchase. Senior rabbit raisers can give you the address of the ARBA.

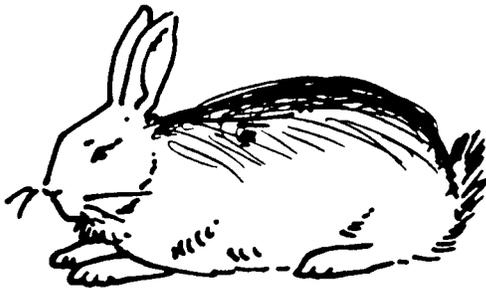
Your rabbits should be free from defects or diseases. Do not buy or keep a rabbit with a twisted tail, rupture, buck teeth, flop ears, crooked legs or bad eyes. These defects can be inherited by the young.

Meanwhile, such conditions as ear canker, "snuffles," sore hock, scours (diarrhea), vent disease and others can be due to harmful bacteria. If these diseases are brought into your rabbitry, they can spread and harm your rabbits. Remember, meat rabbits should be well developed in the important parts: the hind legs, hips and loin. The accompanying drawings show what to look for when you make a visual inspection.

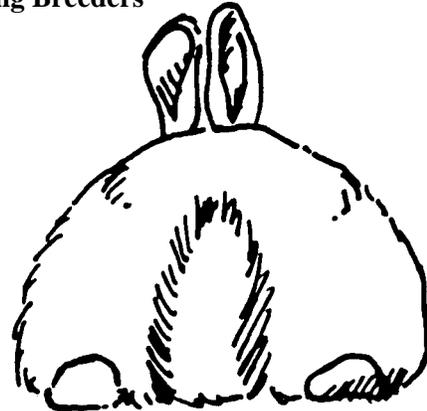
In addition, the wise breeder selects his or her breeding stock from animals that have a history of being vigorous and healthy.

Points to Check When Selecting Breeders

The Ideal Rabbit



Well-balanced rabbit throughout, good head, well-carried ears, good bone, good type.



Good depth or rise to hips, very nice and smooth.



Strong, straight limbs.



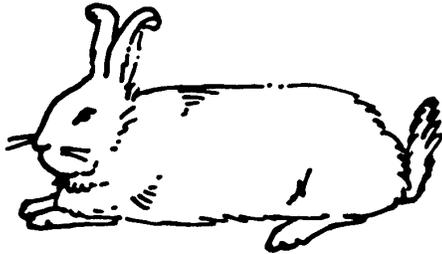
Correct tail carriage.

SELECTING YOUR PROJECT RABBIT

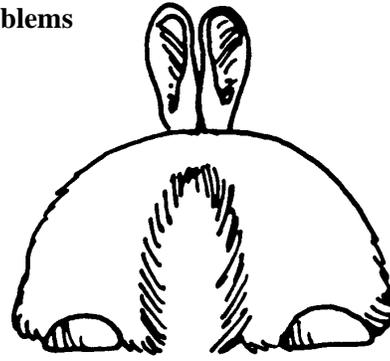
RABBITS, LEVEL I

Member Handout 2, Selecting Animals for Replacement or Show, *continued*

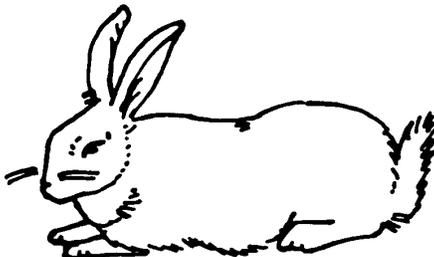
Avoid These Problems



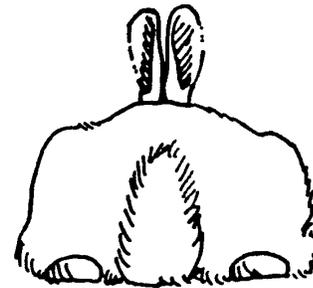
Belled ears, pear-shaped head, double dewlap, back too flat and straight, sloped rump, cow-hocked.



Broad hips but a little flat and not enough rise.



Narrow head, open-carried ears, dip in back, cut-off hips, pot-bellied, side-carried dewlap.



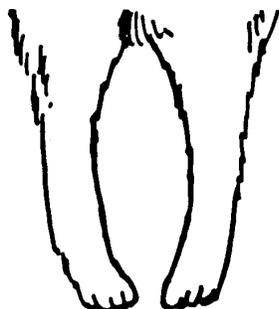
Protruding hip bones or rough hips.



Screw tail.



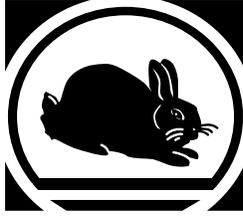
Side-carried tail.



Inward-bowed legs.



Outward-bowed legs.



Feeding Your Rabbit

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- What kind of feed to use
- When to feed the rabbits

ABOUT THEMSELVES:

- What food does for us
- The importance of quality as well as quantity of food

Materials Needed:

- Samples of rabbit pellets
- Samples of rabbit supplements (oats, Calf Manna, Rabbit Glow)
- Good-quality hay
- Cup to measure feed
- Activity Sheet 2, Good Rabbit Food/Good People Food
- Leader's Key, Activity Sheet 2, Good Rabbit Food/Good People Food

ACTIVITY TIME NEEDED: 15 MINUTES

ACTIVITY

Leader Notes

Good-quality feed should be fed in the proper amounts at regular hours each day for best results. Since the rabbit eats in the late evening and night, it is best to feed your rabbit its ration in the evening. It is best to feed a commercially prepared, complete feed rather than a mixture of grains and hay. This ensures that your rabbits are getting the proper nutrients. Most feeds contain the correct amount of salt for your rabbit, and generally you should not add salt unless it is recommended by the feed manufacturer. As a treat, you may feed your rabbit apples, carrots, or bread. However, you should not feed it grass or leafy vegetables because this could cause diarrhea.

Generally, it is not necessary to feed hay, however, some breeders feed hay regularly. Other breeders give their rabbits hay if the rabbits are not eating their regular feed.

Four to 6 ounces of feed is adequate and should be adjusted according to the size of your rabbit. Netherland Dwarfs will need about 3 ounces or less, while a Giant Chinchilla will need about 9 ounces of feed. Resting does, all bucks and young over four months of age must not be overfed or they will become fat. These rabbits should clean up their feed within 12 hours. If they don't, you are probably feeding too much.

Does with litters and young rabbits under four months need to have as much feed as they will eat.

Discuss ounces as a unit of weight. Explain the difference between ounces and fluid ounces. Provide various objects and have the members guess whether the object weighs more than, less than, or the same as a given weight in ounces (one, or four, etc.) Have the member's examine the various feeds and practice measuring a certain amount (4 ounces for instance).

Leader Notes

You can easily make some type of measure for feeding your rabbits. A frozen orange juice can (6-ounce size) will hold about 4 ounces of rabbit pellets. A small tuna can also makes a good measure. The amount of feed a rabbit needs depends on several factors. You will need to experiment with your rabbits to see what is best for them.

Hand out Activity Sheet 2, Good Rabbit Food/ Good People Food.

Note: Brand names are used as an example and do not imply recommendation of a specific product.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What are two important things to remember when feeding a rabbit?
2. What are some good “treats” for your rabbit?

Process:

3. What did you learn from this activity about feeding rabbits?
4. Why is it important to measure and become familiar with how much food we should give rabbits?
5. Why do different sizes or kinds of rabbits require different amounts of food?

Generalize:

6. Why is what an animal eats as important as the amount it eats?

Apply:

7. Why do different types of animals require different types of food?

GOING FURTHER:

- Visit a local feed store to find out what types of rabbit pellets are available in your area.

REFERENCES:

Cooperative Extension Services of the Northeast States
The University of New Jersey

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



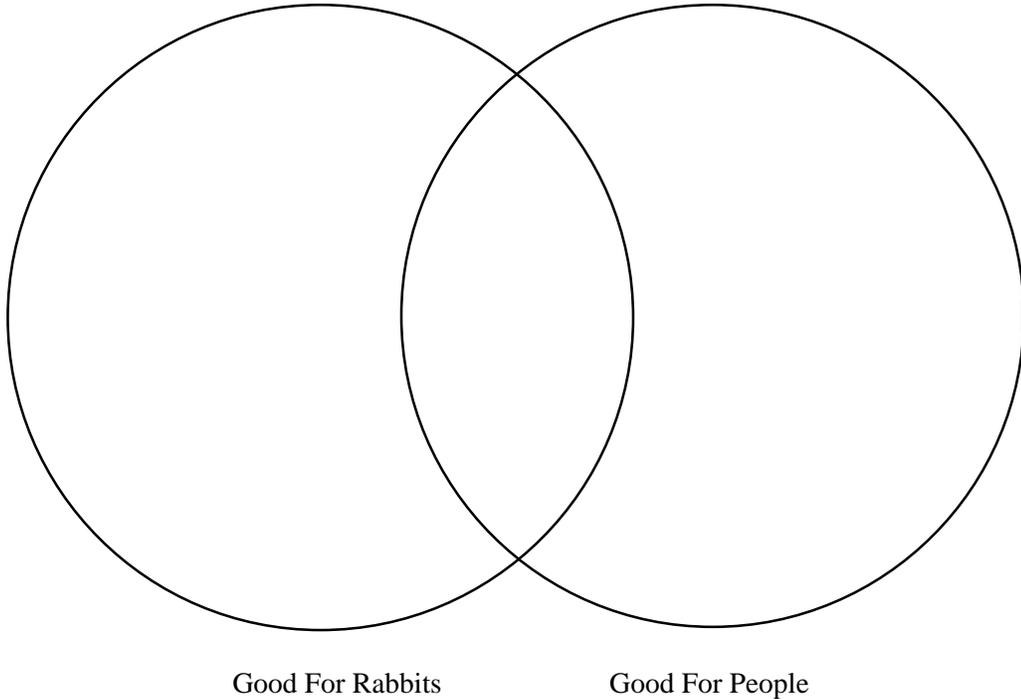
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FEEDING YOUR RABBIT

RABBITS, LEVEL I

Activity Sheet 2, Good Rabbit Food/ Good People Food



Write the following foods where they belong in the diagram. If a food is good for both rabbits and people, write it in the space that belongs to both circles. If it is not good for either, write it outside both circles.

cheese

grain and hay mixture

lettuce

nuts

spinach

water

soda pop

bread

rabbit pellets

hamburger

carrot

potato chips

apple

candy bar

orange

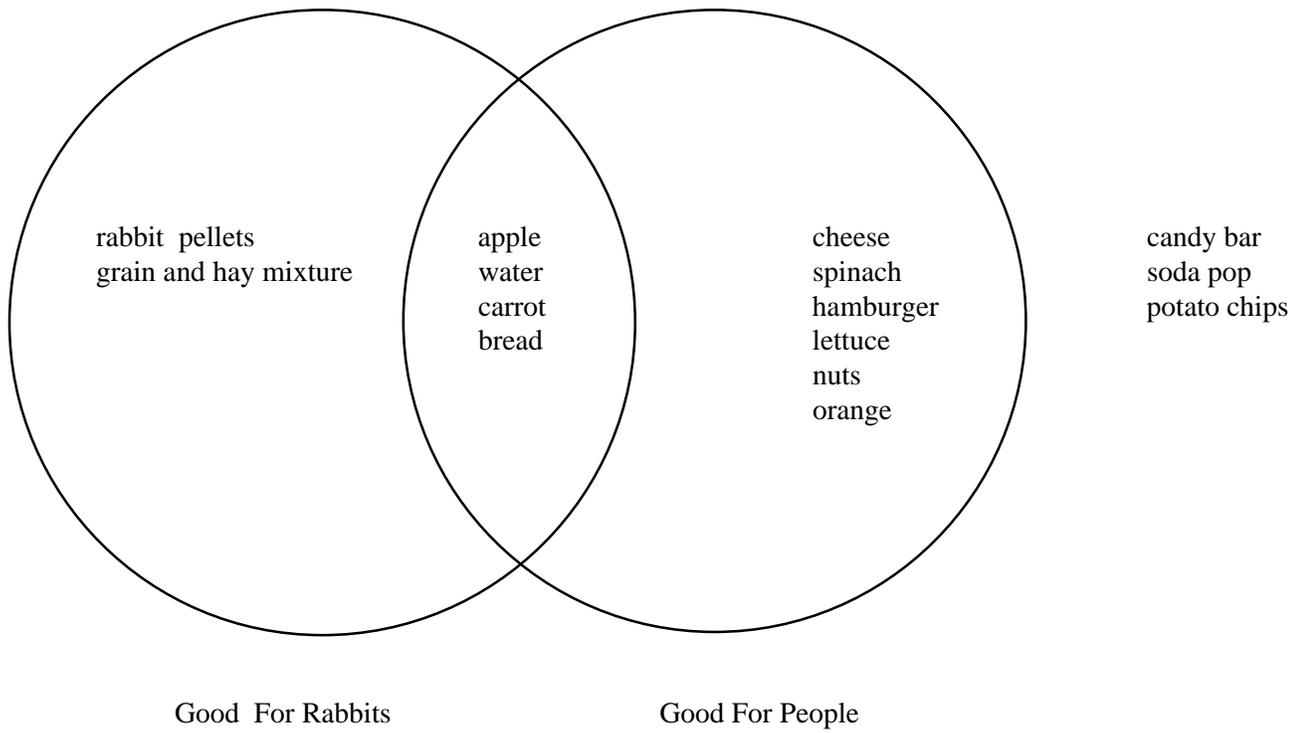
Think Back:

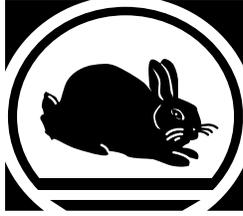
What do you remember most about handling, selecting, or feeding a rabbit? Why?

FEEDING YOUR RABBIT

RABBITS, LEVEL I

Leader's Key, Activity Sheet 2, Good Rabbit Food/ Good People Food





Identifying Watering Devices

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- What equipment is used to water rabbits
- How to decide which watering method is best for their project

ABOUT THEMSELVES:

- The importance of water in their lives

Materials Needed:

- Water Crocks of various sizes
- Water bottles
- Activity Sheet 3, Water Use

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Rabbits need a lot of clean water all year—winter and summer. For a few rabbits, water crocks or water bottles are the best equipment. If you develop a large rabbit operation you may wish to invest in an automatic watering system. However, since most members will not have this many rabbits we will look at the two best choices. Water bottles are excellent except when the temperature gets to freezing or below. Crocks can be used throughout the year. The size of the rabbit will determine the size of crock you will want to use. Use larger crocks with the larger breeds. Use a half-gallon or a gallon crock for commercial does and litters.

Rabbits need a constant supply of water. Usually, it is sufficient to water in the morning and again during the evening, however, if the rabbits are consuming more water, you will need to provide larger watering devices or water more often.

In the winter, you can have two sets of crocks. While one set is in the cages, the other set can be thawing out where it is warm. This way, you will always have ice-free crocks to put water into. Some breeders have purchased plastic crocks with which you can pop out the ice with very little effort. This way, ice-free crocks are available without carrying them into the house each day.

The amount of water a rabbit drinks will vary. However, those animals that drink the most are usually in better condition. A doe and litter may consume as much as a gallon of water per day.

Leader Notes

Have the members look at the crocks and water bottles and decide which would be best for their rabbitry.

Show a gallon container.

Leader Notes

Hand out Activity Sheet 3, Water Use, to do at home or do during this meeting as a group.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. Which watering devices do you use? Why?
2. What are the best two choices of equipment to use when watering a rabbit?

Process:

3. How can you tell if your rabbit is getting enough water?
4. Why is it important for your rabbit to get water?

Generalize:

5. Why are water requirements different in the winter than the summer for most animals?
6. When do you drink lots of water? Why?

Apply:

7. Why is water important to all living things?

GOING FURTHER:

- Visit a rabbitry with an automatic watering system.

REFERENCES:

Official Guide Book to Raising Better Rabbits, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

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IDENTIFYING WATERING DEVICES

RABBITS, LEVEL I

Activity Sheet 3, Water Use

Directions: You may need help for some of these answers.

1. Water Use or Consumption: Figure out the water use of a rabbit and a person from the chart below.

| | 350-pound Calf | Rabbit | Person* |
|--|-------------------|--------|---------|
| Amount of drinking water used daily | 1 to 5 gallons | _____ | _____ |
| Water used for non-drinking | 0 gallons | _____ | _____ |
| Totals | 1 to 5 gallons | _____ | _____ |

2. Which uses the most water for drinking? (Check one)

_____ calf
_____ rabbit
_____ person

3. Which uses the most non-drinking water? (Check one)

_____ calf
_____ rabbit
_____ person

4. Which has the highest total water use? (Check one)

_____ calf
_____ rabbit
_____ person

5. How much non-drinking water do you use in a day? _____ gallons

* Water Use of People

Drinking = 1½ to 2 quarts a day (about ½ gallon)

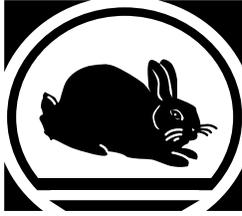
Toilet flushing = 5 gallons per flush

Dishwasher/washing machine = 18 gallons per load

Shower/bath = 6 gallons per minute

Open running faucet = 6 gallons per minute





Selecting Rabbit Equipment

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- What size and type of cage is necessary
- What type of feed equipment is best

ABOUT THEMSELVES:

- Measurement skills
- Various space needs

Materials Needed:

- Different size cages
- Feed crocks
- Metal feeders
- Sheet of graph paper for each member ($\frac{1}{2}$ inch)
- Activity Sheet 4, Spaces

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

First, you need to decide where your rabbits are to be housed. Will they be in a building or will they be outdoors? If the rabbits will be inside, all metal cages are best. However, if the rabbits are to be housed outside, a combination of wood and wire is needed to build a proper hutch.

You will need a cage 30 inches deep, 36 inches long, and 18 inches high for a doe and litter of a medium breed. Small breeds can use smaller cages and larger breeds will need a bigger cage. Bucks and young show rabbits will do fine in cages 18 inches wide, 30 inches deep and 18 inches high.

Automatic metal feeders are best for does and litters. The feed is kept clean and the feeder will hold a day's supply of feed. Crocks are fine for feeding individual rabbits.

Leader Notes

Have the members pretend they are rabbits, and decide what size cage will they need. Not all will need the same size cage.

Use a tape measure to demonstrate measurement. Have members estimate length of various objects in inches.

Discuss the various cages that are present.

Demonstrate the take-home activity using a ruler or yardstick and an appropriately sized room.

Hand out Activity Sheet 4, Spaces.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. Talk with a partner or small group about rabbit hutches you have seen. What were some good and bad points about each one?

Process:

2. Why is it important to have a good rabbit hutch when beginning your project?
3. Why is the size of the hutch important for different sizes of rabbits?

Generalize:

4. What space requirements might other animals need?

Apply:

5. What kinds of space and spaces do you have in your home to move around in?

GOING FURTHER:

- Take your group to an outside and inside rabbitry.

REFERENCES:

Lesson on:

Identifying Watering Devices

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

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SELECTING RABBIT EQUIPMENT

RABBITS, LEVEL I

Activity Sheet 4, Spaces

1. Measure the floor space of your bedroom in feet. On the graph paper below, draw an outline of your room. (1 square = 1 foot). Label this "My Room." Color your total space.

Now draw a rabbit hutch on the paper below. It would be approximately 3 feet by $2\frac{1}{2}$ feet. Label this "Rabbit Hutch." Color the rabbits space.

Remember, you have an 8-foot ceiling, rabbits have a $1\frac{1}{2}$ -foot ceiling.

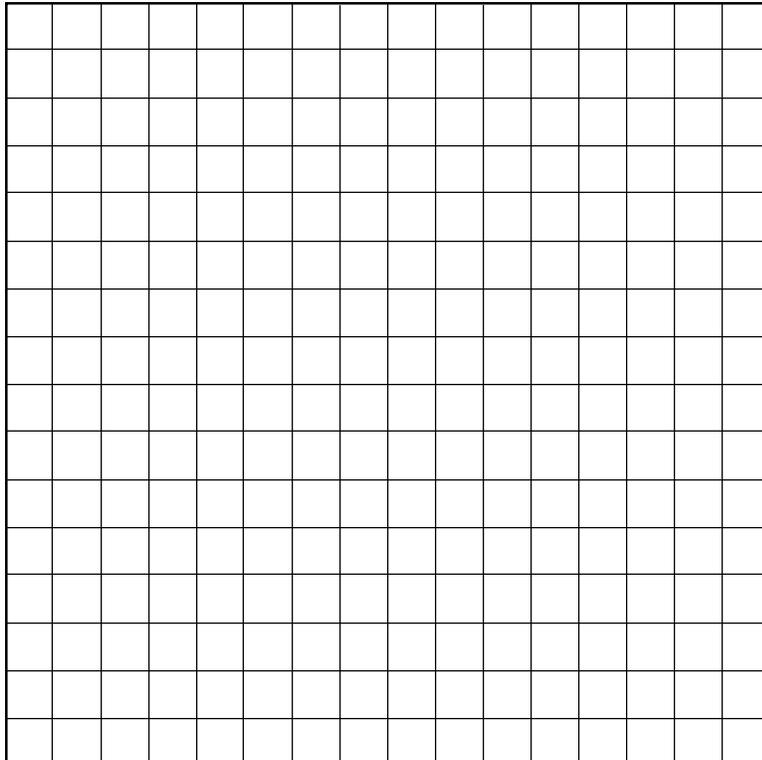
2. Who has the most space? _____

What other space is available to you? _____

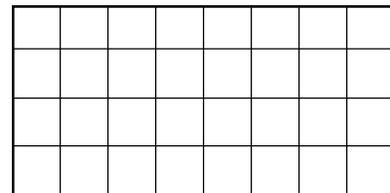
What other space is available to the rabbit? _____

DRAW HERE
1 square = 1 foot

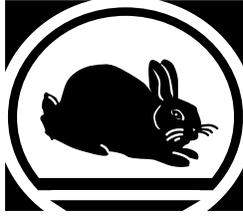
MY ROOM



RABBIT HUTCH







Caring for Rabbits During Extreme Weather—Hot/Cold

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to care for rabbits during winter and summer
- How to recognize a rabbit in distress

ABOUT THEMSELVES:

- How we adapt to extreme weather

Materials Needed:

- Activity Sheet 5, Temperature
- Red pens or pencils
- 2-liter plastic soda bottles
- Carpet

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Every animal must adjust to changes in the environment. It pants or sweats if the temperature is too high, and shivers if it's too cold. The animal's heartbeat increases and it breathes faster when it runs or is under stress.

If the change in the environment or the amount of stress isn't too severe, an animal usually can adapt quite well. However, if the changes or stresses are too great, it won't be able to adjust. Animals that are healthy can endure short-term or minor stresses, but long-term or severe stresses will eventually be dangerous.

As summer temperatures rise your rabbit's fur coat becomes a problem. Wild rabbits can seek the comfort of their burrows in the cool earth during hot weather, but tame rabbits in hutches don't have that option. They rely on us to provide relief from the heat. Domestic rabbits need more protection from the direct sunlight, radiating heat and high temperatures of the summer months than they do from the cold wind and snow of winter.

The rabbit's normal body temperature is 102 to 103°F. Its "comfort zone" (the outside temperatures at which rabbits process feed most efficiently and gain weight the easiest) is 60 to 65°F. When temperatures become above 80°F, rabbits use more energy to remove heat from their bodies. Since rabbits don't perspire, they lose body heat through their breath and from air movement across their bodies.

Leader Notes

Divide the group into teams. Ask one team what they would need if they were a rabbit in a cage and the temperature was very hot. Have the other team decide what they would need if they were a rabbit in a cage in very cold weather. Have each team share their answers with the group.

Ask members how a rabbit can help cool itself when it is hot?

Leader Notes

Ask: Why is it important for rabbits to have large ears?

A rabbit's ears also help control its body temperature. As its body temperature rises, the blood vessels in the rabbit's ears expand and the blood flow through the ears increases. Rabbit ears are large and have very short fur on the outside and almost no fur on the inside. This combination of increased blood flow and the lack of fur means that more body heat can escape from the ears than from any other part of a rabbit's body.

When the temperature is above 90°F for four or five days in a row, it is too hot to try to breed the rabbits.

If the weather becomes too hot, rabbits may suffer from heat prostration. Fat or excited rabbits and does that are about to kindle are most likely to develop heat prostration. Rabbits with heat prostration have blue lips, tongue and ears; increased heart and breathing rates; wet nose and mouths; frothy, blood-tinged discharge from the mouth; and they pant heavily.

If a rabbit is suffering from heat prostration, lower its body temperature quickly or it may die. Put the rabbit in cool (not cold) water for a few seconds. (Be sure to hold the rabbit's head out of the water. A seriously ill rabbit may not be able to hold its own head up.)

Ask: How they can keep rabbits cool in the summer? Encourage group discussion.

There are several ways you can keep your rabbits cool in the summer. Use a sprinkler system to water the roof to keep the rabbitry cool. Use fans to move the air without creating drafts. You may set up awnings over outdoor hutches for shade. If it is extremely hot, put large plastic bottles filled with ice in the hutches. Put pieces of carpet or rags that have been soaked in cool water in the cages. Nursing bunnies can be put in wire nest boxes. If your rabbit is showing signs of stress, put it in an all-wire carrier and put in a dry, cool place. In the summertime, handle your rabbits in the cooler morning or evening hours.

Ask: How can you keep a rabbit warm in the winter? See how many each team can list.

There are several ways you can help keep your rabbit warm in the winter. You must protect the rabbits from direct contact with cold winds, snow, and rain. Face your hutches to the south or east. Setting the rabbitry next to a building, solid fence or woodlot, or covering the hutches with lightweight plastic sheeting also will provide a barrier against winter weather. Does and newly kindled kits, or does that are about to kindle, need extra attention in winter. Save clean, dry fur to help cover bunnies whose mother hasn't pulled enough fur to cover them. If the nest material becomes wet, replace it. Cold temperatures increase the energy needs of rabbits. This means you will need to provide plenty of proper feed and water for your rabbits to help them replace the body heat they lose. You need to water your rabbits two or three times per day when the temperature is below freezing.

Ventilation is important year-round, though you should avoid drafts. If insects such as flies are a problem, use insecticides, fly bait, or insect lights. Also, clean the rabbitry regularly.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. In what type of weather do rabbits thrive?
2. What are ways to keep rabbits cool in the summer?
3. What are ways to keep rabbits warm in the winter?

Process:

4. How does a rabbit's ears help control its body temperature?
5. Why is it important to keep rabbits comfortable in hot or cold weather?

Generalize:

6. How do other animals keep warm in the winter or cool during the summer?
7. What are ways that you keep comfortable when it's hot or cold?

Apply:

8. What are ways that we control the temperature in our homes?
9. How are houses made differently for hot and cold climates?

REFERENCES:

Selecting Rabbit Equipment lesson
Cooperative Extension Service, Michigan State University

Author:

Clarence W. Linsey, Kansas State Breeders Association; James P. Adams,
Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team

| |
|---|
| Leader's Key, Activity Sheet 5, Temperature |
|---|

- | | |
|--------|---------|
| 1. 95° | 6. 35° |
| 2. 95° | 7. 35° |
| 3. 35° | 8. 35° |
| 4. 95° | 9. 95° |
| 5. 95° | 10. 95° |



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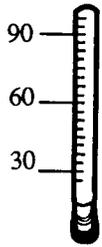
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CARING FOR RABBITS DURING EXTREME WEATHER—HOT/COLD

RABBITS, LEVEL I

Activity Sheet 5, Temperature

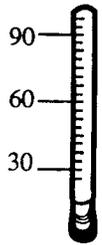
For each item below, use a red pencil or pen to show what the temperature might be when you would do the activity listed. Remember, summer days usually are around 95°F and the winter days around 35°F.



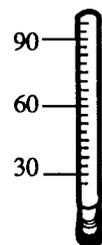
1. Sprinkle water on the roof of the hutch.



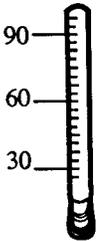
6. Place hutch next to a solid fence.



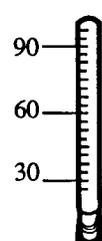
2. Turn fans on hutch.



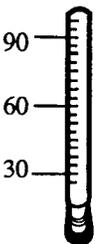
7. Cover the hutch with plastic.



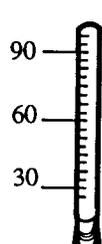
3. Face the hutch south.



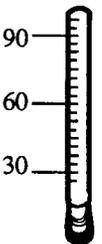
8. Cover bunnies with clean, dry fur.



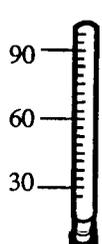
4. Put the hutch in shade.



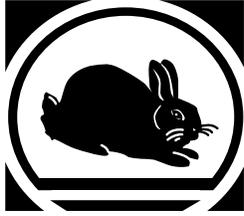
9. Place water-soaked rags in the hutch.



5. Use a wire nest box.



10. Put large, plastic bottles filled with ice in hutch.



Sanitizing Your Rabbit Cage and Equipment

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- What items to use to sanitize equipment
- How to sanitize the cage and equipment

ABOUT THEMSELVES:

- The importance of cleanliness

Materials Needed:

- Rabbit cage
- Wire brush
- Soft brush
- Bucket
- Chlorine bleach
- Rabbit crocks
- Rabbit feeder
- Spray bottle

ACTIVITY TIME NEEDED: 15 MINUTES

ACTIVITY

Clean cages and equipment help prevent diseases in rabbits.

The rabbit equipment should be sanitized every month or whenever your rabbit has had a disease. The equipment is sanitized using a chlorine bleach solution.

Put 1 cup of chlorine bleach in a gallon of water. Use this solution to wash the crocks and feeders.

Then, after you have removed fur and manure from the cage using a wire brush, put some of the chlorine bleach in a spray bottle and spray the entire cage. Let it dry before you return the rabbits to the cage. If the cage has a wooden floor, it needs to be cleaned out every day and sanitized every week. Other disinfectants can be used, but you must make sure they will not irritate the rabbit.

Leader Notes

Given the cage and equipment, ask the members to speculate about how to go about cleaning the cage. Then repeat the process according to the following steps.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What did you use to sanitize your rabbit cage and equipment?
2. What was the most difficult part to clean? Why?

Process:

3. What is the correct measure of bleach to water?
4. Why is it important to sanitize the cage after your rabbit has had a disease?
5. Why is it important to use bleach and not other types of disinfectants?
6. What are some other ways that you keep the area around your rabbit cage clean?

Generalize:

7. What other animal cages would you clean similarly? Differently? Why?

Apply:

8. Why is it important to keep living areas clean?

GOING FURTHER:

- Have the members go home and sanitize their cages and rabbit equipment.

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team

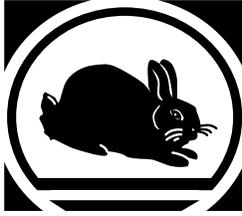
Think back:

Have members share in small groups what they remember about use and care of rabbit equipment? Some members may want to record these thoughts on a piece of paper. Others may want to create a jingle or rap to remember.



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Preparing for a Rabbit Show

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to prepare for a show
- How to enter a show
- Proper conduct at a show
- What to expect at a show

ABOUT THEMSELVES:

- Why we have rules and the importance of following rules

Materials Needed:

- Entry blanks for each member (state, local or American Rabbit Breeders Association)
- Comment cards for each member (state, local or American Rabbit Breeders Association)
- Show catalogs

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

Rabbit shows in the United States began in the late 1800s. More people enjoy the competition and fellowship of these events every day. Rabbit shows give you a chance to display your rabbits and have them rated against those of other exhibitors. You can have fun and learn more about your rabbits at a rabbit show.

Every exhibitor wants his or her rabbit to win. However, you must remember that only one rabbit in each class will win. Always be a good sport, even if your rabbit doesn't place as you think it should have. Congratulate the winning exhibitors.

When you enter rabbits in a show, you agree to follow the rules of that show. The rules govern not only show procedures but proper conduct for show officials, exhibitors and visitors as well. Show rules will vary but the following "do's and don'ts" apply to most rabbit shows.

DO

. . . fill out your entry form neatly and completely, and send the form and entry fee to the show secretary **BEFORE THE ENTRY DEADLINE**.

. . . prepare your rabbits for the show by handling and posing them often.

. . . be sure your rabbits are the proper breed, variety, age, sex and weight for the class or classes you've entered them in.

Hand out entry blanks and let the members practice filling them out neatly and completely.

Leader Notes

. . . bring your rabbits to the show in carrying cages that are the proper size and construction for your rabbits. Leakproof bottoms are a must on carrying cages.

. . . tattoo your rabbits in the left ear to identify it. The label should be easy to read and permanent.

. . . if the show provides cages, accept the feed and water provided at the show or bring your own.

. . . have your rabbit on the judging table promptly when its class is called.

. . . stay with your rabbit at the judging table while it is being judged.

. . . pay attention to the comments given by the judge. You can learn valuable tips on how to improve your rabbit or keep it in top form.

. . . respect the judge and his or her opinion. You asked for the judge's opinion when you entered the show.

. . . groom your rabbits often before coming to the show.

. . . pick up any award you have won at the show.

. . . be courteous and understanding when problems occur. Avoid negative comments.

. . . compliment the judge and show committee on jobs well done.

DON'T

. . . hesitate to show your rabbits because you're a beginner. Everyone has to start sometime.

. . . expect the show secretary to accept late entries. (Some shows allow the late entries, but not all. Read the show catalog.)

. . . bring diseased or injured animals to a show.

. . . bring animals other than rabbits into the showroom.

. . . handle exhibits other than your own unless you are a show official or you have the owner's permission.

. . . attempt to breed rabbits in the showroom.

. . . stand behind the judge's table when judging is in progress unless you are a show official.

. . . try to take your entries from the showroom if you enter rabbits in a show and don't exhibit them.

Pass out the comment cards and discuss how to fill them out and what the comment taker will put on the cards.

DIALOGUE FOR CRITICAL THINKING

Share:

1. Why do people attend rabbit shows?
2. Why do you want to enter your rabbit in a show?

Process:

3. What are three important things to remember to do before you get to the show?
4. What are three important things to remember to do after you get to the show?
5. What would a rabbit show be like if there were no standards identifying what a rabbit should look like?

Generalize:

6. What types of rules and standards are used in other animal shows? Why?
7. Why do you think it is important to have rules and regulations for participating in various activities?

Apply:

8. What are some other activities that you participate in that have a series of rules and regulations? Why are rules needed?

GOING FURTHER:

- Grooming Your Rabbit
- Handling Your Rabbit
- Building a Rabbit Carrier

REFERENCES:

American Rabbit Breeders Association Secretary's Book
Cooperative Extension Service, Michigan State University

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team

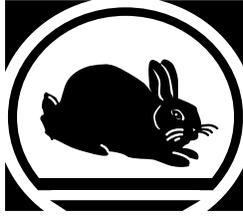
Let members take turns role playing as the judge and the exhibitors to learn about rules, sportsmanship, and how it feels to win, lose or make those types of decisions.



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Grooming Your Show Rabbit

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to groom their rabbit
- Why they should groom their rabbit

ABOUT THEMSELVES:

- The importance of good grooming

Materials Needed:

- Rabbits (Have each member bring a rabbit)
- Carpet for table
- Rags
- Water
- Cornstarch
- Nail trimmers (fingernail or dog nail clipper)

ACTIVITY TIME NEEDED: 15 MINUTES

ACTIVITY

How can you remove the loose hair from your show rabbit? Answer: Use either a damp rag or damp hands to go over the fur. Combs and brushes can and will break the skin and cause sores, spread infection and break down the fur shafts that give the animal its beautiful finish.

How could you remove stains on a white rabbit? Answer: If the rabbit isn't too stained, you can rub cornstarch into the stain and then brush it out. Peroxide or similar bleaching agents can be used, but must be carefully done.

You also can help your rabbit stay clean by keeping the cage clean. If cages get rusty, rabbits will become stained. Rusty wire should be replaced.

A rabbit with long nails can get them caught in the wire and injure itself or you. The nails on wild rabbits wear down naturally, but those of domestic rabbits should be clipped. There are five nails on each front foot and four on each hind foot.

The nails should be clipped whenever they are long, sometimes every six months. You may need some help from an adult. Dog nail trimmers or regular fingernail clippers can be used. The nails should be cut back to just in front of the cone, which is the part with the blood vessels and can be seen when held up to the light.

Leader Notes

Demonstrate how to groom a rabbit for show.

1. Remove loose fur by running a damp rag over the fur, then using your hands, go over the fur. The loose fur will stick to your hands. Rub your hands together to remove the fur from your hands. Be sure to rub the rabbit's fur from head to tail.

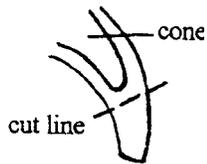
Demonstrate how cornstarch can be used to remove minor stains.

Have the members groom their rabbits.

Demonstrate how to examine the nails of a rabbit.

Leader Notes

Demonstrate how to trim the nails of a rabbit.



What should you do if you cut the blood vessel or cut the rabbit's flesh?
Answer: Stop the bleeding by holding a clean rag or cotton ball to the nail.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What are some grooming practices you use for your rabbit?
2. What other practices do you use to get ready for a show?

Process:

3. How can you remove the loose hair from your show rabbit?
4. How can you remove stains on a white rabbit?
5. Why do you trim the nails of a rabbit?

Generalize:

6. What are some good grooming practices you use with other animals?
7. Why do you think good grooming practices are important?

Apply:

8. What are some good grooming practices that keep you healthy?
Why?

GOING FURTHER:

- Attend a rabbit show and observe grooming techniques.

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

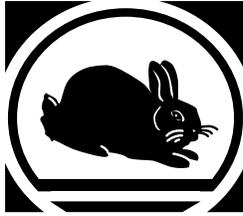
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Showing Your Rabbit

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to handle a rabbit
- The disqualifications and faults for the breed of rabbits raised
- How to examine a rabbit like a judge

ABOUT THEMSELVES:

- Importance of practice in their lives

Material Needed:

- Rabbits (have each member bring a rabbit)
- Carpet for the table
- American Rabbit Breeders Association Standards of Perfection
- Member Handout 3, Rabbit Handling and Showing
- Member Handout 4, Showmanship Scorecard

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

The purpose of rabbit showmanship is to help members become better acquainted with their animals and to learn to handle their stock. In fact, when you participate in showmanship and demonstrate how to handle your animal, you are attempting to display your animal's physical characteristics at their best. From this knowledge, you will learn what to look for and how to check over an animal when selecting future stock.

The time and practice that you spend with the animal before you get to the showmanship table will be of great value, not only for you but for your rabbit. Practice with your animal in the proper position that you expect it to perform on the show table. That is, do not allow the rabbit to stretch out when you want it to pose, or run around the table when you want it to remain in a posed position. Your animal should be clean—free from stains, and loose hair (called moult). The animal's coat should be well groomed. Your animal's condition also will relate to the firmness of flesh, which you control to a great extent by the feeding habit you and your rabbit develop. This condition cannot be obtained in a few weeks. Many weeks of routine, good management are needed for good, firm condition.

Like your rabbit, you should be well groomed. You should wear either a white coat or a long-sleeved white shirt. This will protect your arms as well as presenting a neat appearance. You should exhibit a courteous attitude towards others and be prepared to follow the instructions that the judge gives on the first command.

Leader Notes

Explain and demonstrate how to handle a rabbit during a showmanship contest. (If an older member is available, have them do the demonstration.) Distribute copies of the showmanship card and ask the members to follow along as you demonstrate.

Showmanship starts the minute the rabbit is picked up. Carry the rabbit to the table and set it on the table. With the rabbit in the sitting position, your animal should be checked for ear canker and blemishes over the body. Check the front legs for crooked bone and check the tail to be sure it is carried properly. Then turn the rabbit over on its back and check its eyes and teeth. Look for blemishes on its belly and sores around the neck, check the hind legs for straightness, and check the toenails. Check the sex. Return the animal to the sitting position and pose the rabbit in its correct position.

Help the animal to show its proper body type by grooming the fur, posing the ears, and being sure that the tail is erect and carried straight. Next, pose the rabbit so that it will maintain the pose while you step away from the judging table. Listen to the judge for any further commands that might be given, for instance, they will probably ask you to move the rabbit into different poses. The judge might ask you to show where the loin, shoulders or any other part of the body is located. The judge may quiz you on your knowledge of the rabbit breed that you are exhibiting as well as general knowledge of all breeds. You should be well informed on general disqualifications and faults. Showmanship is not to trip you up, but an opportunity for you to exhibit the knowledge that you have acquired both in book learning and handling.

A judge may ask the following questions:

Have each member practice showmanship and then roleplay being the judge. Help members who are having problems. Use showmanship score cards for practice.

1. What breed of rabbit are you exhibiting?
2. What sex is your rabbit?
3. In what class would you enter your rabbit?
4. Is your rabbit a four-class or six-class rabbit? (Four-class rabbits are smaller with the ideal weight for a senior being under 9 pounds.)

DIALOGUE FOR CRITICAL THINKING:

Share:

1. Why do you like to show rabbits?
2. What is the most difficult/easiest step when showing your rabbit?

Process:

3. What does the judge look for when your rabbit is in the sitting position? Why?
4. What does the judge look for when your rabbit is on its back? Why?
5. Why is regular handling of your rabbit important when getting it ready to show?
6. Why is regular grooming of your rabbit important when getting it ready to show?
7. Why is practice necessary before showing your rabbit?

Generalize:

8. Why is practice important when preparing for special events or activities?

Apply:

9. What other activities or events do you participate in that require practice?

REFERENCES:

Your 4-H Rabbit Project, Pacific Northwest Cooperative Extension, PNW
163

Lessons on:

- Handling a Rabbit
- Grooming Your Rabbit
- Sexing a Rabbit
- Identifying Rabbit Disqualifications and Faults

Authors:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; Marilyn
Rodgers, 4-H Volunteer; James P. Adams, Extension Specialist, 4-H
Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



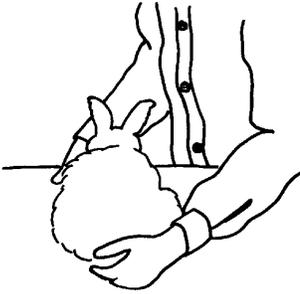
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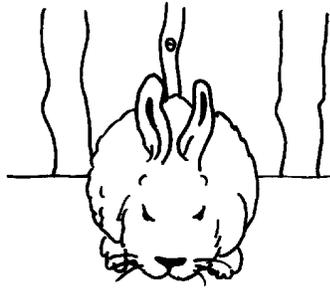
SHOWING YOUR RABBIT

RABBITS, LEVEL I

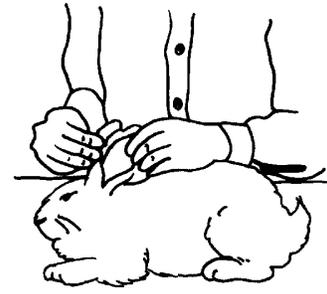
Member Handout 3, Rabbit Handling and Showing



1. **Carry rabbit**—With rabbit facing you, place right hand underneath rabbit's chest and stomach. Balance rabbit on right hand and lift up slightly. Place left hand underneath rump of rabbit until rump is resting on hand. Move rabbit forward until head is securely tucked under left arm. Remove right hand or gently lay right hand on back of rabbit for added security while moving. Always pick up rabbit if asked to move. If moving, step back and behind the other showperson.



2. **Pose rabbit**—Pose rabbit on table with the head facing forward. Smile. A proper pose is with the front feet even with the eyes, rear feet firmly on the table, toes just even with the haunch (thigh joint). There should be a slight rise from shoulder to loin, just over haunch, and a rounded hind quarter. Rabbit should be trained not to move. You should stand straight with your hands at your sides. Turn the animal to the left before beginning the next movement.



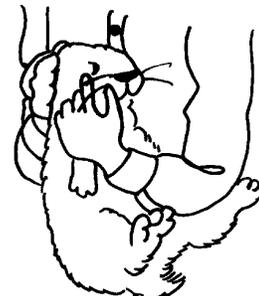
3. **Check ears and ear tattoo number**—Open right ear so judge can see deep into the ear. Then pick up rabbit and place it in the opposite direction to show left ear. (ear canker)



4. **Check teeth**—Pick up rabbit, palming the weight of the rabbit under the left arm. Place the thumb and index finger on each side of the split upper lip and push back lips to show teeth. (tooth defects)



5. **Check nose**—Show judge the nose area and the front feet. (signs of snuffles)



6. **Check eyes**—Let judge see both eyes. (blindness, spots in iris)

SHOWING YOUR RABBIT

RABBITS, LEVEL I

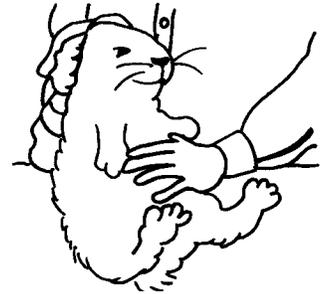
Member Handout 3, Rabbit Handling and Showing, *continued*



7. **Check sex**—Roll the rabbit back on its rump and clamp the tail with the index and second finger. Place thumb below vent area and push toward front of rabbit. (vent disease) Check testicles if male.



8. **Check toenails and front feet**—Push thumb into center of front paw. Push back fur with index finger if necessary. Also show dew claw. (color, length)



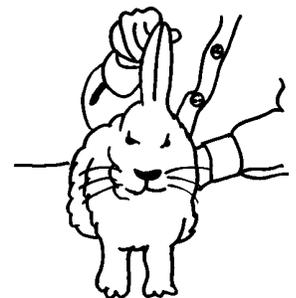
9. **Check chest and abdomen**—Run hand over chest and abdomen area. (abscesses, tumor or abnormalities) Check for blemishes.



10. **Check rear legs**—Force rear legs out straight by placing cupped hand ahead of the rear legs on the stifle joints and pushing toward the feet. Point outstretched legs toward judge. (straightness) Check toenails.



11. **Check hocks**—Show bottom of both feet and underside of rabbit to judge. (sore hocks)

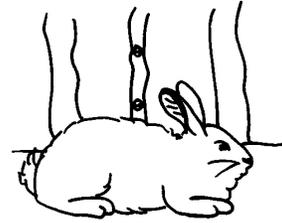
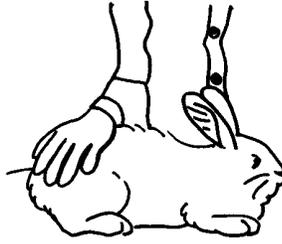
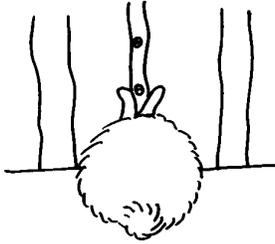


12. **Check front legs**—With rabbit facing the judge, grasp ears and fold over back. Rabbit's hind feet are on the table. Raise forequarters 6 or more inches and extend each front foot with free hand by sliding thumb and first finger down side of the leg bone. (straight, crooked, bowed)

SHOWING YOUR RABBIT

RABBITS, LEVEL I

Member Handout 3, Rabbit Handling and Showing, *continued*

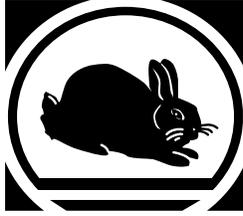


13. **Check tail**—Show rear of rabbit with tail showing to judge. (crooked, wry tail, screw tail)
 14. **Check fur**—Stroke fur toward rabbit's head to show fur fly back and cleanliness. Stroke rabbit from head to rear showing your clean hand to judge, which indicates the rabbit's fur is not in a molting condition. If a Rex, pat the fur to feel the density.
 15. **Pose rabbit**—Show front, rear and side so overall balance can be seen. Feel shoulders, rib area, loin, rump, etc., if asked to do so. (desirable fleshing) Show marking if asked to do so. Take one step back after finished.
16. **Showperson's appearance**—Clean, neat, long sleeves. Clothes color contrasts with rabbit color; long hair tied back.
 17. **Showperson's attitude and actions**—Alert, watching both judge and rabbit, courteous, confident, smooth-flowing presentation.
 18. **Showperson's knowledge**—Ability to answer general questions about rabbits, the rabbit industry and what you've learned—parts, faults, disqualification, eliminations, breed and variety, breeding, feeding, managing rabbits, common terms, symptoms and treatment of common illnesses and ailments.

Think Back:

What do you remember most about preparing for a rabbit show? Why?





Preparing Your Rabbit For Kindling

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to feed a pregnant doe
- How to prepare the nest box for kindling

ABOUT THEMSELVES:

- Their space needs

Materials Needed:

- Nest box
- Nesting material (straw, hay, etc.)
- Activity Sheet 6, Pregnancy Conditions Quiz

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

A pregnant doe needs more feed than a resting doe. After you are sure the doe is pregnant, gradually increase her feed. However, you do not want to overfeed because a fat doe has trouble kindling (giving birth).

A nest box should be put in the doe's cage on the 28th day of pregnancy. You need to use clean straw or other nesting materials. During the winter you will want to put 4 to 6 inches of bedding in the nest box. Also, a sheet of Styrofoam can be placed between the bottom of the nest box and a solid floor to help keep the box warm in the winter. But during the summer months, 1 to 2 inches of bedding is sufficient. The nest box should not have a top on it. If it does, the doe might sit on top of the box, allowing urine to collect in the box. If the doe fails to have a litter, the nest box should be removed on the 34th day after mating.

Leader Notes

Discuss the size of nest box needed. Small breeds will need smaller boxes than the larger breeds.

Hand out Activity Sheet 6, Pregnancy Conditions Quiz.

DIALOGUE FOR CRITICAL THINKING

Share:

1. What type of nest box do you use or plan to use? Why?
2. What type of nesting material do you use with a pregnant doe? Why?

Process:

3. Why is it important to vary the amount of nesting materials in the winter and summer?
4. Why is the size of the nesting box important?

Generalize:

5. What types of space are needed for other pregnant animals?

Apply:

6. Do your space needs change for different activities that you might be involved in? Why?

REFERENCES:

Lessons on:

- Making A Rabbit Nest Box
- Determining Pregnancy in Rabbits
- Feeding Your Project Animal

Official Guide To Raising Better Rabbits, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team

| |
|--|
| Leader's Key, Activity Sheet 6, Pregnancy Conditions Quiz Correct 4, 7, 9, 12 |
|--|



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PREPARING YOUR RABBIT FOR KINDLING

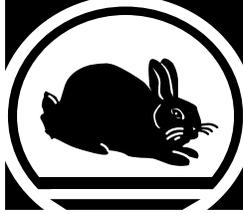
RABBITS, LEVEL I

Activity Sheet 6, Pregnancy Conditions Quiz

Which of the following pregnant does is being properly cared for? Circle the number that has the correct series of conditions. There may be more than one.

| | | | | |
|-----------------|--------|--------|---------------|----------------|
| 1. large breed | winter | 2" hay | normal ration | small nest box |
| 2. small breed | winter | 2" hay | normal ration | small nest box |
| 3. small breed | summer | 6" hay | extra ration | small nest box |
| 4. large breed | summer | 2" hay | extra ration | large nest box |
| 5. large breed | summer | 2" hay | extra ration | small nest box |
| 6. large breed | summer | 6" hay | extra ration | large nest box |
| 7. small breed | winter | 6" hay | extra ration | small nest box |
| 8. large breed | winter | 6" hay | normal ration | large nest box |
| 9. small breed | summer | 2" hay | extra ration | small nest box |
| 10. large breed | winter | 6" hay | extra ration | small nest box |
| 11. small breed | summer | 2" hay | normal ration | large nest box |
| 12. large breed | winter | 6" hay | extra ration | large nest box |





Caring for the New Kits

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- What to do after the kits have been kindled

ABOUT THEMSELVES:

- Importance of accepting responsibility

MATERIALS NEEDED:

- If possible, visit a rabbitry where kits were recently born for the members to see how to care for the newly born litter.
- Activity Sheet 7, Rabbit Maturity Time Line

ACTIVITY TIME NEEDED: 30 MINUTES PLUS
RABBITRY VISIT

ACTIVITY

Leader Notes

When a mother rabbit gives birth to her litter, we say she has kindled. The babies are called kits.

As soon as the doe has kindled, you should check the nest box and remove any bloody masses and dead kits. The nest box should be checked every day during the summer months. During the winter, the nest box should be checked often but not during days when the temperature is near zero. The nest box should never be allowed to be damp.

During the summer, you may need to put the kits in a wire nest box in order to keep them from getting too warm. Sometimes, you may need to remove fur from the nest box in order to prevent the young kits from becoming too warm. In the winter, you will want to cover the kits with the fur after you have checked them. If necessary, the kits may be handled. The doe will not neglect her kits because they have been handled.

Cut down on the feed to the doe for a couple days then gradually increase it until about the 10th day she is getting all the feed she wants. This way the doe will produce more milk when the kits are ready to consume it.

If your doe has 12 kits but can only feed six to eight, you will want to foster off four to six of the kits. If there are no does available to foster the kits to, you will have to attempt to hand-rear the extra kits. At least six of the kits will be lost if all 12 are left with the mother. Often, the doe will end up losing more than six if too many kits are left to nurse.

Consult Level III lesson on raising orphan rabbits for details.

Leader Notes

Remove the nest box when the young are 3 weeks old. If the young start coming out of the nest earlier than three weeks, remove the nest box so all young will get a chance to nurse. During extremely cold weather you may wish to leave the nest box in for four weeks.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What's the most difficult part of caring for new kits? Easiest? Why?

Process:

2. Why should the nest box be checked every day?
3. Why is it important to decrease the amount of feed to the doe immediately after kindling?

Generalize:

4. What are some of the new duties you took on when you began caring for new kits?

Apply:

5. What are some events (times) in your life when you had to take on new responsibilities or were depended upon to finish a job?

REFERENCES:

Lessons on:

- Preparing Your Rabbit for Kindling
- Weaning the Rabbit Litter

Official Guide To Raising Better Rabbits, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

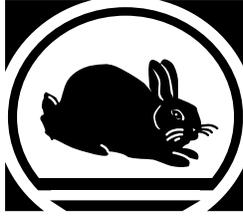
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Determining the Sex of a Rabbit

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to hold the rabbit in order to determine the sex
- How to determine the sex of 4- to 8-week-old rabbits

ABOUT THEMSELVES:

- Improve observation skills

Materials Needed:

- You will need 4- to 8-week old rabbits of both sexes

ACTIVITY TIME NEEDED: 20 MINUTES

ACTIVITY

It is important to be able to determine the sex of rabbits for the following reasons:

1. To know what sex of rabbit you are raising.
2. To mate rabbits.
3. To prevent unwanted breeding from occurring.
4. To be able to enter rabbits in the proper classes at the shows.

Before sexing your rabbit, be sure you are wearing a long-sleeved shirt to avoid being scratched.

Q. How would you hold a rabbit to determine its sex?

A. With your left hand, hold the rabbit in a sitting position on the table. Using your right hand, place the thumb behind the right hind leg and have each member use the index and forefinger to demonstrate how to depress the tail backwards and downwards. Then use the thumb to gently depress the area in front of the sex organs to expose the reddish membrane.

Q. How do you tell the difference between a buck and a doe?

A. On the buck, the organ will protrude as a well-rounded tip (penis). On the doe, the membrane will protrude to form a slit (vulva) with a depression at the end next to the anus.

Q. Is it important to separate littermates?

A. If you do not, the rabbits will fight, destroying their fur. Sometimes the rabbits will injure themselves; often the rabbits are unfit for showing. The rabbits may breed if not separated since some rabbits are fertile at eight weeks. If a doe becomes pregnant at this age her growth will be stunted.

Leader Notes

Divide the group into teams of two to three members. Before you have told and shown the members how to determine the sex, have the teams see if they can determine the sex of the rabbits. Each team will need one or two rabbits.

Discuss how to determine the sex of a rabbit. Have the members try to determine the sex of several rabbits. If a member is having problems, have an older member help.

Demonstrate how to sex a rabbit.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. How easy or hard was it to determine the sex of a rabbit?

Process:

2. Why is it important to know the sex of a rabbit?
3. Why is it important to separate littermates by sexing at weaning?

Generalize:

4. Why is the sex of your rabbit important when choosing rabbits to show?

Apply:

5. When is it important to be able to know the sex of a rabbit to plan for future breeding programs?

GOING FURTHER:

- Visit a commercial rabbitry and see how they use records to cull.

REFERENCES:

Agricultural Extension Service, University of Minnesota

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

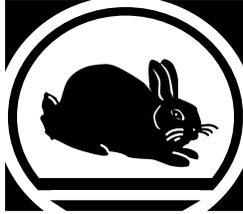
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Tattooing a Rabbit

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- What equipment is needed to tattoo a rabbit
- How to tattoo a rabbit

ABOUT THEMSELVES:

- Importance of identification

Materials Needed:

- Tattoo pliers
- Tattoo numbers and letters
- Tattoo ink
- Vaseline
- Paper towels
- Tattoo box
- Cardboard
- Rabbits
- Carpet
- Activity Sheet 8, Determining Ownership
- Leader's Key, Activity Sheet 8, Determining Ownership

ACTIVITY TIME NEEDED: 30 TO 45 MINUTES

ACTIVITY

Learning to tattoo a rabbit is an important and necessary management skill. All animals shown or registered in the American Rabbit Breeders Association registration system must be tattooed. This practice also provides positive identification for the purposes of record-keeping and protection against theft.

If you plan to show your rabbit at the county fair, one of the rules is that all rabbits must be tattooed in order to be shown.

A tattoo can have up to five letters or numbers that are used to identify your rabbit.

The best time to tattoo a rabbit is when it is about 8 weeks old and ready to be weaned. Steps to follow when tattooing are:

1. Put numbers and/or letters in the tattoo pliers.
2. Tattoo a piece of cardboard or paper first to make sure it will say what you want it to.

Leader Notes

You may wish to divide the group into teams and ask them to demonstrate how they would tattoo a rabbit. Give the teams a few minutes to work out the task. Using cardboard instead of a live rabbit, have the teams demonstrate how to tattoo a rabbit.

Demonstrate how to tattoo a rabbit using the tattoo box.

Leader Notes

3. Put rabbit in tattoo box. If you don't have a tattoo box, have someone hold your rabbit while you tattoo it.
4. Puncture the left ear with the tattoo pliers.
5. Rub tattoo ink into the puncture holes. Roll-on ink bottles are easy to use. If ink gets on the fur it usually is best to just let it wear off.
6. Apply a small amount of Vaseline and wipe the ear clean with a paper towel.

If the tattoo is not satisfactory, you may either make a second tattoo or repuncture the holes with a sharp needle and repeat the inking process.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. Pretend that you don't know how to tattoo a rabbit, have a group member explain it to you.
2. What are two tools needed to tattoo a rabbit?

Process:

3. Why is 8 weeks of age a good time to tattoo a rabbit?
4. Why is it important to individually identify rabbits?

Generalize:

5. What are some methods used to identify other animals?

Apply:

6. What are ways that people identify their possessions?

REFERENCES:

Agricultural Extension Service, University of Minnesota

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

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TATTOOING A RABBIT
RABBITS, LEVEL I
Activity Sheet 8, Determining Ownership

Use the following clues to help you decide which rabbit below belongs to which child.

1. Pat uses only odd digits (1,3,5,7,9) and letters on his tattoos.
2. Nancy always puts her initial in the middle of her rabbit's tattoo.
3. Joey's tattoo always begins with an M if his rabbit is a male.
4. Rosa put a 3 on the end of her rabbit's tattoo since it was her third rabbit.
5. Joey's rabbit is a female.

M5A93

M2NY3

F7X73

M6N18

TATTOOING A RABBIT

RABBITS, LEVEL I

Leader's Key, Activity Sheet 8, Determining Ownership

M5A93

Pat

M2NY3

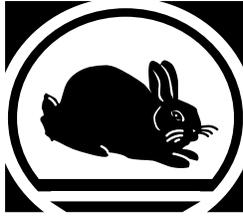
Rosa

F7X73

Joey

M6N18

Nancy



Weaning the Rabbit Litter

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- When to wean rabbits
- How and why to cull rabbits from a litter

ABOUT THEMSELVES:

- Strategies to use in making decisions

Materials Needed:

- American Rabbit Breeders Association Standard of Perfection
- Three or more rabbits (weaning age)
- Rug to put on table for activity

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Weaning is when a young rabbit is separated from its mother. It is like when babies begin eating solid food at about the age of 1 or 2 years.

The best time to wean the rabbit litter is when they are 8 to 10 weeks old. At this time, you must decide what use each rabbit will be to you. Rabbits may be raised as pets, for breeding, show or meat. A list of disqualifications and faults will help you decide if you want to raise a rabbit for show.

Most members have room for only a few rabbits. Some members of a litter will be culled, or separated from the others, and raised for meat. These can be put together in a pen and kept until they are processed, when they weigh 4 to 6 pounds.

The others should be separated into individual pens. Then they cannot fight, injure or pull hair from each other. This also will keep them from breeding at too early an age.

Before you can decide which rabbits are good and which will be culled, you must determine the breed type, the fur quality, and breed markings. You need to know the standard for the breed.

When you wean the litter, follow these steps:

1. Sex
2. Cull
3. Tattoo
4. Place showing or breeding rabbits in separate cage.

Leader Notes

Lessons on sexing, culling, judging and tattooing should be done before or in conjunction with this lesson.

Demonstrate the steps needed to wean a litter.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What does “weaning” a rabbit mean?

Process:

2. What are the different characteristics you should consider before culling your rabbits?
3. Why is it important to follow the procedures of sexing, culling, tattooing and placing rabbits in separate cages?
4. What decisions should you make about each rabbit after it is weaned?

Generalize:

5. What are some other decisions you have had to make? Why?

Apply:

6. Who helps you make daily decisions? Why?

REFERENCES:

Lessons on:

- Recognizing the Ideal Rabbit
- Parts of the Rabbit
- Talking Like a Rabbit Judge
- Determining the Sex of a Rabbit
- Recognizing General Faults and Disqualifications
- Selecting Rabbit Equipment

American Rabbit Breeders Association Standards of Perfection, Agricultural Extension Service, University of Minnesota

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

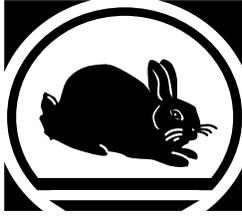
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Giving a 4-H Presentation

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- What information should be included in a project presentation

ABOUT THEMSELVES:

- Communication skills

Materials Needed:

- Have each member bring a rabbit
- Carpet for table
- Activity Sheet 9, Good Speaker Tips

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Tell the members that they are going to give a project talk about their rabbit project. One at a time, have members take their rabbit to the table. Then ask the following questions:

1. What breed of rabbit do you have?
2. How old is your rabbit?
3. What sex is your rabbit?
4. What do you feed your rabbit?
5. How often do you feed your rabbits?
6. How many rabbits do you have?
7. What is the best thing about having a rabbit?
8. For what purposes do people raise rabbits?

Leader Notes

As each member arrives, pin a rabbit term on each member's back. Have the members try to guess what the term is on their backs. Members may ask questions that can be answered as yes or no. After the group has had a chance to guess the term on their backs, take off the terms and see how many guessed the correct term.

After the member has answered all the questions, tell them that he/she has given a project talk. The member may need some help in answering the questions. Continue until all members have had a chance to give their presentations.

Explain that there are a lot of other questions that can be answered in a project talk. For example, how many varieties does your breed have? What type of fur does your rabbit have?

DIALOGUE FOR CRITICAL THINKING:

Share:

1. How easy or difficult was it to determine the rabbit term on your back?
2. Which did you enjoy the most—asking or answering rabbit questions? Why?

Process:

3. What did you learn about rabbits during this activity?

Generalize:

4. What did you learn about yourself during this activity?

Apply:

5. What will you do differently the next time you prepare for a presentation?

REFERENCES:

Lessons on:

- Identifying Breeds of Rabbits
- Feeding the Show Rabbit
- Selecting Your Project Animal

Author:

Clarence W. Linsey, Kansas State Breeders Association; James P. Adams, Extension Specialist 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team

Leader's Key, Activity Sheet 9, Good Speaker Tips

What every speaker enjoys:

$\frac{A}{1}$ $\frac{P}{2}$ $\frac{P}{3}$ $\frac{L}{4}$ $\frac{A}{5}$ $\frac{U}{6}$ $\frac{S}{7}$ $\frac{E}{8}$



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GIVING A 4-H PRESENTATION
RABBITS, LEVEL I
Activity Sheet 9, Good Speaker Tips

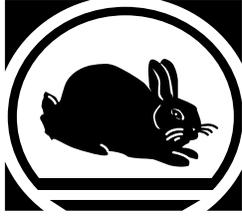
If the statement is something a good speaker does, circle the first letter. If the statement is not something a good speaker does, circle the second letter. Then put the circled letters in the blanks to find out what every speaker enjoys.

- | | | |
|---|---|---|
| M | A | 1. Reads everything so he/she doesn't make a mistake. |
| S | P | 2. Speaks quietly to get done earlier. |
| P | E | 3. Speaks loudly and clearly. |
| O | L | 4. Leans back against the wall. |
| A | N | 5. Looks at the audience. |
| U | B | 6. Stands straight. |
| W | S | 7. Chews gum during the presentation. |
| E | A | 8. Has prepared the presentation ahead of time. |

What every speaker enjoys:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| — | — | — | — | — | — | — | — |

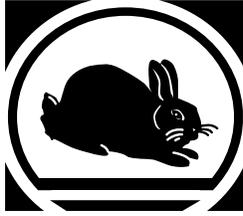




Kansas 4-H Rabbit Leader Notebook

Level II

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Setting Goals for Your 4-H Rabbit Project

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to set goals

ABOUT THEMSELVES:

- Importance of setting goals

Materials Needed:

- Paper and pencils
- Rabbit Member Guide and Annual Report (MG-16)

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Goals should indicate growth in the project as well as the member's learning. Each year the goals should include at least one new skill to learn.

The MAP Worksheet defines the steps that members must go through to set their goals for Level II.

Leader Notes

Have each member tell what goals he or she met or accomplished during the last year in this project. For example: raised two litters of Angoras, gave a project talk on rabbits, etc.

Hand out a "Rabbit Member Guide and Annual Report" to each member.

Ask the members for some suggestions of things they might want to learn during the project year. Possible ideas might be suggested from lesson titles in Level II.

After they have developed a good list, have the members write their goals for the year on their MAP.

Have the members share their goals for the year with each other and the group. With these goals in mind, you can plan the project meetings so that the members will be able to accomplish many of their goals.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What is one skill that you learned from your rabbit project last year?
2. What is the goal that you have for your rabbit project this year?

Process:

3. What problems did you have with your rabbit project last year?
4. Why do you think you had those particular problems?

Generalize:

5. Does setting goals help you solve rabbit problems?
6. Does setting goals help you solve your own problems?

Apply:

7. How will you use goal setting the next time you plan an activity?

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

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SETTING GOALS FOR YOUR 4-H RABBIT PROJECT

RABBITS, LEVEL II

Rabbit Member Guide and Annual Report

Welcome to the 4-H Rabbit Project! The purpose of this Rabbit Member Guide and Annual Report is to help you journey through your Rabbit Project. This guide will:

- Identify how to set goals on things to learn and begin your rabbit project,
- Identify 4-H learning opportunities,
- Identify 4-H recognition system,
- Provide you with an annual summary for your Kansas 4-H Rabbit Project.

EXAMPLES OF GOALS ON THINGS TO LEARN

- Level I - Identify 10 parts of a rabbit
- Level I - How to show a rabbit
- Level II - How to make a nest box
- Level II - How to judge rabbits
- Level III - How to give medicines
- Level III - How rabbits digest their food
- Level IV - How to conduct a skillathon
- Level IV - How to balance a ration

In addition, there is a note to your parents/guardian at the bottom of this page, so that they can help you with your rabbit project.

LEARNING OPPORTUNITIES IN 4-H

- Attending project meetings with your friends
- Learn record keeping skills
- Giving rabbit presentations at club and county 4-H Days, State Fair, school or civic groups
- Attending judging clinics and contests to observe, evaluate and make decisions
- Exhibiting at local, county, state or at American Rabbit Breeders Association (ARBA) sanctioned shows.

4-H RECOGNITION SYSTEM

4-H's Recognition System is diverse and provides you with many learning opportunities:

- Participation: attending project meetings, helping others at project meetings, show and share at State Fair
- Progress toward goals: meeting deadline you set on MAP sheet (see page 2)
- Standards of excellence: meeting a high percentage of learning goals for each level of the project
- Peer competition: judging and showmanship contests at rabbit shows and fairs
- Team/cooperative efforts: community service activities

NOTES TO PARENTS/GUARDIANS:

The Rabbit Project is one of several projects in the Animal Sciences Division of Kansas 4-H projects. It is an ideal project for both rural and urban youth, as well as all age groups. Rabbits are a good beginning project because they adapt to many different environments, require minimal investment and teach responsibility.

If your youth does not have a group leader, check with your Extension Office to see if your youth can participate in a neighboring club. If this is not available, you will need to act as the leader or helper. The Extension Office has a copy of the "Rabbit Leader's Notebook" that you may wish to use.

Insert all member handouts and activity sheets in the 4-H Record Book after this Rabbit Member Guide and Annual Report. These "records" are a recording of what was done. List costs, hours spent, etc. on your journal page created in MAP STEP 8. Financial and performance records may be found in: Level II pages 27 to 30; Level III pages 57 to 62 and 95 to 98; Level IV pages 51 to 60. Using records before the youth is capable of understanding the concept or doing the math computations is strongly discouraged!

HOW TO SET GOALS AND BEGIN YOUR RABBIT PROJECT USING THE MEMBER ACHIEVEMENT PLAN—MAP

This is your **Member Achievement Plan—MAP**. This plan will help you begin to decide what goals, deadlines, and energizers you want to use for the upcoming year.

MAP STEP 1

Identify as goals two things you would like to learn this year. Your leader will give you a list that might help you think about what you want to learn in your rabbit project.

Goal 1: _____

Goal 2: _____

MAP STEP 2

After you identify each goal, let's break them into steps. You can list 3 to 5 steps for each one of your goals.

| Steps for Goal 1: | MAP STEP 3 Deadline | MAP STEP 4 Energizer | MAP STEP 5 Date Completed |
|-------------------|------------------------|-------------------------|------------------------------|
| 1st _____ | _____ | _____ | _____ |
| 2nd _____ | _____ | _____ | _____ |
| 3rd _____ | _____ | _____ | _____ |
| 4th _____ | _____ | _____ | _____ |
| 5th _____ | _____ | _____ | _____ |

MAP STEP 3

Now that you've put Goal 1 into steps, go back and put a deadline next to each step. The deadline shows when you plan to complete the step. Every step should have a different deadline or date.

MAP STEP 4

Sometimes goals are hard to stick to. It takes a long time to see results. So as you complete a step and meet a deadline you need to give yourself a boost. Let's call this boost an energizer or reinforcer. An energizer can be anything that you like and enjoy: going to a movie with a friend, talking on the phone, listening to a CD, taking your dog for a walk, eating a healthy snack, playing ball, etc.

What are other things that you might use as energizers? List them here: _____

Now, place one energizer for each step under the column marked, "Energizer."

MAP STEP 5

When you've finished a step in your goal, place the date completed in the column marked, "Date Completed."

MAP STEP 6

Now that you've identified your steps, deadlines, and energizers, do the same for Goal 2.

| Steps for Goal 2: | MAP STEP 3 Deadline | MAP STEP 4 Energizer | MAP STEP 5 Date Completed |
|-------------------|------------------------|-------------------------|------------------------------|
| 1st _____ | _____ | _____ | _____ |
| 2nd _____ | _____ | _____ | _____ |
| 3rd _____ | _____ | _____ | _____ |
| 4th _____ | _____ | _____ | _____ |
| 5th _____ | _____ | _____ | _____ |

MAP STEP 7

Your goals, steps, deadlines, and energizers are written. It's time to share with one of your project members. When we talk to others about our goals, it helps us get a better idea of what we are going to do. Sometimes talking will help us get a better idea, so don't worry about changing any part of your MAP if you want to. After you've explained your goal to a project friend, have them sign and date it in the space provided below.

Project Friend's Signature _____ Date _____

Have your project leader sign below:

Project Leader's Signature _____ Date _____

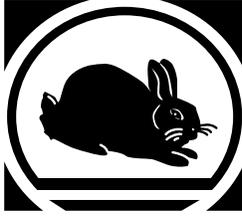
MAP STEP 8

Keep a journal of everything you do in the project to help you remember these experiences. (Create a page with these headings and add it to this record.)

| Date | What you did, learned, how you felt, costs, time spent, etc. |
|-----------|--|
| Ex. Nov 5 | Attended a project meeting and learned parts of a rabbit. Now I know why a rabbit hops instead of walks. |
| Dec. 6 | Spent 5 hours building a nest box at a cost of \$10. |

MAP STEP 9

You've spent a whole year on your rabbit project. You should have learned many new things. Take some time to think back and review your journal (STEP 8). Write one or two main things you learned about rabbits. What is something you learned about yourself while studying rabbits? (Add a page if you need more space.)



Receiving Recognition Through Your Rabbit Project

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- How they can receive recognition through a 4-H rabbit project

ABOUT THEMSELVES:

- Meaningful forms of recognition

Materials Needed:

- Chalkboard and chalk or flip chart
- Kansas Awards Application for each member from county Extension office
- Copies of county or local Awards Application

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

How are you progressing on your goals? Refer back to your Rabbit Member Guide as you progress through the project year.

Everyone wishes to be recognized for a job well done. Recognition encourages some members to try harder.

Recognizing 4-H Rabbit Members

- Recognition of 4-H'ers for participation in educational experiences acknowledges involvement as a first step in building a positive self concept. For some youth, participation in a 4-H learning experience is an accomplishment.
- Recognition of progress toward personal goals enables youth to gain experience in goal-setting and realistic self-assessment.
- Recognition of the achievement of generally recognized standards of excellence gives youth an external, predetermined target for their learning experiences. Standards of excellence are established by experts in a given area. By measuring personal progress against standards of excellence, youth can gain insight into their own efforts and abilities.
- Recognition through peer competition is a strong motivation for some, but not all young people. This type of recognition subjectively identifies, in a concrete time and place, the best team or individual. It is not appropriate for youth under 8 years old.

Leader Notes

Divide the group into teams. Ask each team to name various ways a member can receive recognition through the rabbit project. After three minutes, ask each team how many methods of recognition they came up with. List these on the chalkboard or flip chart.

Using the list generated by the members, discuss the various ways a member can receive recognition. Indicate which form of recognition each is.

Discuss and review the Kansas Awards Application and process.

Review possible awards listed in the 4-H Journal.

Leader Notes

Review and discuss any county award forms that are specific to your county.

Have the members draw a name of another member out of a hat. Ask each to think about a way that the other member makes a positive contribution to meetings. Then have each member recognize him or her for the contribution he/she makes. Have a recognition ceremony in which each is given positive recognition. (The leader can be prepared to offer suggestions to members who have trouble identifying the contributions of others.)

- Recognition for cooperation helps youth learn and work cooperatively, preparing them for living in today's interdependent, global society. Learning and working together promotes high achievement. Cooperation may take advantage of all the skills represented in the group, as well as the process by which the group approaches the learning task/goal. Everyone is rewarded.

Ways of Receiving Recognition Through the Rabbit Project

- A. Participation
 1. Project meetings
 2. Local judging and showmanship schools
- B. Progress Toward Goals
 1. Self-set individual or group goals
- C. Standards of Excellence
 1. Present talks or demonstrations
- D. Peer Competition
 1. Exhibit at local shows, fairs
 2. County, Area or State project awards
 3. Judging contests or showmanship
- E. Team/Cooperative Efforts
 1. Create window displays, banners, booths, floats
 2. Share rabbits with Senior Centers or schools
 3. Do community service activities

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What progress have you made on the goals you've set?
2. What is one thing you would like to receive recognition for?
3. What type of recognition do you prefer for your accomplishments?

Process:

4. What do you think is the most important thing about receiving recognition for a project you've completed?
5. What are some of the requirements for various forms of recognition? Why?

Generalize:

6. What are other forms of recognition that you might receive in 4-H?

Apply:

7. How will you use various forms of recognition in the future?

GOING FURTHER:

- Discuss recognition from competition versus recognition from cooperation.

REFERENCES:

Incentives In 4-H Modules (available in most county Extension offices)

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association
James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University.

Reviewed By:

Rabbit Design Team

Think Back:

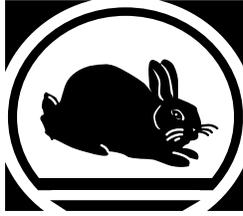
Have members talk about their goals, the contribution they make to the group, and how they would like to be recognized for their contribution.



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Producing Healthy Rabbits

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to produce healthy rabbits

ABOUT THEMSELVES:

- Importance of good management techniques

Materials Needed:

- Chalkboard or flip chart
- Activity Sheet 1, Healthy Rabbit Meter
- Leader's Key, Activity Sheet 1, Healthy Rabbit Meter

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY

A healthy rabbit will be alert and active with bright eyes and a shiny fur coat. The healthy rabbit will be eating and have good ear carriage. There will not be any discharge from the nostrils. The feces should be round and firm.

There is a common cliché in the rabbit world: “First year a beginner, second year an expert, third year gone!”

It takes good management to produce healthy rabbits.

Unhealthy rabbits do not convert feed into edible protein efficiently and usually do not mature into animals that approach the Standard of Perfection on a regular basis.

In order to produce healthy rabbits, the grower must adhere to the following guidelines:

1. Use healthy breeding stock.
2. Select replacement stock that is healthy—do not keep stock that has health problems, even if it is superior in physical characteristics or bloodlines. If rabbits aren't healthy isolate them for treatment.
3. Cull breeding stock and growing stock continually—only keep rabbits that are healthy and exhibit disease resistance. Don't let their show record cloud this issue.
4. Determine the capacity of your rabbitry and do not over populate it.

Leader Notes

Have members list symptoms or ways you can tell if a rabbit is healthy, you write these down.

Write guidelines on chalkboard or flip chart.

Leader Notes

5. Maintain adequate ventilation.
6. Maintain proper nutrition. For beginners it is probably best to use commercial rabbit feed.
7. Keep stress factors to a minimum.
8. Determine the cause of every death in the rabbitry. Learn to conduct a necropsy (analyzing for causes of death) on each carcass.
9. Keep accurate and complete records.
10. Cull unhealthy animals from the herd. Do not sell these for breeding stock or exhibit these animals.

Hand out Activity Sheet 1, "Healthy Rabbit Meter." Send it home or let members work in small groups to finish it.

Learn the proper culling methods and implement them. Remember to provide the proper environment for your rabbits.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. How would you describe a "healthy rabbit?"
2. What are two or three guidelines for producing a healthy rabbit?

Process:

3. Why is it important to maintain the health of a rabbit?
4. What are some good rabbit management practices? Why are they important?
5. Why is record keeping important in the production of healthy rabbits?

Generalize:

6. What are the benefits or problems associated with good or bad management?

Apply:

7. What are some management practices that you use in your everyday life?

GOING FURTHER:

- Observe a necropsy (analyzing for causes of death)

REFERENCES:

Domestic Rabbits, July-August 1987

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



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PRODUCING HEALTHY RABBITS
RABBITS, LEVEL II
Activity Sheet 1, Healthy Rabbit Meter

A vertical rectangular box is centered on the page. From the top and bottom edges of this box, horizontal dashed lines extend outwards to the left and right. There are 11 horizontal dashed lines extending to the left and 11 horizontal dashed lines extending to the right, creating a grid of 22 rectangular cells for writing.

In raising rabbits, you must consider all of the following. Write these items in the blanks above in such a way that they spell out in the box the result of having given them consideration.

Disease

Good Management

Venilation

Housing

Culling

Stress

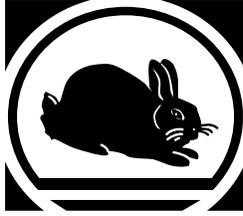
Breeding

Food

Cleanliness

Handling





Understanding a Feed Tag

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to read a feed tag

ABOUT THEMSELVES:

- How to process information to make decisions

Materials Needed:

- Feed tags from different varieties of rabbit pellets
- Activity Sheet 2, Feed Tag Quiz
- Cereal box labels with Nutrition Facts (several)

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

When you purchase rabbit pellets, be sure to check the feed tag—check the amount of protein and fiber. Working does and litters need more fiber than resting does and bucks.

Let's discuss the major components of a feed tag:

1. Guaranteed Analysis—The minimum and maximum amounts of nutrients.
2. Ingredients—Listed on the tag in order from greatest to least amount.
3. Feeding instructions or tips—Suggest daily amounts for various types and breeds of rabbits.
4. Special warnings, uses and warranty.

Leader Notes

Give each pair of members a feed tag and ask them to determine how much protein is in the feed. Then have them find out how much fiber is present.

Hand out Activity Sheet 2, "Feed Tag Quiz."

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What information does a feed tag have on it?
2. What was easiest/hardest to understand on the feed tag?

Process:

3. What types of rabbits need the most fiber?
4. How do the ingredients affect how you should store rabbit feed?

Generalize:

5. When you compared and contrasted the rabbit feed tag with the cereal box label, what was alike or different?
6. Why is it important to have a balance of nutrients in various diets?

Apply:

7. How will you use the information learned in this activity in the future?
8. What changes do you plan to make in your own diet? Why?

REFERENCES:

Lessons on:

- Feeding Your Project Rabbit
- Feeding Your Show Rabbit

Domestic Rabbits, September-October, 1987

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



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UNDERSTANDING A FEED TAG

RABBITS, LEVEL II

Activity Sheet 2, Feed Tag Quiz

CUPBOARD SHOW RABBIT PELLETS

GUARANTEED ANALYSIS

CRUDE PROTEIN, min .. 14.0% CALCIUM (Ca), max 1.2%
 CRUDE FAT, min 2.5% PHOSPHORUS(P) min ... 0.5%
 CRUDE FIBER, min 15.0% SALT (NaCl), min 0.4%
 CRUDE FIBER, max 20.0% SALT (NaCl), max 0.9%
 CALCIUM (Ca), min 0.7% VITAMIN A, min ... 2,700IU/lb

INGREDIENTS

Alfalfa meal, processed grain by-products, plant protein products, cane molasses, vegetable oil, calcium carbonate, monocalcium phosphate, dicalcium phosphate, salt, vitamin A acetate, D-activated animal sterol (source of Vitamin D3), vitamin E supplement, choline chloride, niacin, vitamin B12 supplement, calcium pantothenate, riboflavin, pyridoxine hydrochloride, thiamine mononitrate, menadione dimethylpyrimidinol bisulfite (source of vitamin K), folic acid, zinc oxide, zinc sulfate, ferrous sulfate, manganese sulfate, manganous oxide, copper sulfate, ethylenediamine dihydriodide, calcium iodate, cobalt carbonate, sodium selenite, yucca schidigera extract, propionic acid (a preservative), sorbic acid (a preservative), mono- and di-esters of 1,2, propandiol, butylated hydroxyanisole (a preservative), butylated hydroxytoluene (a preservative).

FEEDING INSTRUCTIONS:

Feed Show Rabbit Pellets to adult show rabbits as follows:

Small Breeds—feed 3 to 4 oz daily.

Large Breeds—feed 4 to 6 oz daily.

IMPORTANT NOTE: Feeding recommendations can be adjusted as needed for body and fur condition.

FEEDING TIPS:

Provide plenty of fresh, clean water at all times. Never feed any feedstuffs that are moldy, musty or suspect in any way. Show Rabbit Pellets are a complete feed. Additional hay or other feedstuffs are not required and may dilute the nutrient levels resulting in depressed performance. Rabbits should be changed slowly from one feed program to another over a 5- to 7-day period. The new feed should be mixed with the old feed to allow the rabbit to adjust smoothly to the new food.

WARRANTY

Cupboard warrants that this product conforms to the description on the label, complies with applicable state and federal laws and is fit for the purposes referred to in the "Directions for Use." CUPBOARD MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR OF MERCHANTABILITY. In the event that any product fails to conform to the warranty outlined above, Cupboard shall, at Buyer's option, refund the purchase price of the defective product or replace the product. This refund or replacement shall be Buyer's sole and exclusive remedy and in no event shall Cupboard or the Seller be liable for consequential, incidental, special, direct or indirect damages resulting from the use or handling of this product.

Net weight shown on bag or bulk invoice.

CUPBOARD MILLING COMPANY

General Office

Clover, KS 99999-9999

7081-4

Yummy Flakes

Nutrition Facts

Serving Size: 1 cup (31 g)

Servings per container: 16

| Amount per serving | Cereal | With ½ c. skim milk |
|--------------------|--------|---------------------|
| Calories | 120 | 160 |
| Calories from fat | 0 | 5 |

%Daily Value**

| | | |
|-------------------------------|-----|-----|
| Total Fat 0g* | 0% | 0% |
| Saturated Fat 0g | 0% | 1% |
| Cholesterol 0mg | 0% | 1% |
| Sodium 230mg | 10% | 12% |
| Total Carbohydrate 27g | 9% | 11% |
| Dietary Fiber 0g | 0% | 0% |
| Sugars 2g | | |
| Other Carbohydrate 25g | | |
| Protein 2g | | |
| Vitamin A | 0% | 6% |
| Vitamin C | 10% | 10% |
| Calcium | 0% | 15% |
| Iron | 45% | 45% |
| Thiamin | 25% | 25% |
| Niacin | 25% | 25% |
| Vitamin B6 | 25% | 25% |
| Folate | 25% | 25% |
| Vitamin B12 | 25% | 30% |

* Amount in cereal. One half cup skim milk contributes an additional 40 calories, less than 5mg cholesterol, 65mg sodium, 6g total carbohydrate (6g sugars) and 4g protein.

** Percent Daily Values are based on a 2,000 calorie diet.

Your daily values may be higher or lower depending on your calorie needs:

| | Calories | 2,000 | 2,500 |
|--------------------|-----------------|---------|------------|
| Total fat | Less than | 65g | 80g |
| Sat. fat | Less than | 20g | 25g |
| Cholesterol | Less than | 300mg | 300mg |
| Sodium | Less than | 2,400mg | 2,400mg |
| Total Carbohydrate | | 300g | 375g |
| Dietary Fiber | | 25g | 30g |
| Calories per gram: | | | |
| Fat: 9 | Carbohydrate: 4 | | Protein: 4 |

UNDERSTANDING A FEED TAG

RABBITS, LEVEL II

Activity Sheet 2, Feed Tag Quiz, *continued*

Questions:

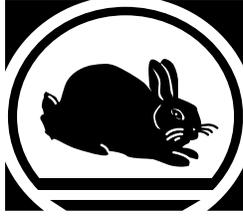
1. What are percentages of each of these ingredients?

| | Rabbit Feed Tag | Cereal Label |
|-------------|-----------------|--------------|
| Protein | _____ % | _____ % |
| Fat | _____ % | _____ % |
| Fiber | _____ % | _____ % |
| Calcium | _____ % | _____ % |
| Salt/Sodium | _____ % | _____ % |
| Vitamin A | _____ % | _____ % |

2. Top three ingredients:

| Rabbit Feed | Cereal |
|-------------|--------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

3. How are the ingredients in these two labels alike?
4. How are the ingredients in these two labels different?



Feeding the Show Rabbit

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- What conditioning is
- How to achieve good conditioning

ABOUT THEMSELVES:

- The affect of diet on appearance

Materials Needed:

- Calf Manna
- Rabbit Glow
- Rolled oats
- Whole oats
- Sunflower seeds
- Activity Sheet 3, Conditioning Worksheet
- Leader's Key, Activity Sheet 3, Conditioning Worksheet

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

A rabbit is said to be in good condition if its coat looks and feels good. The coat should be shiny and return to its normal position when stroked toward the head. It feels smooth along the entire length of the body without rough or bony spots.

Conditioning is partly related to the breed of the rabbit. Some breeds can never look and feel as smooth as others.

Conditioning also is partly related to diet. Fur is made up of protein. When rabbits get enough protein, they develop good coats of fur if they have the breeding for good fur.

Many breeders give their show rabbits feed supplements in order to condition the rabbits for show. Some prefer to give a creep feed such as Rabbit Glow. Other breeders use Calf Manna. Still others use rolled oats, whole oats, or sunflower seeds. There are almost as many ways to condition your show animal as there are rabbit breeders. Choose a conditioner that fits your need. You may need to try several before you are satisfied. Even the very best feeding program will not get a poor quality animal in condition since condition also is an inherited trait.

Leader Notes

Divide the group into teams and ask each team to list the different feeds used to condition rabbits. Have each team share their list with the group.

Leader Notes

Have the members observe the different conditioners on hand. Look at the ingredients on two conditioner feed tags. Compare how they are alike and different.

Tips on conditioning:

1. Feed and water your rabbit at the same time each day.
2. Do not get your rabbit too fat. You may need to cut back on the amount of regular feed when you start giving the conditioner. The rabbits should receive about a teaspoon of conditioner each day.
3. Rabbits will like a treat such as bread or apples. However, these should be given only occasionally.
4. You may want to feed different conditioners to different groups of your rabbits and compare the results of each conditioner.

Note: The use of brand names does not indicate endorsement for any particular product but serves as an example.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What are several indicators that your rabbit is in good condition?
2. What is the major ingredient of rabbit fur?

Process:

3. Why is the condition (finish) of your rabbit important?
4. What is significant about the condition of your rabbit's fur?
5. How does what your rabbit eat determine how he/she looks?

Generalize:

6. When do other animals need special feeds? Why?

Apply:

7. How does the saying "You are what you eat" affect your food choices?

GOING FURTHER:

- Attend a rabbit show to check for conditioning.

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; Pete Naylor, Kaw Valley Rabbit Club; Larry Snavely, Kaw Valley Rabbit Club; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



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FEEDING THE SHOW RABBIT

RABBITS, LEVEL II

Activity Sheet 3, Conditioning Worksheet

First, circle the items below that will improve your project's conditioning.

W H O L E O A T S
7 13 26 2 45 16 31 22 8

A D D I T I O N A L M I L K
29 3 24 40 15 5 49 6 9 47 44 21 4 33

E X T R A G R A S S
20 1 12 10 17 52 50 43 37 46

H I G H F I B E R
7 45 13 26 16 8 2 31 22

R A B B I T G L O W
3 15 44 24 6 29 49 33 40 5

C A L F M A N N A
52 1 37 10 50 12 43 20 35

C H O C O L A T E
35 48 17 54 18 14 34 11 51

S U P P L E M E N T A R Y P R O T E I N
47 9 14 51 34 18 4 21 28 36 41 23 42 30 38 25 46 32 39 27

Now, use the numbers underneath the letters of the circled words to solve the following coded riddles:

1. A daily nutritious feeding of your project

A GOOD

23 31 24 44 39 22 13 41 24 6 36

2. Attention to your project's conditioning

GOOD

13 15 23 45 52 31 3 21

3. What you might call your project when its coat glows

A

8 9 28 20 42 24 9 27 43 42

FEEDING THE SHOW RABBIT

RABBITS, LEVEL II

Leader's Key, Activity Sheet 3, Conditioning Worksheet

First, circle the items below that will improve your project's conditioning.

W H O L E O A T S
7 13 26 2 45 16 31 22 8

A D D I T I O N A L M I L K
29 3 24 40 15 5 49 6 9 47 44 21 4 33

E X T R A G R A S S
20 1 12 10 17 52 50 43 37 46

H I G H F I B E R
7 45 13 26 16 8 2 31 22

R A B B I T G L O W
3 15 44 24 6 29 49 33 40 5

C A L F M A N N A
52 1 37 10 50 12 43 20 35

C H O C O L A T E
35 48 17 54 18 14 34 11 51

S U P P L E M E N T A R Y P R O T E I N
47 9 14 51 34 18 4 21 28 36 41 23 42 30 38 25 46 32 39 27

Now, use the numbers underneath the letters of the circled words to solve the following coded riddles:

1. A daily nutritious feeding of your project A GOOD 23 31 24 44 39 22 13 41 24 6 36
2. Attention to your project's conditioning GOOD 13 15 23 45 52 31 3 21
3. What you might call your project when its coat glows A 8 9 28 20 42 24 9 27 43 42



Recording Your Rabbit Project

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- The importance of record keeping

ABOUT THEMSELVES:

- The usefulness of record keeping

Materials Needed:

- Activity Sheet 4, Rabbit Project Worksheet

ACTIVITY TIME NEEDED: 20 MINUTES

ACTIVITY

Record keeping begins the minute you start your project. You should keep track of the cost of your cages, crocks, feeders, rabbits and feed. You need to record what you buy as well as what you sell.

You need to keep a record of how well your does are producing. Using the doe breeding record, keep track of the date bred, date kindled, buck bred to, number of live young, number of dead young, date weaned, and number weaned.

Leader Notes

Pass out Activity Sheet 4, Rabbit Project Worksheet. Discuss how to fill out the worksheet.

Point out that the member needs to keep track of all presentations given and exhibits shown.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What helps you remember to record important information about your rabbits?
2. What is the easiest/hardest part of keeping records?

Process:

3. What kinds of records do you keep on your rabbit?
4. Why is it important to know the cost of production for your rabbits?
5. What factors affect the cost of production?

Generalize:

6. In what other projects is record keeping important?
7. What kinds of records do you keep for yourself?

Apply:

8. How could computers assist you in your record keeping efforts?

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

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RECORDING YOUR RABBIT PROJECT

RABBITS, LEVEL II

Activity Sheet 4, Rabbit Project Worksheet, *continued*

DOE BREEDING RECORD

DOE NO. _____ BORN _____ BREED _____

SIRE _____ DAM _____ LITTER NO. _____

| Date Bred | Date Due | Buck No. | Date Kindled | No. Young Born | | Number Young Retained | Litter No. | Date Weaned | No. Weaned | Weaning Wt. |
|-----------|----------|----------|--------------|----------------|------|-----------------------|------------|-------------|------------|-------------|
| | | | | Alive | Dead | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

DOE BREEDING RECORD

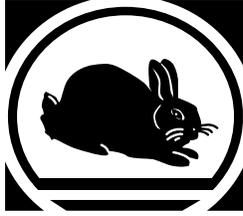
DOE NO. _____ BORN _____ BREED _____

SIRE _____ DAM _____ LITTER NO. _____

| Date Bred | Date Due | Buck No. | Date Kindled | No. Young Born | | Number Young Retained | Litter No. | Date Weaned | No. Weaned | Weaning Wt. |
|-----------------|----------|----------|--------------|----------------|------|-----------------------|------------|-------------|------------|-------------|
| | | | | Alive | Dead | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| TOTAL BOTH DOES | | | | | | | | | | |

Think Back:

What do you remember most about rabbit production? Why?



Mating of Rabbits

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- When it is time to breed their rabbits
- How to mate their rabbits

ABOUT THEMSELVES:

- Importance of nutrition and daylight in your life

Materials Needed:

- Chalkboard and chalk

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

The miniature breeds of rabbits (Netherland Dwarfs, Dwarf Hotots, Holland Lops, Jersey Wooly, etc.) will be sexually mature at 125 to 150 days (4 to 5 months) of age. The medium sized rabbits (Florida White, Dutch, Havana, Mini Lops, etc.) will take 150 to 180 days (5 to 6 months) to mature sexually. The commercial breeds (Californians, Champagnes, New Zealands, Palomino, etc.) will become sexually mature at 180 to 210 days (6 to 7 months) of age. The giant breeds (Flemish Giants, Checkered Giants, Giant Chinchilla, French Lops, etc.) do not become sexually mature until 8 months of age or more. If you breed your does too young, they will not develop to their full potential. Commercial breeds are often mated when they reach a certain weight rather than age.

It is a good management practice to examine the external genitals of the buck and doe prior to mating for any infections. Never mate animals with infections.

To mate your rabbits, take the doe to the buck's cage. The buck will mount the doe and move back and forth. The doe will raise her hindquarters. Then the buck will fall off backwards or to the side. If the buck doesn't fall off, the mating hasn't been successful. You will need to try again.

Leave the doe in the buck's cage only long enough for the mating to occur.

Be sure to keep an eye on the doe so you will know if the mating is accomplished.

If the doe is not receptive, she should be returned to her cage. Try to mate the doe again in two or three days.

Leader Notes

When rabbits are ready to breed we say they are sexually mature. Smaller breeds mature earlier than larger breeds. Does usually mature 30 to 60 days before bucks.

Leader Notes

When the doe accepts the buck, it is a good management practice to remate the doe in eight to 12 hours. This will increase litter size and conception rate.

A mature buck will be able to serve 10 to 20 does.

A mature buck may be mated to four to six does per day, if he is allowed to rest five to seven days before he is used again.

A mature male can be used on a daily basis, if only one or two does are mated per day.

BREEDING PROBLEMS:

Breeding problems often are found in late fall and early winter, because the lack of daylight causes rabbits to be sexually inactive.

A good selective culling of breeding stock, keeping only replacement stock from does who are sexually active year round is the first step. Use only young, aggressive bucks.

Feed all animals a good, balanced ration that has sufficient vitamins A, D and E. Put four to six drops of 50-50 mixture of wheat germ oil and pure peanut oil on the feed each feeding.

Make sure does are not too fat.

Have each member tell what breed they raise and when the does will be old enough to breed.

House the does in the lightest area of the rabbitry or use artificial light. The rabbits need 14 to 16 hours of daylight.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What breed of rabbit have you selected to raise? Why?
2. Name two early maturing breeds of rabbits and two late maturing breeds of rabbits.

Process:

3. What are some characteristics that determine when rabbits are capable of mating?
4. What health problems should be avoided before mating rabbits?
5. What is the significance of good nutrition and light when mating rabbits?

Generalize:

6. In what other project is reproduction affected by nutrition and light?

Examples: Poultry, Horse.

Apply:

7. How does good nutrition and the amount of daylight affect your life?

GOING FURTHER:

Lessons on:

Mating the Doe after Kindling

Understanding Rabbit Breeding Systems

REFERENCES:

Domestic Rabbits, March-April, 1988

Official Guide To Raising Better Rabbits, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



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Making a Rabbit Nest Box and Selecting Nesting Materials

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to build a nest box
- How to choose the best nesting materials

ABOUT THEMSELVES:

- Preparation and evaluation techniques

Materials Needed:

- 4 Pine boards 1 × 12 × 12 inches
- 2 Pine boards 1 × 12 × 12 inches
- Nails
- Hammers
- Saw
- Straw
- Pine shavings
- Rice hulls
- Shredded paper
- Hay
- Member Handout 1, Nest Box Diagram

ACTIVITY TIME NEEDED: 90 MINUTES

ACTIVITY

Small breeds can use a smaller nest box 12 × 16 inches and larger breeds will need a nest 12 × 20 inches.

There are many suitable materials that can be used for nesting materials. If you use hay, the doe will use it to eat and for nesting materials. Shredded paper is used by some breeders with great success. Other breeders prefer to use straw. Rice hulls and pine shavings also have been used. Some breeders like to use a combination, pine shavings and straw, etc. All of these make good nesting material.

Remember to keep the nesting materials clean. If the nesting material becomes soiled in the nest box, replace it. Always replace wet nesting material.

More nesting materials are needed in the winter than in the warmer months. Use about 6 to 8 inches of nesting materials during the winter months and 2 to 4 inches in the summer months.

Leader Notes

Pass out Member Handout 1, Nest Box Diagram.

Help each member decide on the type of nest box needed for their breed. Then help the members make a nest box for their rabbitry. (This would be a good time to have parent help or several junior leaders to assist.)

Leader Notes

Have the members examine the various nesting materials that are on hand. Ask them to decide what they think would be best in their rabbitry.

The nest box should be placed with the doe on the 28th day after she was bred. It should be left until the 35th day after the doe was bred.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What type of material did you use for making a rabbit nesting box?
2. How much of these materials did you have to purchase?

Process:

3. What nesting materials did you consider? Why?
4. Why are more nesting materials needed in the winter than in the summer?

Generalize:

5. What preparations need to take place to get ready for newborns in other animal projects?
6. Why is it important to prepare for events well in advance of them happening?

Apply:

7. Why is it important to evaluate each event as it happens?
8. What might you learn from an evaluation that would help you in the future?

REFERENCES:

Cooperative Extension Service, New Mexico State University

Official Guide to Raising Better Rabbits, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

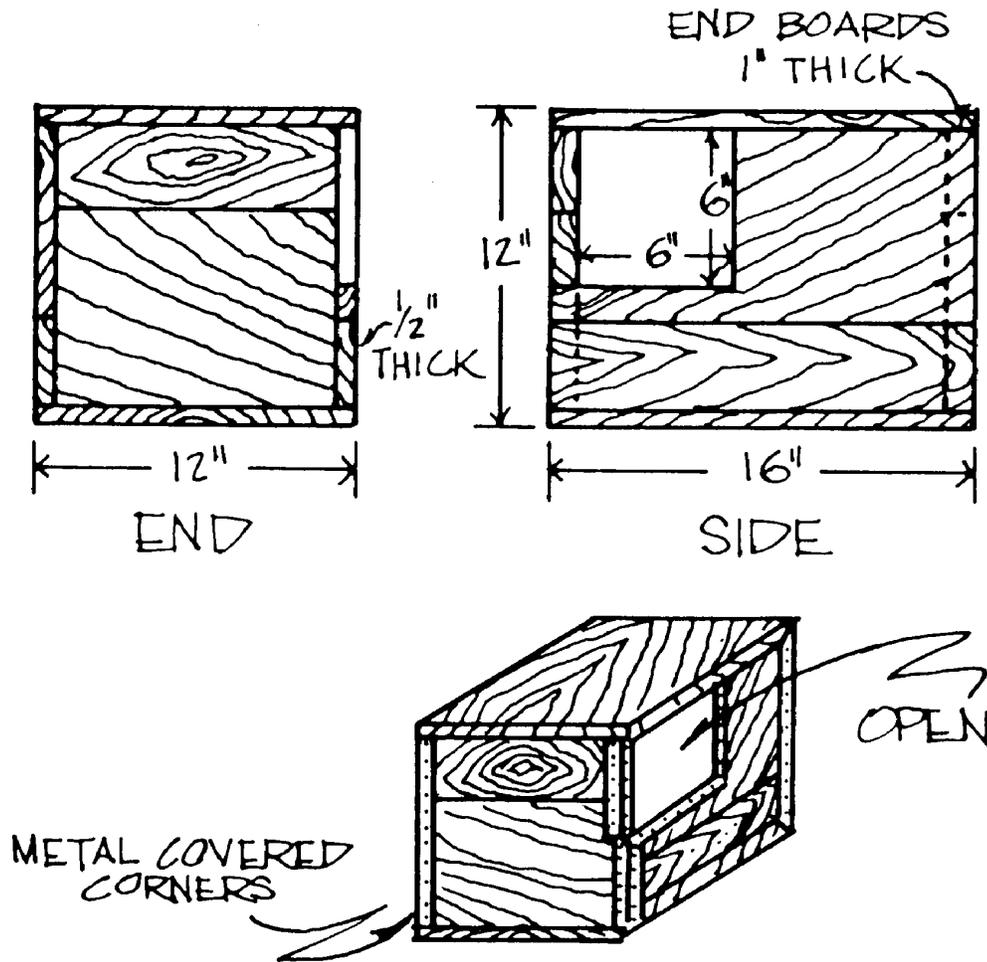
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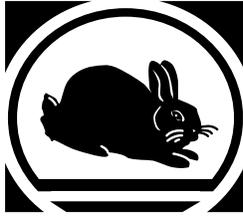
MAKING A RABBIT NEST BOX AND SELECTING NESTING MATERIALS
RABBITS, LEVEL II
Member Handout 1, Nest Box Diagram



Think Back:

What was your biggest concern when you began planning for new kits? Why?





Recognizing Rabbit Types

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- The five basic rabbit types

ABOUT THEMSELVES:

- Preferred learning styles

Materials Needed:

- Pictures of the five basic rabbit types
- Pictures of various rabbit breeds
- Pencils, glue
- Activity Sheet 5, Rabbit Types Puzzle (copy and cut)
- Activity Sheet 6, Rabbit Types Puzzle Worksheet

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Each breed has a characteristic type. Members need to be able to recognize the correct type for their breed.

The five general types of rabbits are:

1. **FULL ARCHED TYPE**—This group is easily recognized by an arch which starts at the nape of the neck, continuing over the shoulders, mid-section, loins, and hips to the base of the tail. Full arched rabbits are much deeper in body height than width. They have long limbs and a long body. Full arched rabbits have a racy appearance.
2. **SEMI-ARCHED BREEDS**—These rabbits are sometimes referred to as a Mandolin type. They are well arched, but starting at the back of the shoulders instead of the nape of the neck and continuing to the base of the tail.
3. **SHORT COUPLED, COMPACT TYPE**—These rabbits are considered good meat type but lighter in weight and shorter in body length. Some are round or tubular, while others are the conventional broader type. These rabbits are shorter in body length than the commercial type. The width, depth and length are controlled by differences in weight.
4. **COMMERCIAL TYPE**—Most of the meat-producing breeds belong to this group. These breeds excel in width and depth of body, fullness of loin, roundness of hips and rump, and hardness in flesh. Commercial type rabbits have the smallest amount of waste when dressed. Most are medium length rabbits.

Leader Notes

Have members describe each type before sharing the description. Then show an example.

Leader Notes

Divide the group into teams. Give each team 10 pictures of different breeds of rabbits and ask the members to classify the breeds according to type. Check each team's results. Explain why each breed belongs to its particular type.

Have members tell what type of rabbits they are raising.

To review the body types, distribute attached puzzles already cut out and mixed up, either individually or in combination with others. Have members assemble, glue and label each picture.

5. SNAKY TYPE (CYLINDRICAL TYPE)—The body is slim, round and long enough to show off markings. Head rather slim and long, legs fine in bone and long; body should lie snakelike upon the judging table.

Examples of Short Coupled, Compact Type Rabbits:

English Angora, Standard Chinchilla, Dutch, Florida White, Havana, Lilac, Netherland Dwarf, Polish, Silver, Dwarf Hotot

Examples of Commercial Type Rabbits:

French Angora, Champagne D'Argent, Creme D'Argent, Californian, Cinnamons, American Chinchilla, French Lop, Harlequin, Hotot, New Zealand, Palomino, Rex, Sable, Satin, Silver Fox, Silver Marten, Blue Vienna

Examples of Full Arched Type Rabbits:

Belgian Hare, Checkered Giant, English Spot, Rhinelander, Britannia Petite, Tan

Examples of Semi Arched Type Rabbits:

American, Beveren, English Lop, Flemish Giant, Giant Chinchilla

Example of Snaky (Cylindrical) Type Rabbits:

The only breed of this type is the Himalayan.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. Name two rabbit body types and characteristics of each.
2. Name two breeds of each of the five body types.

Process:

3. What is the main purpose of each body type?

Generalize:

4. Which learning method did you prefer, the puzzle or the breed classification activity? Why?

Apply:

5. Where and when might you use a puzzle to learn new information in the future?

GOING FURTHER:

- Attend a Rabbit Show

REFERENCES:

Official Guide to Raising Better Rabbits, American Rabbit Breeders Association
Registrar's Study Guide, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

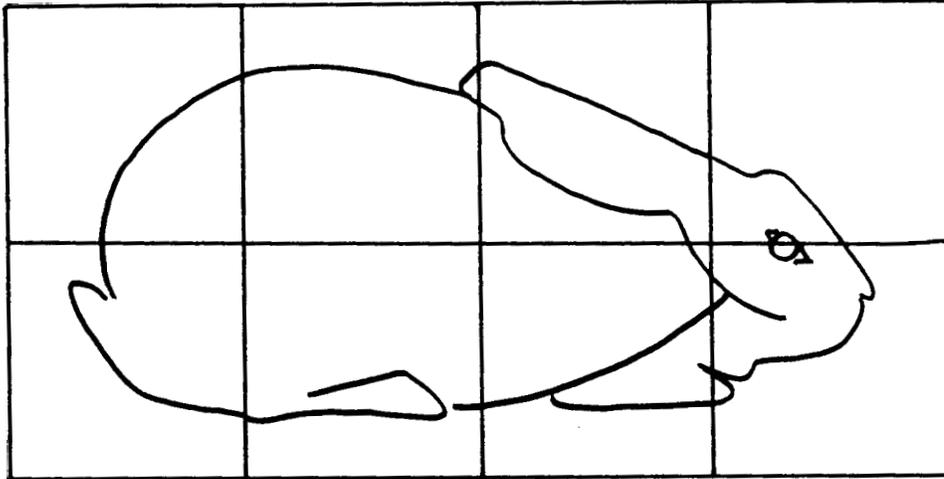
Rabbit Design Team



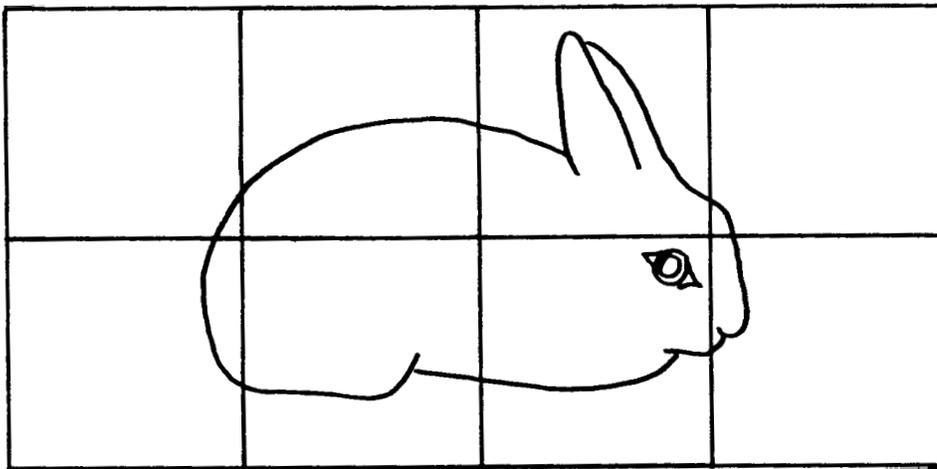
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RECOGNIZING RABBIT TYPES
RABBITS, LEVEL II
Activity Sheet 5, Rabbit Types Puzzle



Commercial



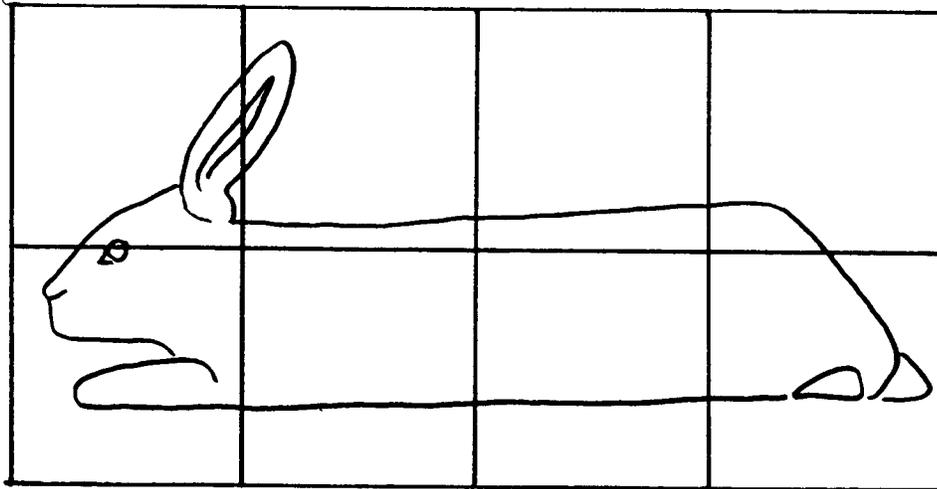
Short Coupled, Compact

These puzzles may be copied, cut, and distributed to members individually or in combination with others depending on the ability of members. Use the attached sheet to assemble and label each picture.

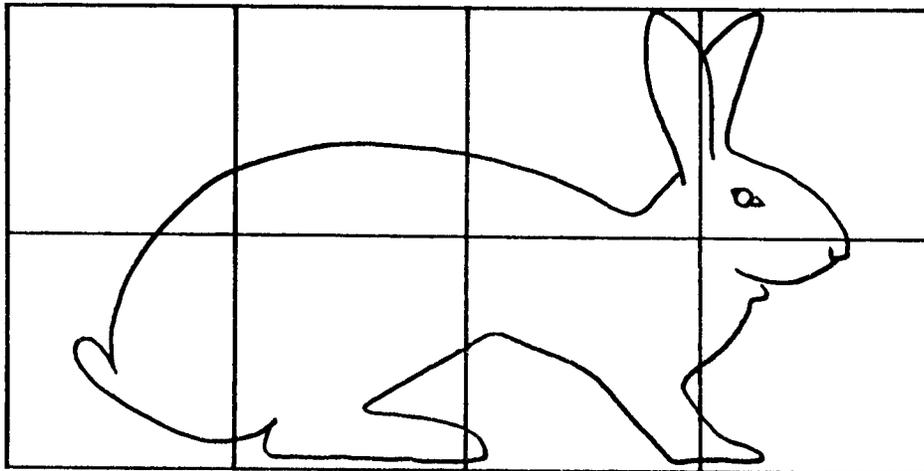
RECOGNIZING RABBIT TYPES

RABBITS, LEVEL II

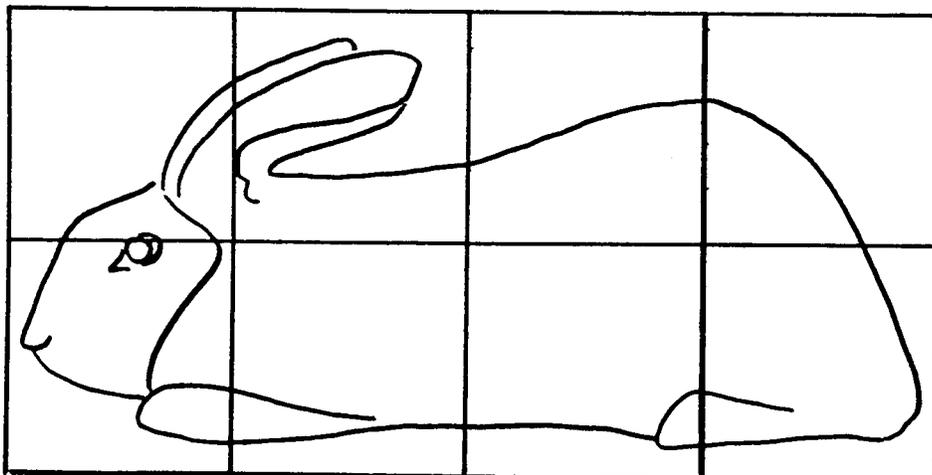
Activity Sheet 5, Rabbit Types Puzzle, *continued*



Snaky



Full-arched

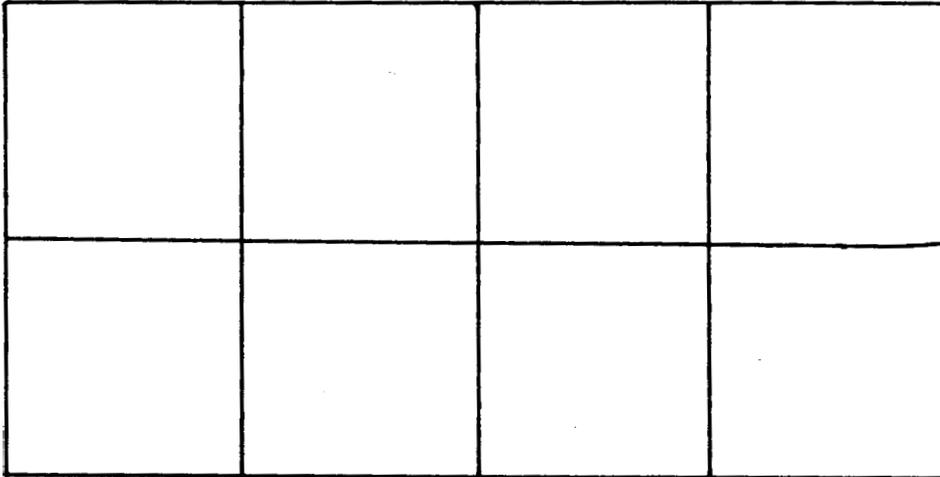


Semi-arched

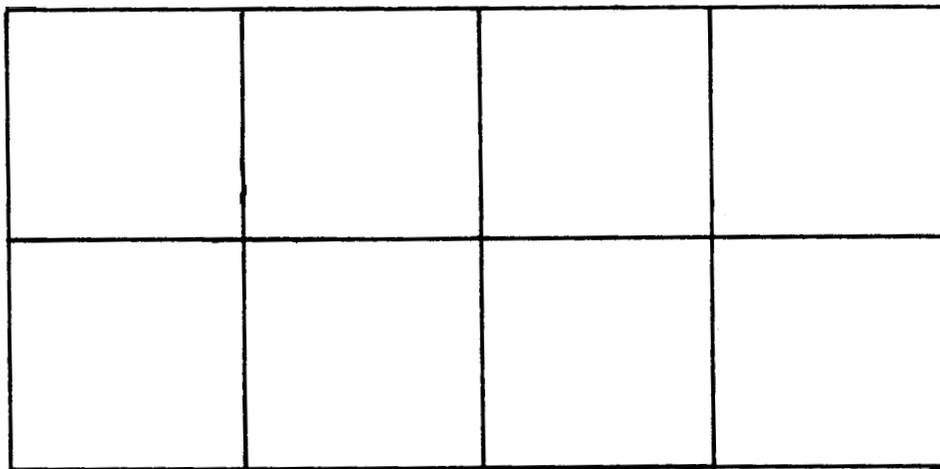
RECOGNIZING RABBIT TYPES

RABBITS, LEVEL II

Activity Sheet 6, Rabbit Types Puzzle Worksheet



Commercial



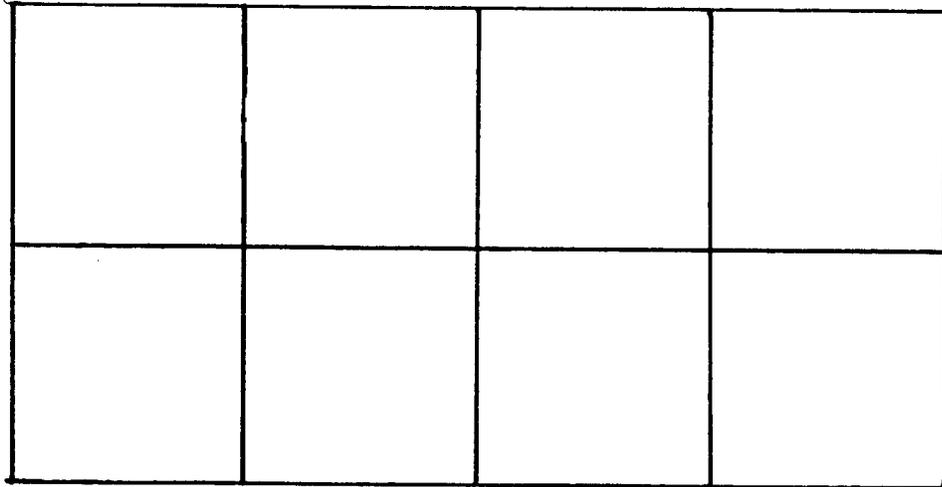
Short Coupled, Compact

After assembling the pieces, glue each picture in an area above and with the correct body type.

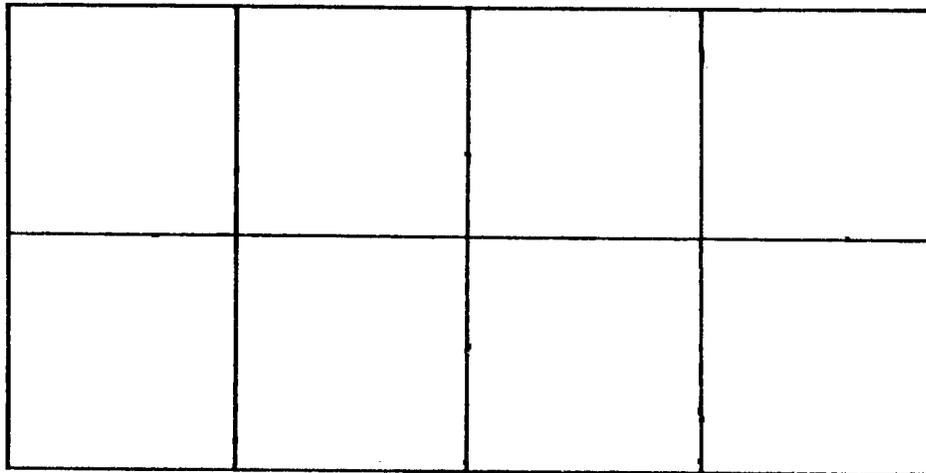
RECOGNIZING RABBIT TYPES

RABBITS, LEVEL II

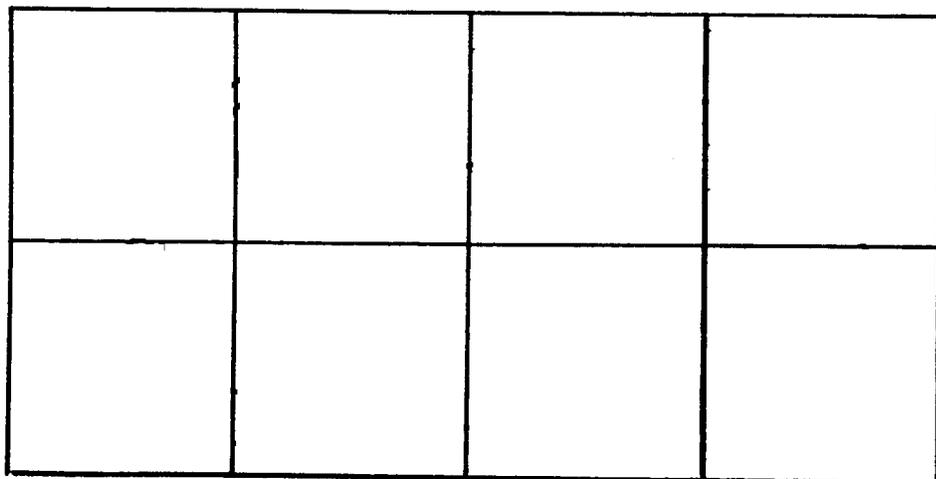
Activity Sheet 6, Rabbit Types Puzzle Worksheet, *continued*



Snaky

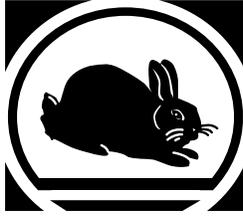


Full-arched



Semi-arched





Identifying Rabbit General Faults and Disqualifications

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- General rabbit faults
- General rabbit disqualifications

ABOUT THEMSELVES:

- Awareness of differences
- How to use specific criteria in decision making

Materials Needed:

- Chalkboard and chalk or flip chart
- Standard of Perfection, American Rabbit Breeders Association
- Rabbits with general faults and disqualifications (if possible)
- Carpet for table
- Activity Sheet 7, Rabbit Conditions
- Leader's Key, Activity Sheet 7, Rabbit Conditions

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

It is important to know the various faults so the breeder can avoid these in their breeding and show stock.

GENERAL FAULTS (ALL BREEDS)

1. Specimen in moult
2. Rabbit out of condition (but not diseased)
3. Hutch stains
4. Stray white hairs in colored fur
5. Poor tail carriage—one that is not permanently set on either side
6. Poor ear carriage
7. Poor eye color
8. Flabby or overfat
9. Thin or extremely poor flesh

Some faults are likely to be passed to the offspring (inherited). Stray white hairs in colored fur, poor tail carriage, poor ear carriage, poor eye color, and flesh condition can be inherited. Ask members what breed they raise and then, using the ARBA Standard of Perfection, check the faults of that breed. For example, if a member raises Californians, look up Californians to see the faults listed. General faults apply to each breed's standard, unless specifically excepted.

Leader Notes

List general faults on chalkboard or flip chart as each is discussed.

Circle inherited faults on your list.

Leader Notes

Look up each breed the members raise and list their faults. Several members will probably raise the same breed so this shouldn't take too long. However, you may wish to divide the group according to breed raised. If you have several helpers and Standard of Perfection books, have each helper discuss the faults for that breed.

GENERAL BODY TYPE

Faults: Racy, mandolin, or any type away from a plump, firm, meaty body.

More severe point reductions for: shoulders wider than hips; long, narrow head; extra long neck; flatness over back, especially over hips; rough; bony and protruding hips.

Hindquarters

Faults: Narrow; flat; pinched; undercut; chopped; bony rump; weak loin; protruding hip bones; rough over spine.

Midsection

Faults: Narrow; flat; rough; not well-filled; narrow, thin loin.

Shoulders

Faults: Too narrow or too wide to balance with hindquarters; excessive fat; loose, flabby flesh over the shoulders.

Head

Faults: Long, slim head with pinched nose.

Ears

Faults: Heavy, open, spoon-shaped ears; weak ear base.

Feet and Legs

Faults: Long or heavy bone.

Marking and Color

Faults: Chocolate, orange or any color other than black to have greater point reductions. Other things being equal, the blacker marked rabbit shall place over the gray or lighter marked rabbits. Eyes faded in color.

GENERAL DISQUALIFICATIONS

A rabbit breeder needs to be able to identify disqualifications to be used in culling rabbits from the herd. Disqualifications are conditions that can't be changed and thus would make a rabbit unsuitable for competition or shows. All disqualifications apply to each breed's standard, unless specifically excepted.

I. AILMENTS

Ear canker, slobbers, pot belly, vent disease, or abscesses. Mange or scurvy condition with flakes resembling dandruff or scale on the skin or at the base of the fur. Fungus growth or scabby condition. Infestation by mites, fleas, or lice.

Colds—The animal must show a white purulent nasal discharge. (A wetness around the nostrils or roughened fur on the inside of the foreleg is not sufficient evidence of a cold.)

Tumor or Abnormal Swelling—A swollen or distended mass forming a lump.

Be prepared to observe some disqualifications in some live rabbits.

Rupture or Hernia—Protrusion of abdominal viscera through the muscle in the abdominal cavity and collecting between the skin and muscle.

Abnormal Eye Discharge—Must be noticeable and pronounced.

II. GENERAL

Abnormalities—Any deviation from the normally accepted condition of the body structure. Indications of ill health, or other departures from generally accepted healthy condition.

Permanent Ear Mark—Illegible tattoo, or tattoo not in the left ear. Tattoo obliterated by tattoo ink so as to be unreadable.

Overweight or Underweight—Not within the minimum and maximum weight limits specified in the breed standard. (Disqualification from Competition suspends the rabbit from competition in fur or wool classes.)

Genitalia—Split penis.

Testicles—All male animals, in the regular showroom classes, must show two normally descended testicles at the time of judging. Juniors are excepted. Juniors must show both or neither testicle. Those showing only one at time of judging are to be disqualified from competition.

Wrong Sex, Breed, Group, or Variety—(Disqualification from competition suspends the rabbit from competing in fur or wool classes and changes the number in the class.)

III. STRUCTURAL

Blindness in One or Both Eyes—Usually indicated by a filming over of the cornea, obstructing the pupil.

Crooked Legs—Bent, bowed, deformed, or cow hocks if severe.

Dewlaps—Disqualify when noted in the breed standard.

Ears—Ears carried below horizontal in regular eared breeds. Ears naturally carried above horizontal in lop eared breeds. (Ears extending horizontally are guilty of poor ear carriage and should be faulted.)

Torn Ears or Ears with Portion Missing—Must noticeably detract from the general appearance of the animal.

Off Colored Eyes—Eye color other than called for in the breed standard.

Wall Eye—Sometimes called moon eye. Eye with whitish cornea, giving milky appearance to the eye.

Unmatched Eyes—Two eyes not of the same color.

Spots or Specks on Eye—Spots or specks in iris or on cornea.

Leader Notes

Marbling—A mottling of eye color. (Do not disqualify for marbling appearing in the eyes of some Chinchilla breeds and varieties allowing blue-gray eyes.)

Malocclusion—Buck or wolf teeth which have the lower incisors extending in front of the upper incisors, sometimes curving to the sides, and usually long.

Simple Malocclusion—When teeth meet head on, with no overlap of upper teeth. Top incisor teeth must be over the bottom incisor teeth to be acceptable.

Pigeon Breast—A narrow chest with prominent “V” protruding breast bone.

Sore Hocks—The foot portion showing infection or bleeding, not merely bare.

Teeth—Missing or broken tooth or teeth. The normal bite of the rabbit’s teeth has the upper incisors overlapping the bottom incisors.

Tail—Permanently set to either side or permanently out of line. (The tail is to be considered as an on line extension of the spine.) Screwtail or bobtail. Portion missing, so as to be conspicuously out of proportion.

Toenails—Missing toenail(s), including dewclaw. (A portion of the toenail missing, but allowing the determination of the pigmentation is acceptable.) Unmatched toenail(s) on the same foot or corresponding foot, including the dewclaw. (Toenails lighter than called for in the breed standard shall be considered a fault.) White toenail(s) disqualify in all colored breeds and varieties, including Himalayan, Californian and Pointed Whites. Colored toenail(s) disqualify in white or marked breeds and varieties in combination with white, unless specifically exempted in the breed standard.

IV. COLOR

Spots—Foreign colored spots in any animal. White spots in a colored animal. Colored spots in a white animal. (All apply unless specifically excepted in the breed standard.)

Smut—Smut on the usable portion of the pelt in Pointed Whites, Californian, or Himalayan marked breeds and varieties.

Tan Pattern—Any Tan Pattern marking appearing in the marking pattern of Pointed White, Himalayan, or Californian marked breeds or varieties.

Wrong Undercolor—Color other than called for in the breed or variety standard. Shade variations are acceptable, but considered a fault.

White Hairs—Excessive white hairs in a colored section.

Altering Appearance—Any dying, plucking, trimming, or clipping so as to alter appearance. Coloring toenails. Any faking, including powdering and indiscriminate use of grooming preparations designed to alter the natural condition or appearance. NOTE: Disqualification from competition of any animal for altering of appearance may result in the disqualification of the exhibitor's entire entry under the ARBA Show Rules.

V. UNWORTHY OF AN AWARD

Any deviation from the standard to such a degree that it is non representative of that breed's requirements, shall not be placed and a notation made by the judge, "Unworthy of an Award." It shall be either worthy of a first place with only one in the class, or not placed with the above remark. It is possible that more than one rabbit competing in the same class may be determined to be "Unworthy of Award." The number in a class must be reduced for any animals excused for this reason.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What were some of the faults you found in the breeds raised by your group?
2. What's the difference between a general fault and a disqualification?
3. Is identifying these faults easy or difficult? Which is which?

Process:

4. Why are some faults more serious than others?
5. Why do the fault standards vary for different breeds?
6. What disqualifications do you see most frequently? Infrequently? How can they be corrected?
7. If a rabbit does not meet the standard for show or competition, for what purpose might this rabbit be used?
8. Why is it important to have standards for selecting a rabbit?

Generalize:

9. When are standards important in other projects? Why?

Apply:

10. What are some standards that are important to you?
11. What are some standards you have that are different from your friends? Why?

Leader Notes

GOING FURTHER:

- Attend a rabbit show and listen to a judge.
- Participate in a rabbit judging contest.
- Invite a rabbit judge to your meeting to discuss general faults and disqualifications.

REFERENCES:

Standard of Perfection, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Revised by:

Rabbit Design Team



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IDENTIFYING RABBIT GENERAL FAULTS AND DISQUALIFICATIONS
RABBITS, LEVEL II
Activity Sheet 7, Rabbit Conditions

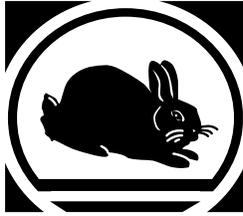
For each of the following conditions, decide if it is a general fault or a disqualification, or neither. Remember, a disqualification cannot be corrected. Put an × in the appropriate column.

| Condition | General Fault | Disqualification | Neither |
|-------------------------------|----------------------|-------------------------|----------------|
| Rabbit in moult | | | |
| Lop ears | | | |
| Hutch stains | | | |
| Poor tail carriage | | | |
| Spots on solid-colored animal | | | |
| Hernia | | | |
| Does not run fast | | | |
| Flabby or overfat | | | |
| Poor ear carriage | | | |
| Out of condition | | | |
| Nails not clipped | | | |
| Poor eye color | | | |
| Blindness | | | |
| Broken Tooth | | | |
| Crooked leg | | | |
| Unmatched eyes | | | |

IDENTIFYING RABBIT GENERAL FAULTS AND DISQUALIFICATIONS
RABBITS, LEVEL II
Leader's Key, Activity Sheet 7, Rabbit Conditions

For each of the following conditions, decide if it is a general fault or a disqualification, or neither. Remember, a disqualification cannot be corrected. Put an × in the appropriate column.

| Condition | General Fault | Disqualification | Neither |
|-------------------------------|----------------------|-------------------------|----------------|
| Rabbit in moult | × | | |
| Lop ears | | × | |
| Hutch stains | × | | |
| Poor tail carriage | × | | |
| Spots on solid-colored animal | | × | |
| Hernia | | × | |
| Does not run fast | | | × |
| Flabby or overfat | × | | |
| Poor ear carriage | × | | |
| Out of condition | × | | |
| Nails not clipped | | | × |
| Poor eye color | × | | |
| Blindness | | × | |
| Broken Tooth | | × | |
| Crooked leg | | × | |
| Unmatched eyes | | × | |



Judging a Rabbit Class

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- What to look for in selecting stock or otherwise judging a rabbit

ABOUT THEMSELVES:

- Techniques involved in decision making

Materials Needed:

- Rabbits to be used in a judging class
- Carpet for the table
- Activity Sheet 8, Judging Worksheet
- Leader's Key, Activity Sheet 8, Judging Worksheet

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

The member needs to be able to select good replacement stock, thus, the need to know how to judge rabbits.

In order to choose a good rabbit for show you need to know what qualities to look for. Viewing the rabbit from the side, you should look for short neck, ears in proportion to the body, and a back that makes a smooth rise from behind the head to the top of the hips. Avoid rabbits with long ears and a long neck.

Looking down at the top of the rabbits, you should see well-filled shoulders and hindquarters. The hindquarters should be wider than the shoulders and the rabbit should feel smooth from front to back.

Looking at the rabbit from a rear view, the rabbit should have smooth, arched hips. When viewed from the rear, the rabbit should look like half of a basketball with ears.

JUDGING A RABBIT

A properly posed rabbit should have its feet under it so that the loin is arched. Be careful not to push the feet too far under the body or leave them behind the hip.

Leader Notes

Hand out judging worksheet to each member.

Have members select best picture of side view and discuss.

Have members select best top view and discuss.

Have members select best rear view and discuss.

Have members select which rabbit is posed correctly and discuss.

After using worksheet, judge a class of live rabbits.

Leader Notes

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What trait was easiest to observe when looking at the side, top, rear view of a rabbit?
2. What was the most difficult aspect of posing a rabbit?

Process:

3. What should you look for in a side, top, rear view of a rabbit? Why?
4. How should you pose your rabbit for the best view?

Generalize:

5. In what other project areas are similar techniques used to select the proper type of animal?
6. How do these techniques help you select the best animal?

Apply:

7. What are some other activities that you are involved in that require decision making?
8. What standards are used to assist in making your decision?

GOING FURTHER:

- Participate in a rabbit judging contest.

REFERENCES:

Cooperative Extension Service, South Dakota State University
Standard of Perfection, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed By:

Rabbit Design Team

Have members answer each of the think back question on a separate sheet to file with activity sheets in record books.

Think Back:

What is the significance of each of the following when judging rabbits:

Body types? _____

Faults? _____

Disqualifications? _____

Meat conformation? _____



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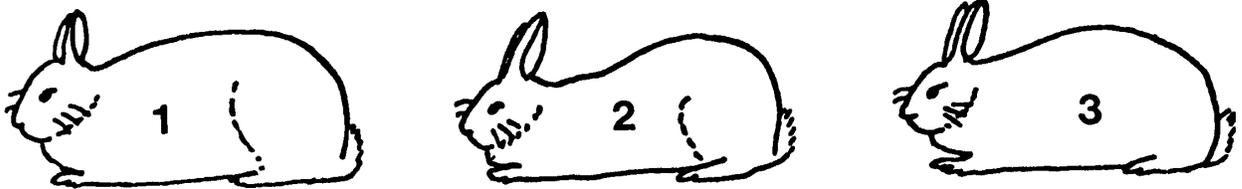
JUDGING A RABBIT CLASS

RABBITS, LEVEL II

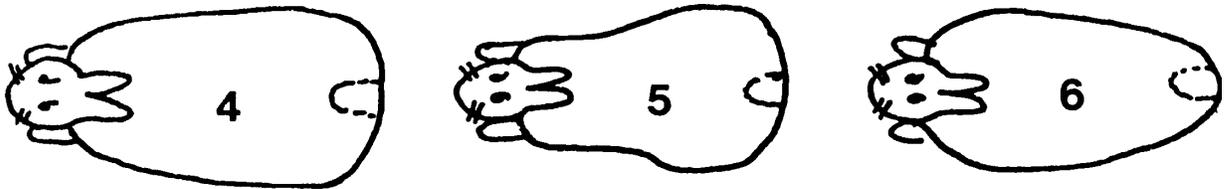
Activity Sheet 8, Judging Worksheet

In order to choose a good rabbit for a show and for best meat production you should know what qualities to look for. Following are some tips on what a good rabbit looks like.

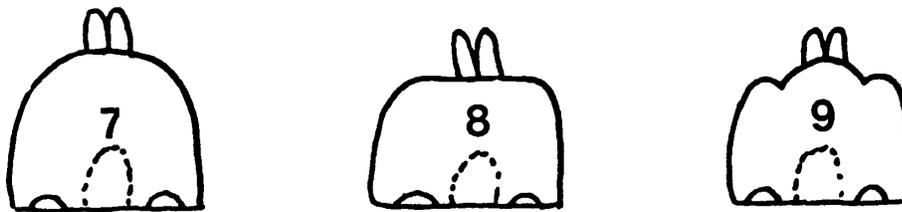
Viewing a rabbit from the side, you should look for a short neck, short ears, and a back that makes a smooth rise from behind the head to the top of the hips. Circle the rabbit below you think is best?



Looking down at the top of a rabbit, you should see well-filled shoulders and hindquarters. The shoulders shouldn't be as wide as the hindquarters and the rabbit should look and feel smooth from front to back. Which of the next three rabbits would you choose? Circle your choice.



Finally, you should **consider a rabbit from the rear view**. A good rabbit should have smoothly arched hips. Circle the rabbit you judge best?



Once you have chosen the best rabbit to show you should **take care to pose it correctly**. Even a rabbit with a good shape looks like a poor example if the legs are set too far forward or too far back. Circle the rabbit you think is posed correctly?



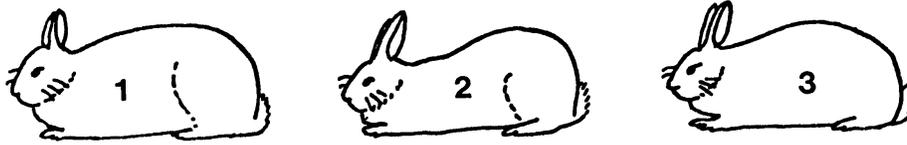
JUDGING A RABBIT CLASS

RABBITS, LEVEL II

Leader's Key, Activity Sheet 8, Judging Worksheet

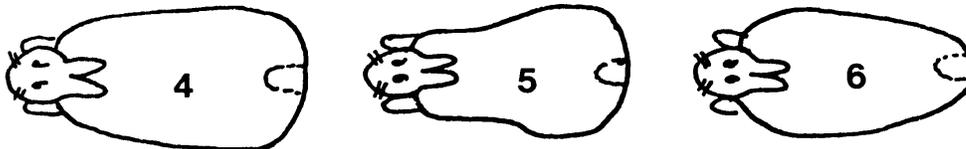
In order to choose a good rabbit for a show and for best meat production you should know what qualities to look for. Following are some tips on what a good rabbit looks like.

Viewing a rabbit from the side, you should look for a short neck, short ears, and a back that makes a smooth rise from behind the head to the top of the hips. Which of the rabbits drawn below do you think is best?



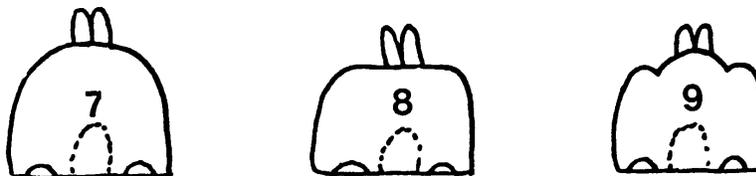
If you chose rabbit 1 you are correct. Rabbit 2 has low shoulders and hips rise in a sudden hump. Rabbit 3 has the highest point of his back well ahead of his hips. Remember that long ears and a long neck do not add meat to the carcass.

Looking down at the top of a rabbit, you should see well-filled shoulders and hindquarters. The shoulders shouldn't be as wide as the hindquarters and the rabbit should look and feel smooth from front to back. Which of the next three rabbits would you choose?



Rabbit 5 has shoulders which are too narrow and make the line from front to back widen suddenly at the hips. The rabbit should gradually get wider as you go from the shoulders to the hips. The hips on rabbit 6 are narrow. Rabbit 4 is the best example.

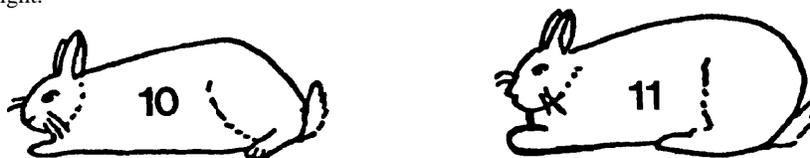
Finally, you should **consider a rabbit from the rear view**. A good rabbit should have smoothly arched hips. Which rabbit would you judge best?

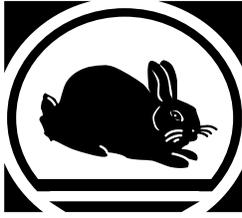


Rabbit 7 has the ideal type of smooth arched hips. Rabbit 8 has wide flat hips. Rabbit 9 has the most common fault—narrow bony hips and prominent thigh bones. When you run your fingers along the sides of this kind of rabbit, your fingers get caught by the bony humps.

Once you have chosen the best rabbit to show you should take care to pose it correctly. Even a rabbit with good shape looks like a poor example if the legs are set too far forward or too far back. Which rabbit drawn below do you think is posed correctly?

If you chose rabbit 11 you are right.





Registering Your Rabbit

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- The reasons for registering a rabbit
- How to register a rabbit

ABOUT THEMSELVES:

- The importance of their family tree or ancestors

Materials Needed:

- Activity Sheet 9, Your Family Tree (Pedigree)
- ARBA Standard of Perfection
- Have a registrar on hand
- Pedigree blanks
- Scales
- Rabbits to be registered (You may ask the members to bring rabbits which they want registered.)

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

Many individuals want to buy breeding stock from rabbitries that have their entire breeding stock registered. This ensures that the recent ancestors have made the minimum weight requirements for the breed. Rabbits must be registered if you wish to receive a grand champion certificate from the American Rabbit Breeders Association, though registration is not required in order to show your rabbit.

Members need three things in order to get their rabbits registered:

1. They must be a current ARBA member.
2. They must have a pedigree (rabbit family history) that shows the last three generations.
3. They must have a rabbit which is at least six months old, meets the weight requirements, and is free of any disqualifications or general faults.

A breeder must take his rabbits to a registrar who has been licensed by the ARBA. The registrar will examine the rabbit for any general faults or disqualifications and weigh the rabbit. If the rabbit meets the weight requirements and is free of any general faults or disqualifications, then the rabbit can be registered. The registrar will make comments on the regis-

At this point introduce the registrar and have him/her give some comments to the group.

Then allow the registrar to proceed with the registration of the rabbits present.

Leader Notes

Discuss and help members fill out pedigree blanks for registering their rabbits. Do a general sample first.

Hand out Activity Sheet 9, "Family Tree," for each member to take home and complete with their parents.

tration blank about type, color, eyes, ears, bone, balance, fur, etc. After the blank is filled out, the Registrar will put the registration number in the right ear.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. Are your rabbits registered? Why or why not?
2. What information do you need to register rabbits?

Process:

3. Why is it important to register your rabbits?
4. Why is it important for someone from ARBA to assist you in registering your rabbit?

Generalize:

5. What process is used to register other project animals?
6. Why do we need to know the history/characteristics of various ancestors?

Apply:

7. Why is it important to know your family history?

REFERENCES:

Standard of Perfection, American Rabbit Breeders Association
Official Guide Book, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

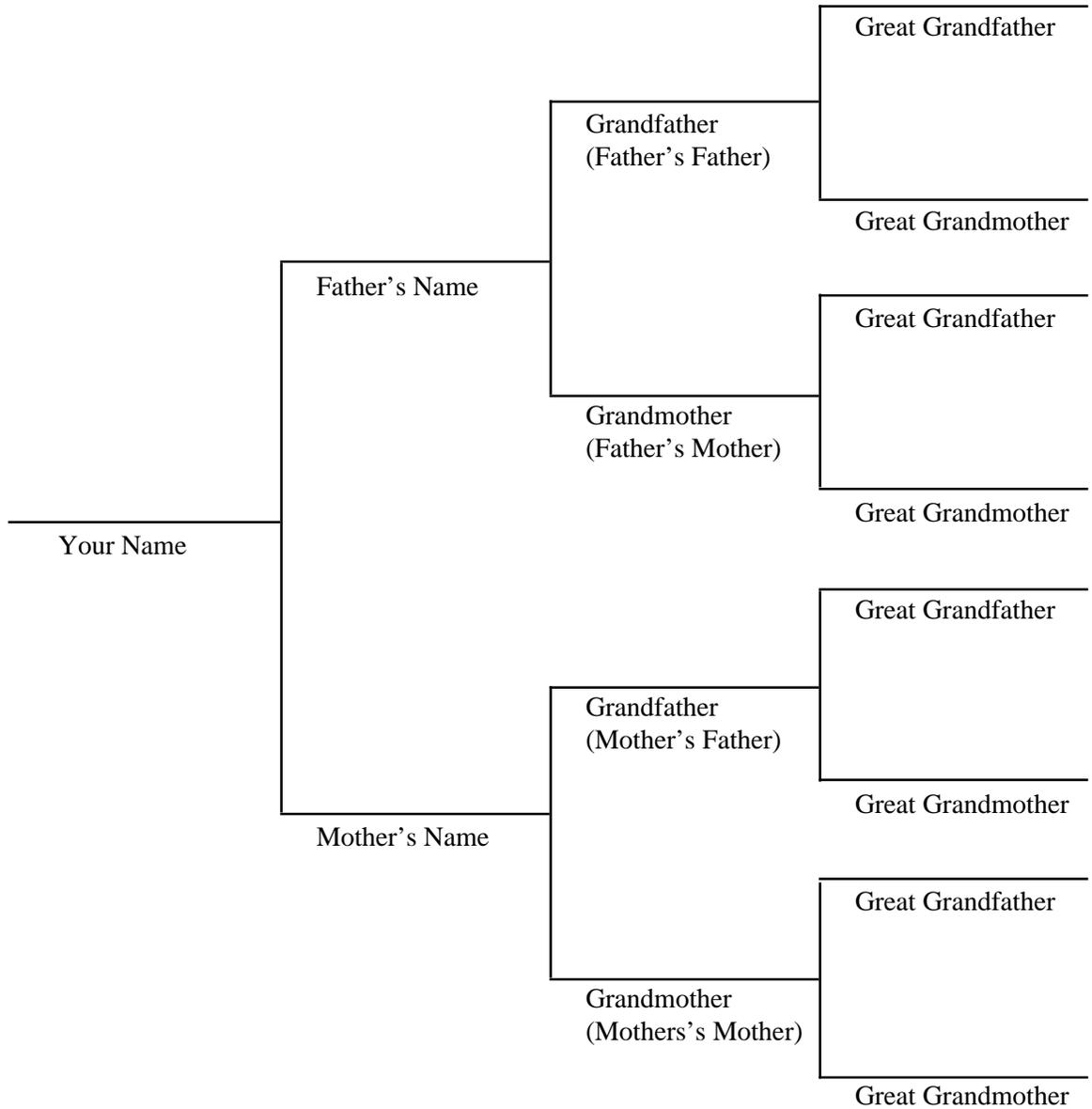
Rabbit Design Team



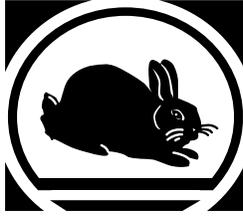
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REGISTERING YOUR RABBIT
RABBITS, LEVEL II
Activity Sheet 9, Your Family Tree (Ancestry)







Fur Terms for Rabbits

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- Fur terminology

ABOUT THEMSELVES:

- Ways to enhance communication

Materials Needed:

- Rabbits (if possible)
- Carpet for table
- Activity Sheet 10, Fur Term Matching
- Leader's Key, Activity Sheet 10, Fur Term Matching

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

It is important to understand basic fur terminology. If the judge says that your rabbit's fur lacks density and texture, what does it mean?

Density—How thick is the coat? The thicker the coat the more dense it is. When you stroke the fur toward the head, if you readily see the skin, the coat lacks density. The more dense coat will not allow you to see much of the skin.

Texture—The character of fur as determined by feel, or touch; such as "fine" or "coarse" in texture. Observe the texture by stroking the fur towards the head.

A rabbit's coat has two types of hair—the undercoat and guard hairs. Can any of you explain the difference?

Answer: The guard hair is the longer coarser hair of the coat offering protection to the undercoat and furnishing wearing quality to the coat in addition to providing sheen. The undercoat is the fur hair next to the skin and is finer.

What is a moult?

Answer: It is the act of shedding fur.

What if the judge says the rabbit's coat is dead?

Answer: This is produced because the rabbit is moulting. The fur lacks life.

What is a fine coat?

Answer: The coat is too fine in texture, lacks body. Guard hairs are too weak and thin.

Use a rabbit to show and illustrate each term as it is discussed.

Ask members to give some definitions and discuss as a group before giving correct answer.

Leader Notes

What does it mean that a coat has fly back?

Answer: It is a coat that flies back (returns) to its normal smooth position when stroked from the hindquarters toward the shoulders.

What does it mean when your rabbit has a slipping coat?

Answer: The coat is shedding a profusion of hairs.

If a rabbit has a poor coat, what does this mean?

Answer: The fur is not in condition because moulting or ill health of the animal. It also can be caused by inattention to grooming.

Have the members examine the rabbits and decide what they could say about their fur. Discuss.

What is the difference between an open coat and a loose coat?

Answer: None. The fur lacks density in undercoat and guard hairs are fine and lack texture.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What are the two types of hair in a rabbit's coat?
2. What type of coat does your rabbit have?

Process:

3. Why is it important to understand descriptive terms for a rabbit's fur?
4. What is the importance of the density and texture of a rabbit's coat?
5. What does the condition of the fur tell us about the rabbit's health?

Generalize:

6. What types of terms are used to describe the hair, coat or wool of other animals?

Apply:

7. How do good terms and descriptions assist you in communicating with others?

GOING FURTHER:

- Observe a rabbit judge using this terminology at a show.

REFERENCES:

A Progressive Program for Raising Better Rabbits and Cavies, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



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Kansas State University
Manhattan

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FUR TERMS FOR RABBITS
RABBITS, LEVEL II
Activity Sheet 10, Fur Matching

Draw a line to match the term with its meaning or another term which means the same thing. Then check desirable qualities in the first column.

| | | |
|-------|---------------|--------------------------------|
| _____ | slipping coat | fur next to skin |
| _____ | guard hairs | fur lacks life |
| _____ | density | how it feels |
| _____ | texture | lacks body |
| _____ | fine coat | longer hair on outside of coat |
| _____ | moulting | ability to smooth itself |
| _____ | flyback | thickness |
| _____ | undercoat | shedding |
| _____ | loose coat | profuse shedding |
| _____ | dead coat | open coat |

FUR TERMS FOR RABBITS

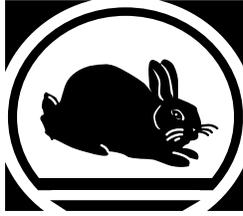
RABBITS, LEVEL II

Leader's Key, Activity Sheet 10, Fur Matching

Draw a line to match the term with its meaning or another term which means the same thing. Then check desirable qualities in the first column.

| | | | |
|--------------|---------------|-------|--------------------------------|
| _____ | slipping coat | _____ | fur next to skin |
| <u> X </u> | guard hairs | _____ | fur lacks life |
| <u> X </u> | density | _____ | how it feels |
| _____ | texture | _____ | lacks body |
| _____ | fine coat | _____ | longer hair on outside of coat |
| _____ | moulting | _____ | ability to smooth itself |
| <u> X </u> | flyback | _____ | thickness |
| _____ | undercoat | _____ | shedding |
| _____ | loose coat | _____ | profuse shedding |
| _____ | dead coat | _____ | open coat |





Identifying Types of Rabbit Fur

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- Three types of rabbit fur
- Differences between fur types

ABOUT THEMSELVES:

- To make judgements based on a standard

Materials Needed:

- A Satin Rabbit
- A Rex Rabbit
- A rabbit with normal fur
- Carpet for the table
- Activity Sheet 11, Fur Quality Comparisons
- Leader's Key, Activity Sheet 11, Fur Quality Comparisons
- A variety of rabbits to be examined

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

NORMAL FUR

All rabbits are classified as normal fur unless they carry a Rex, Satin or wool coat. When speaking of normal fur, it should be realized that this includes several fur structure variations.

Ask the members what type of fur their breed has.

Most furs are considered to be commercial normal furs, with the many variations clearly defined under the individual breed listing in the ARBA Standard of Perfection.

Show the three different types of fur.

Many normal-furred rabbits carry what is known as a roll back coat. Some are very short and snappy fly-back coats. One breed has no properties for returning the coat to a normal position.

Have the members examine the three rabbits to see the differences in their fur.

The Normal fur class is judged on texture, density, balance and condition.

Have the members examine the fur of several rabbits and classify it according to type.

Texture—The coat should be coarse enough in guard hair to offer resistance when stroked toward the head. The coat should fly back to its natural position and lie smooth over the entire body. There should be a fine undercoat, which is soft, interspersed thickly with heavier or thicker guard hairs. Texture is more important than density.

Check to see if the members have made the proper identifications.

Density—The underfur should be fine, soft and dense, interspersed thickly with heavier or thicker guard hairs. These guard hairs should be visible down to the skin and extend above the underfur forming a protective coat

Discuss each fur type as the members examine that fur on a rabbit.

Leader Notes

for the underfur, giving body and density to the coat. The same quality fur should carry over the entire usable portion of the pelt.

Balance and Condition—The coat should be well balanced of fairly good length, with the guard hair no more than $\frac{1}{8}$ inch longer than the under fur. A dense short coat is preferable to a short, thin coat. Texture and density, rather than length, are the important factors. Uniform length is desired. The hair should be set tight in the skin, without breaks due to moult. The coat should be clean, bright and free of stain.

REX FUR

The Rex fur should be extremely dense; be $\frac{5}{8}$ inch long, be straight, upright and as nearly as possible the same length and texture over the entire body, and to have a lustrous sheen. Guard hairs should be plentiful and evenly distributed, but not noticeably protruding. The fur is to have a good body and plush-like effect which offers a distinct springy resistance to the touch. The fur should feel smooth to the touch, but must not have a soft, silky texture which would destroy the body springiness.

SATIN FUR

The basic differences in Satin fur are a smaller diameter hair shaft and a more transparent hair shell. The greater transparency of the outer hair shell makes Satins appear more brilliant in color compared to normal-furred rabbits. The sheen and luster are due to the clarity of the glass-like hair shell and its ability to reflect light.

The fur should be fine, very dense and thick to the touch, due to a soft, very dense undercoat. This fine, soft, dense undercoat should be interspersed thickly with lustrous, slightly coarser guard hairs visible to the skin and should extend above the underfur evenly about $\frac{1}{8}$ inch, forming a protective surface for the underfur. The guard hairs give body, density and resilience in texture so that when stroked toward the head, the fur will return to its natural position and lie smoothly over the entire body. The coat should be well balanced with uniform length. The hair should be set tight to the skin, without breaks due to moult and free from mats and stains. The coat must have an appearance of distinct, glossy, lustrous sheen.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What type of fur does your breed of rabbit have?
2. What are the normal fur classes judged on?

Process:

3. What is the most important characteristic of normal, rex, and satin rabbit fur? Why?

Generalize:

4. What characteristics of rabbit fur might you find in other project animals?

Apply:

5. What are the characteristics or descriptions that help you in making measurements that reflect an ideal standard?

GOING FURTHER:

- Attend a rabbit show and watch fur classes being judged.

REFERENCES:

American Rabbit Breeders Association Guide Book
Standard of Perfection, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team

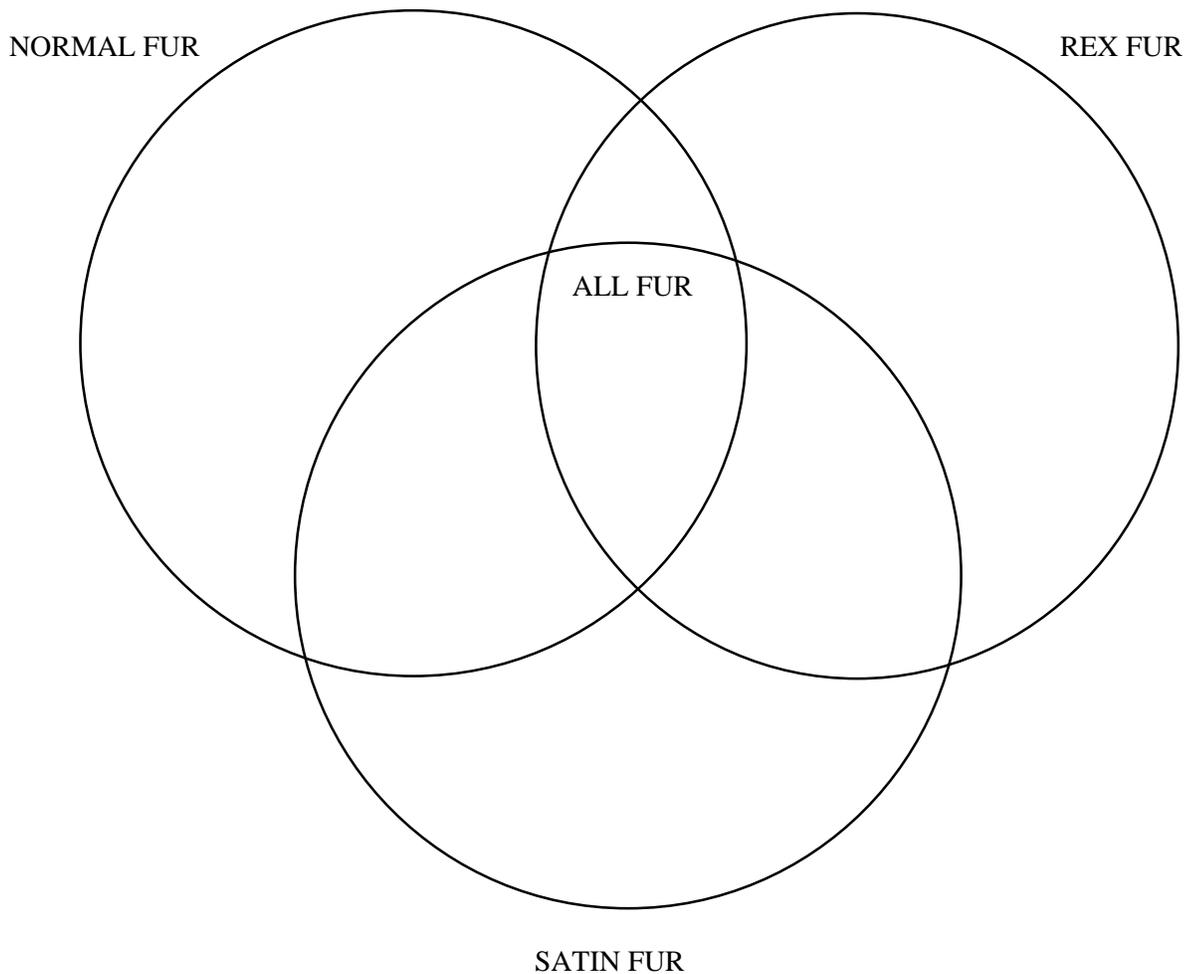


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IDENTIFYING TYPES OF RABBIT FUR
RABBITS, LEVEL II
Activity Sheet 11, Fur Quality Comparisons

In the diagram, write the number of the qualities of fur in the area they most apply to. If a quality is common to all kinds of fur, write the number in the center area where it says "All Fur."



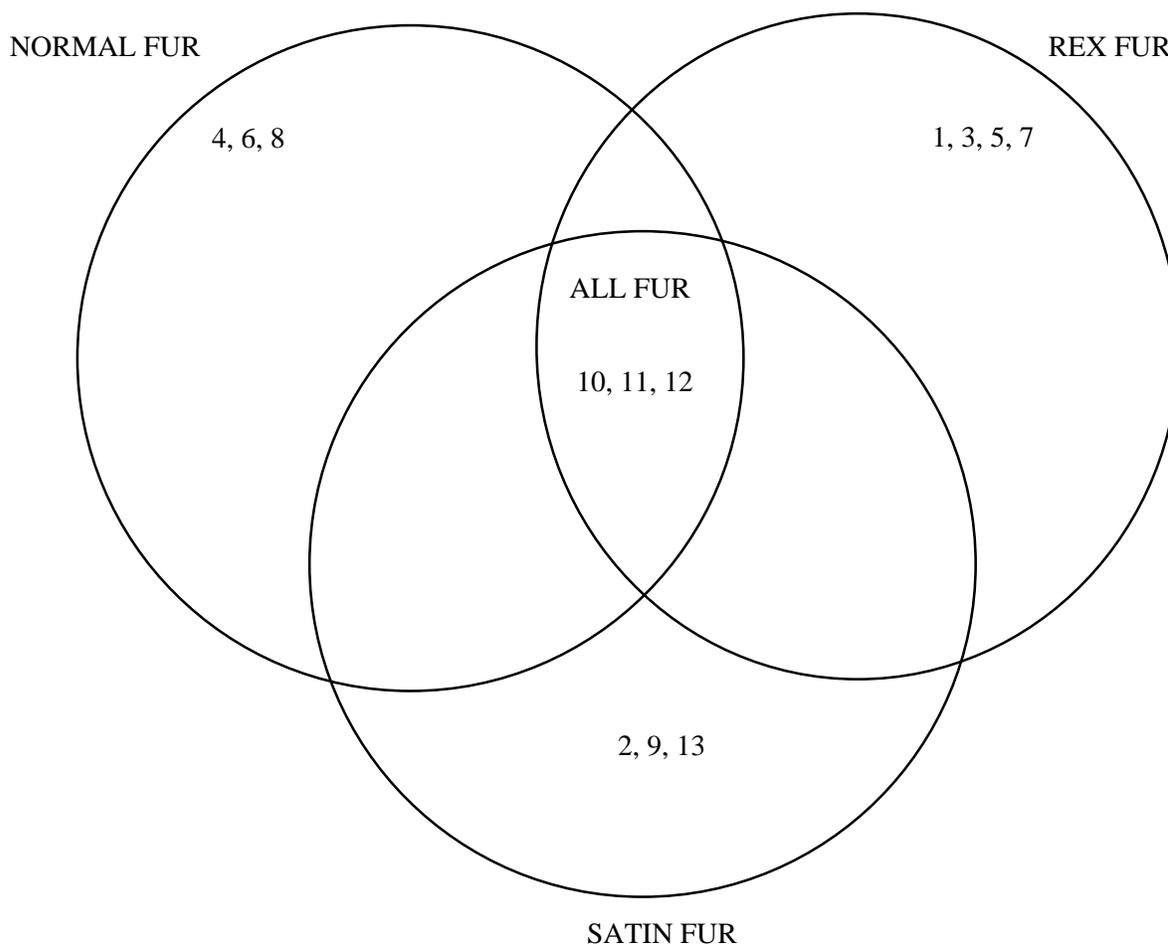
1. Springy resistance to touch
2. Transparent hair shell
3. Fur $\frac{5}{8}$ inch long
4. Soft texture important
5. Guard hairs do not protrude
6. Variable return coat
7. Smooth but not soft and silky
8. Variable length according to breed
9. Small diameter hair
10. Clean, free of stain
11. Uniform length
12. Balanced without breaks due to moult
13. More brilliant color

IDENTIFYING TYPES OF RABBIT FUR

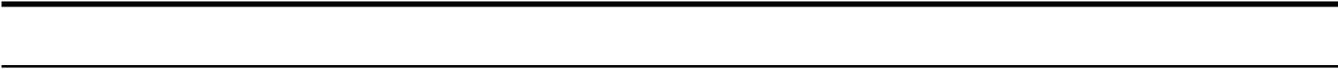
RABBITS, LEVEL II

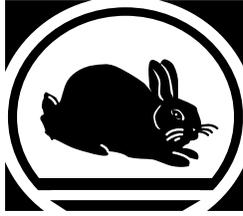
Leader's Key, Activity Sheet 11, Fur Quality Comparisons

In the diagram, write the number of the qualities of fur in the area they most apply to. If a quality is common to all kinds of fur, write the number in the center area where it says "All Fur."



- | | | | |
|----------------------------------|----------|--|----------|
| 1. Springy resistance to touch | (REX) | 8. Variable length according to breed | (NORMAL) |
| 2. Transparent hair shell | (SATIN) | 9. Small diameter hair | (SATIN) |
| 3. Fur $\frac{5}{8}$ inch long | (REX) | 10. Clean, free of stain | (ALL) |
| 4. Soft texture important | (NORMAL) | 11. Uniform length | (ALL) |
| 5. Guard hairs do not protrude | (REX) | 12. Balanced without breaks due to moult | (ALL) |
| 6. Variable return coat | (NORMAL) | 13. More brilliant color | (SATIN) |
| 7. Smooth but not soft and silky | (REX) | | |





Identifying Types of Rabbit Wool

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to identify types of wool

ABOUT THEMSELVES:

- The importance of wool in their lives

Materials Needed:

- Giant Angora rabbit
- French Angora rabbit
- English Angora rabbit
- Carpet to put on table
- Microscope (If needed, a hand lens could be substituted.)
- Example of sheep wool

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Each breed of Angora rabbits has a distinctive wool. Breeders should know what type of wool is desired in their breed.

Angora wool is used for articles of clothing such as gloves and sweaters. The best wool is plucked rather than sheared.

ENGLISH ANGORA WOOL

Density

The greatest density possible is desired. Density all over the animal including the back and belly is preferred. Density should be determined by feeling several places on the body, the sides, rump, and the chest, as well as by blowing into the wool. Length should not be mistaken for density.

Texture

To be as silky as possible, should be alive, healthy and fall free. Guard hairs to be present, but not overly evident.

Length

Uniform length of wool over the entire body. Ideal length to be 2.5 to 3.5 inches. Minimum length acceptable to be 1.5 inches. No advantage to be given to wool over 3.5 inches in length. Evenness of growth of wool; that is no break in the outline indicating thinness, broken, or matted wool. Slight molt permissible at nape of neck and forward of shoulders only.

Leader Notes

Pluck a strand of wool from each of the breeds and have the members compare the wools. Plucking is taught in Level III Lesson, "Harvesting Angora Wool."

Ask if the group can distinguish between the breeds by wool type.

View the different types of wool under the microscope.

Provide an example of sheep wool to compare with the rabbit wool.

Leader Notes

Faults: Wool not uniform in length; wool that is stained, wool that is listless, lifeless, soft, matted, packed, or felted.

Disqualification: Wool that is excessively coarse (resembling French wool).

FRENCH ANGORA WOOL

Density

The greatest possible density is desired. Determine density in the same manner as you would on an English Angora.

Texture

To be slightly coarse to coarse wool. Wool should be full of life, strong and fall free, not soft, matting, felting type wool. Guard hairs to be present and evident.

Length

Length to be uniform all over the body. Ideal length to be 2.5 to 3.5 inches. Minimum acceptable length to be 1.5 inches. No advantage given to wool over 3.5 inches. Evenness in growth of wool important. Slight molt permissible at the nape of the neck and forward of shoulders only.

Faults: Wool not uniform in length; wool that is listless, lifeless, soft, matted, packed, or felted. Wool that is very thin.

Disqualifications: A coat that appears excessively coarse and hairy, due to insufficient undercoat. Excessively soft and silky type wool.

GIANT ANGORA WOOL

Density

The greatest possible density is desired.

Texture

The wooly fleece contains three hair types:

1. Underwool—Is to be prominent over the other two hair types. It is to be medium fine, soft with a gentle shine, and delicately waved.
2. The Awn Fluff—This is soft, wavy wool with a guard hair tip. Found between the underwool and the awn hair (guard hair). Should be longer than the underwool, stronger waved ending in a fine, awn-like tip.
3. The Awn Hair (Guard Hair)—A strong straight hair to protrude above the fleece. To be present and evident and to be more predominant in does.

Length

Length to be uniform over the body. Ideal length to be 4 inches. Minimum acceptable length to be 2 inches. Evenness in growth of wool is important. Slight moult permissible at the nape of the neck and forward of the shoulders only.

Faults: Wool that is not uniform in length. Wool that is listless, lifeless, soft, matted, webbed, packed or felted. Wool that is very thin.

Disqualifications: Complete absence of wave to wool or excessively coarse coat due to the predominance of awn hair and underwool.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. Name one type of rabbit wool.
2. What characteristic of rabbit wool is the easiest to identify?

Process:

3. How is rabbit fur and rabbit wool different?
4. With your collective experiences about rabbit fur and wool, what do you think is the most significant thing to remember about rabbit fur/wool?
5. How is rabbit wool different from sheep wool? Alike?
6. What is rabbit wool used for?

Generalize:

7. What other animal products are used in the same way rabbit wool is?

Apply:

8. How will your knowledge of wool help you make future clothing decisions?

GOING FURTHER:

- Observe a rabbit wool show.
- Observe someone plucking rabbit wool for sale.

REFERENCES:

Standard of Perfection, American Rabbit Breeders Association
Domestic Rabbits, February 1988

Leader Notes

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed By:

Rabbit Design Team

Have members record these questions on a separate sheet and include them in their record books.

Think Back:

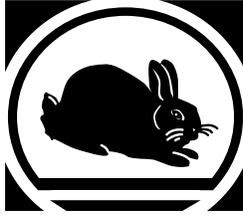
What is the most important thing to remember about the fur or wool of a rabbit? Why?

What is significant about fur or wool when registering a rabbit?



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Housebreaking a Pet Rabbit

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to housebreak a rabbit

ABOUT THEMSELVES:

- The usefulness of patience
- The value of positive reinforcement

Materials Needed:

- Rabbit cage
- Young rabbit

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

The secret in housebreaking a rabbit lies in watching the rabbit just as carefully as you would a young puppy that is not housebroken. After your rabbit has adjusted to its new home (cage), you can start letting the rabbit out for short times. Be sure to watch the rabbit very carefully, if it starts to eliminate, quickly pick it up and say “no” while carrying it back to the cage so it can finish. You may want to carry the rabbit to the cage occasionally so it can relieve itself. If it goes, reward it with “good rabbit” and let it come out and play. You will probably have to keep close supervision on your rabbit until the rabbit is about 1 year old.

Repeat the same procedure if the rabbit is chewing. However, it may be impossible to keep the rabbit from chewing.

Patience is the key to training any animal. You will have to be patient when housebreaking a rabbit.

Open the cage and allow the bunny to come out. Have the members watch the bunny and put it back in the cage as soon as the bunny starts to eliminate. Be sure to scold the bunny so it will learn that it is unacceptable to eliminate outside the cage.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. If you have housebroken a pet rabbit, explain your experiences to several others.
2. What do you think will be the most difficult part of housebreaking a rabbit?

Process:

3. Why is it important to have patience when housebreaking a pet rabbit?
4. How many times do you think you'll need to repeat the process of housebreaking your rabbit before it is trained?

Generalize:

5. Why can using repetition and patience instead of force lead to successful results?

Apply:

6. Do you think positive rewards are more effective than punishment? When might one be more effective than the other? Why?
7. When will you use positive reinforcement in the future?

GOING FURTHER:

- Visit someone who has a housebroken rabbit.

REFERENCES:

Rabbit Gazette, March/April 1988

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

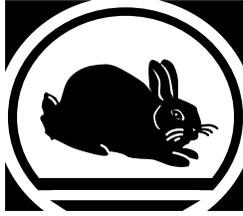
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Giving a Rabbit Demonstration

Rabbits, Level II

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to organize a rabbit demonstration
- How to deliver a demonstration

ABOUT THEMSELVES:

- Understanding Personal Learning Preference
- Presenting to a Group

Materials Needed:

- Poster board
- Marking pens
- Rulers
- Construction paper
- Scissors
- Activity Sheet 12, Who Gave What?

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

A good demonstration has an introduction, body and conclusion. In a demonstration, a task is accomplished or a product is made. The following steps should be followed to develop a demonstration:

I. Organizing the Demonstration

1. Select a topic
2. Decide on necessary steps to accomplish demonstration
3. Decide what materials are needed
4. Select a “catchy” title
5. Develop an introduction
6. Develop a body
7. Develop a conclusion
8. Prepare a poster or any visuals you plan to use

II. Delivering the Demonstration

1. Know your topic
2. Practice your demonstration in front of a mirror or with a partner
3. During presentation
 - a. speak loudly and clearly
 - b. eye contact
 - c. stand up straight

Leader Notes

Lead the group through the steps to develop an outline for a demonstration.

Hand out Activity Sheet 12, “Who Gave What?” Have members do the activity at the meeting or at home and bring it back.

Leader Notes

How you deliver your demonstration will help determine how interested your audience remains. First of all, know what you are going to say and do. Have all your equipment and supplies ready. Practice your demonstration ahead of time. Be sure you understand the importance of your topic.

III. Example: If you chose tattooing a rabbit for the demonstration, the title might be “Which One is Sue?”

Introduction: Several rabbits have gotten out of the fair coops. How can I find my rabbit, Sue? I know, I’ll look for the rabbit with her tattoo number.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What is the easiest/hardest thing about preparing a good demonstration? Why?
2. What is the easiest/hardest thing about delivering a good demonstration? Why?

Process:

3. What do you think is the most significant factor in organizing a demonstration? Why?
4. What should you consider when delivering your demonstration? Why?

Generalize:

5. What did you enjoy the most, the demonstration or the activity “Who Gave What?” Why?
6. What are other methods of learning that you prefer? Why?

Apply:

7. When will you use the demonstration method and for what purpose?

GOING FURTHER:

- Attend a demonstration contest and observe.

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team

Leader's Key, Activity Sheet 12, Who Gave What?

Ted—Keeping Records

Sonia—Tattooing

Ellie—Grooming

Josh—Building a Nest Box

Steve—Trimming Nails



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GIVING A RABBIT DEMONSTRATION

RABBITS, LEVEL II

Activity Sheet 12, Who Gave What?

Sometimes you learn by knowing what is not rather than what is.

Ted, Sonia, Ellie, Josh, Steve, and Emily are members of a 4-H club. From the following clues, can you tell who gave what demonstrations at the last meeting? No one person did more than one thing.

1. Ted and Josh did **not** bring rabbits to the meeting for their demonstrations.
2. Sonia did **not** bring clippers to use in her demonstration.
3. Steve did **not** have ink on his hands at the end of the meeting, but somebody did.
4. Ellie's rabbit did **not** have freshly trimmed nails at the end of the meeting.
5. Ted did **not** use a hammer or nails in his demonstration.
6. Ellie did **not** know how to tattoo her rabbit until she learned it at the meeting.
7. Emily did **not** see the grooming, nest box building, tattooing, nail trimming, or record-keeping demonstrations because she missed the meeting.

Ted did _____

Sonia did _____

Josh did _____

Ellie did _____

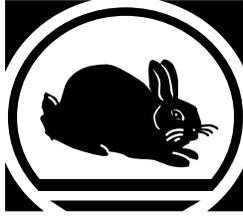
Steve did _____

Emily did _____

Think Back:

By giving a talk or demonstration, explain to a friend or others some aspect of rabbits and why you enjoy them.

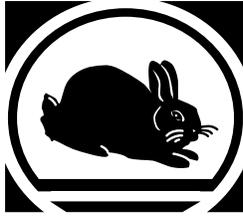
Think about your yearly accomplishments by making notes on Step 9 of your Member Guide and Annual Report.



Kansas 4-H Rabbit Leader Notebook

Level III

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Advancing in the Rabbit Project by Reaching Goals

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- To set goals for their rabbit project
- To explore various areas for rabbit projects

ABOUT THEMSELVES:

- Understanding the importance of overcoming barriers

Materials Needed:

- Flip chart and markers or chalkboard and chalk
- Rabbit Member Guide and Annual Report (MG-16)
- Activity Sheet 1, Barriers to Reaching My Goals (Two copies)

ACTIVITY TIME NEEDED: 40 MINUTES

ACTIVITY

As you become older, you can branch out into a variety of areas related to the rabbit project. This lesson is prepared to guide members into different areas of interest through a goal-setting process.

Some lesson suggestions might be:

- Determining when a doe is pregnant
- Learning how to dress a rabbit
- Learning how to tan a rabbit pelt
- Figuring dressing percentage
- Calculating average daily gain
- Learning to produce rabbit in the winter

Goal setting

After having had time to see all the topics that can be addressed when raising rabbits, it is time to make some goals for the year.

Let's think about possible barriers that might prevent us from reaching our goals.

Barriers

It is important to know how to cope with and eliminate barriers that might stop you from reaching your goals. Some major barriers to reaching goals can include time, money, resources, knowledge or ability.

When you have completed question 1, fill out your Rabbit Member Guide and Annual Report, for MAP STEPS 1-3.

Leader Notes

Ask the members what different things they would like to learn about rabbits. List these on the board.

Hand out Rabbit Member Guide and Annual Report, MG-16.

In groups of two or three members, fill out question 1 on Activity Sheet 1.

Leader Notes

In groups of two or three members, fill out question 2 on Activity Sheet 1.

The best way to deal with barriers is to design strategies of how you will overcome the barrier.

For each step that you've listed on your Rabbit Member Guide and Annual Report, identify a barrier that you think could possibly prevent you from reaching your goal.

Now identify with two or three group members some ways of overcoming those barriers in question 3.

For question 4 identify what you think will be the biggest personal barrier you will encounter this year and how you plan to overcome it.

Now using your Rabbit Member Guide and Annual Report, complete MAP STEPS 4-7. Use a second copy of Activity Sheet 1, "Barriers to Reaching Goals," to analyze your second major goal.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What is a barrier to reaching goals that has to do with time?
2. What is a barrier to reaching goals that has to do with money?

Process:

3. Why is it important to know possible barriers that might prevent you from reaching your goals?
4. How will you overcome barriers that prevent you from reaching your goals?

Generalize:

5. What frustrations occurred when you discussed barriers? Why?
6. How do you deal with the frustrations that result from working with barriers?

Apply:

7. What are some barriers that you may face in the future?

GOING FURTHER:

- Teach this goal-setting process to other 4-H members or groups.

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist 4-H Youth Programs, Kansas State University

Reviewed By:

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ADVANCING IN THE RABBIT PROJECT BY REACHING GOALS
RABBITS, LEVEL III
Activity Sheet 1, Barriers to Reaching My Goals

1. **BARRIER:** What might be a barrier to reaching a goal that could include?

time: _____

money: _____

resources: _____

knowledge: _____

ability: _____

other barriers: _____

2. **OVERCOMING BARRIERS:** What are some barriers that you might encounter when reaching your goals?

For MAP STEP 2

Barrier 1: _____

Barrier 2: _____

Barrier 3: _____

Barrier 4: _____

Barrier 5: _____

3. **STRATEGIES FOR OVERCOMING BARRIERS:** How will you overcome the barriers that might prevent you from reaching your goal?

For MAP STEP 2

Strategy 1: _____

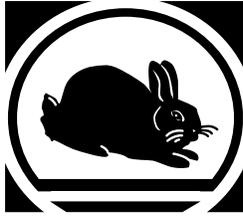
Strategy 2: _____

Strategy 3: _____

Strategy 4: _____

Strategy 5: _____

4. **YOUR PERSONAL BARRIER:** What do you think will be your biggest barrier to overcome during the next year for your rabbit project and how do you plan to overcome it?



The History of Rabbits

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- A brief history of rabbits

ABOUT THEMSELVES:

- Understanding their personal history

Materials Needed:

- Chalkboard or flip chart
- Pencils and paper
- Activity Sheet 2, My Life History

ACTIVITY TIME NEEDED: 35 MINUTES

ACTIVITY

Leader Notes

BRIEF HISTORY OF RABBITS

1. Rabbits have been mentioned in all of recorded history.
2. Rabbits exist world-wide and on all continents.
3. Some believe that rabbits were first domesticated in Africa.
4. Some believe that during the Middle Ages, French monks domesticated rabbits by keeping them in protected areas and selectively breeding them.
5. Rabbits have survived, multiplied and continued to replenish the earth under the most adverse conditions.
6. Rabbits have been used for food in Asia for more than 3,000 years.
7. Rabbits have been marketed for food in the European countries for more than 1,000 years.
8. In Spain, caves contain drawings of rabbits dating back to the Stone Age.
9. About 250 B.C., the Romans promoted rabbits in all areas where they were in power.
10. In the 15th century, the Portugese promoted rabbits to provide a supply of fresh meat for their long journeys.

Either you or a guest speaker should be brought to this meeting to lecture/discuss the history of rabbits.

Be sure all of the following information is included.

Outline on chalkboard or flip chart.

Check your local library for a video or slide set that might cover rabbit history.

Leader Notes

11. In some areas, the rabbits multiplied so rapidly that the Romans and Portugese could not control them.
12. In Australia, rabbits imported from England multiplied quickly because they had no natural enemies and stringent methods of control were needed.
13. In Rome, it was believed that rabbit meat promoted the beauty of women.
14. During the second half of the 19th century, rabbits were taken to islands near the south pole to provide fresh meat for whale hunters and research teams. In the sub-artic temperatures during winter, when there was no vegetation of any kind, the rabbits adapted to living on seaweed that drifted ashore.
15. Ancient Aztecs held rabbit meat in high esteem.
16. Aztec court physicians prescribed rabbit meat for an effective body rebuildder.
17. The American Indians hunted rabbits since early times.
18. During the time of Confucius, the Chinese used rabbits in religious ceremonies. It is believed that 35,000 Himalayan rabbits per year were used as sacrificial animals.
19. By 1850, 70 million rabbits were produced annually in France.
20. Rabbits are raised in all 50 states.
21. Most felt hats are made of rabbit fur.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What was one interesting thing you learned about rabbits?
2. Name several other countries where rabbits are very important to the culture.

Process:

3. How have rabbits affected the history of other countries?

Generalize:

4. How does knowing the history of another project animal help you understand that animal?

Apply:

5. If you were writing a history of your life, how would you like to be remembered?
6. Are there events in your history that you are proud of? What are they?

GOING FURTHER:

- Prepare a talk on the history of rabbits.
- Write an essay on the history of rabbits for your local newspaper.

REFERENCES:

Official Guide To Raising Better Rabbits, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



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THE HISTORY OF RABBITS
RABBITS, LEVEL III
Activity Sheet 2, My Life History

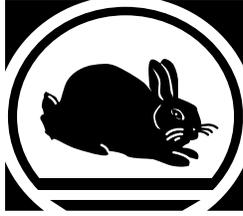
Write or think about an important event in your life when you were about the age mentioned in the chart below.

| Age | Important Events |
|---------|------------------|
| 0 | Born on _____ |
| 1 - 3 | _____ |
| 4 - 6 | _____ |
| 7 - 9 | _____ |
| 10 - 12 | _____ |
| 13 - 14 | _____ |

What was the most important event in your life?

What was the most interesting event in your life?

Select two events in your life and share them with a member.



Recognizing the Rabbit's Bony Parts

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- The principle bones of the rabbit skeleton

ABOUT THEMSELVES:

- Importance of developing a strong foundation

Materials Needed:

- Bones from front leg
- Bones from hind leg
- Activity Sheet 3, The Rabbit Skeleton
- Leader's Key, Activity Sheet 3, The Rabbit Skeleton

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

If you understand the skeleton of a rabbit, you will better understand the importance of genetics and conditioning the show rabbit.

Leader Notes

Hand out the drawings of the rabbit skeleton.

Go over the various bones by pointing them out on the skeleton.

Have the members compare the front leg bones and the hind leg bones.

Give the members a few minutes to look over the skeleton and find the various bones.

Divide the group into teams and have a contest seeing which team can recognize the most bones. You could have a member from team I ask team II to locate a particular bone. Then reverse the procedure. Continue until all members have had a chance to ask questions.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What was the easiest/hardest part of a rabbit's bony structure to recognize?
2. How many of the bony parts do you remember?

Process:

3. Why is it significant to know the rabbit's bony parts?
4. Why does a rabbit with good structure or foundation make a better show rabbit?
5. What are some things that effect the growth of a rabbit's bony parts?

Generalize:

6. What other animal structures have you studied? Why was it important?

Apply:

7. Why is a strong foundation an important step in building any project or event in your life?

GOING FURTHER:

- Prepare a skeleton of a rabbit.
- Prepare the bones of the front leg of a rabbit.
- Prepare the bones of the hind leg of a rabbit.
- Visit a natural history museum.

REFERENCE:

Practical Anatomy of The Rabbit, E. Horne Craigie, Blakiston Company

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

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Rabbit Design Team



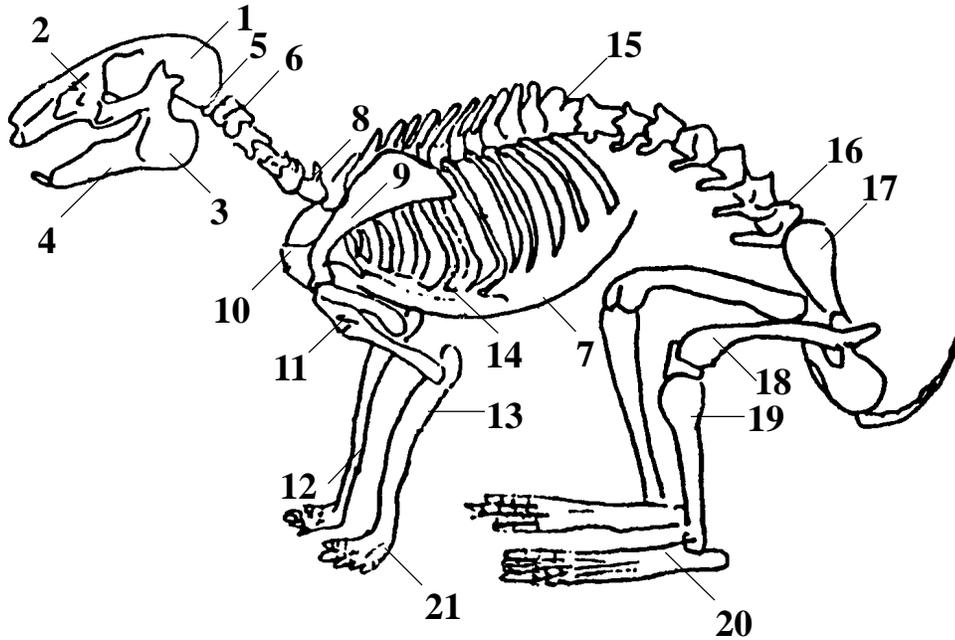
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RECOGNIZING THE RABBIT'S BONY PARTS

RABBITS, LEVEL III

Activity Sheet 3, The Rabbit Skeleton



Match the number of the correct bone with the name below.

_____ Cranial portion of the skull

_____ 7th cervical vertebra

_____ Epistropheus

_____ Humerus

_____ 5th Rib

_____ Hyoid

_____ 7th lumbar vertebra

_____ Tarsus

_____ Phalanges (digits)

_____ Atlas

_____ Clavicle

_____ Ulna

_____ Mandible

_____ Pelvis

_____ Scapula

_____ Tibia

_____ Facial portion of the skull

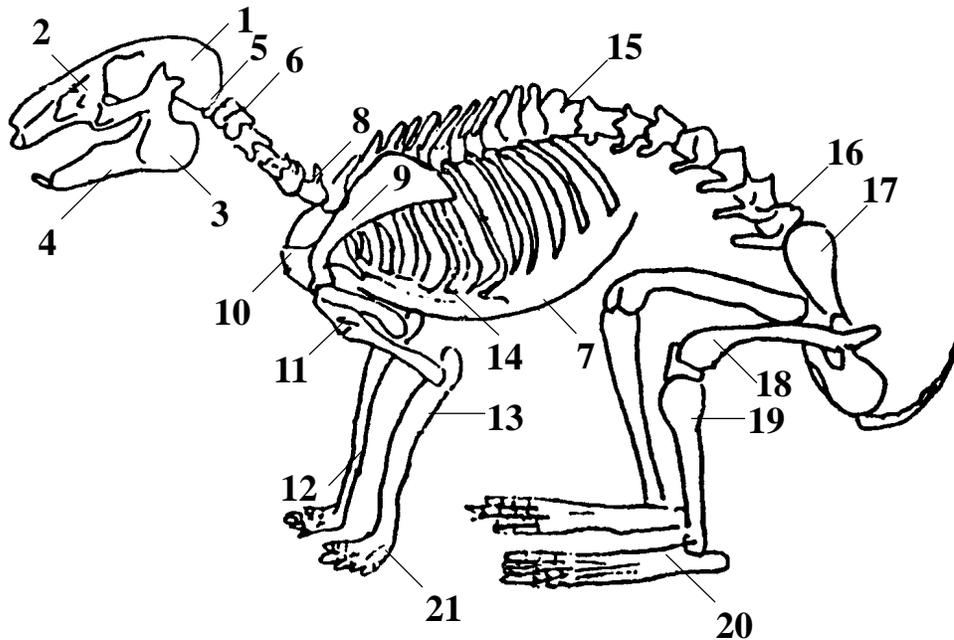
_____ Femur

_____ 12th thoracic vertebra

_____ Radius

_____ Rib cage

RECOGNIZING THE RABBIT'S BONY PARTS
RABBITS, LEVEL III
Leader's Key, Activity Sheet 3, The Rabbit Skeleton



Match the number of the correct bone with the name below.

- | | |
|---|--|
| <u> 1 </u> Cranial portion of the skull | <u> 13 </u> Ulna |
| <u> 8 </u> 7th cervical vertebra | <u> 4 </u> Mandible |
| <u> 6 </u> Epistropheus | <u> 17 </u> Pelvis |
| <u> 11 </u> Humerus | <u> 9 </u> Scapula |
| <u> 14 </u> 5th Rib | <u> 19 </u> Tibia |
| <u> 3 </u> Hyoid | <u> 2 </u> Facial portion of the skull |
| <u> 16 </u> 7th lumbar vertebra | <u> 18 </u> Femur |
| <u> 20 </u> Tarsus | <u> 15 </u> 12th thoracic vertebra |
| <u> 21 </u> Phalanges (digits) | <u> 12 </u> Radius |
| <u> 5 </u> Atlas | <u> 7 </u> Rib cage |
| <u> 10 </u> Clavicle | |



Cold Weather Rabbit Production

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- The different ways to make cold weather rabbit production successful

ABOUT THEMSELVES:

- Understanding of inputs as related to outcomes

Materials Needed:

- Nest box
- Nest box heating pad
- Styrofoam
- Nesting materials (peanut hulls, wood shavings, cat litter, finely shredded paper, etc.)
- Chalkboard or flip chart

ACTIVITY TIME NEEDED: 25 MINUTES

ACTIVITY

The rabbit producer often experiences increased kindling mortality and increased breeding problems during the winter months. This results in a decrease in production efficiency.

Constant year-round production is important to the fancier and essential to the commercial breeder if success on the show table and financial success is to be achieved.

Whenever the expectant doe is exposed to temperatures of 45°F and below, special management techniques must be used to protect the young kits.

The more the temperature drops, the more important and more dramatic the management practices are.

How much protection a pregnant doe needs from weather conditions depends on the type of protection the does housing structure gives and how much additional heat already is provided.

It is very important that the “core temperature” within the nest be maintained at approximately 67 to 69°F at all times during the first 10 to 12 days.

The appropriate size nest boxes must be used. The closer the kits “huddle” in the nest, the more heat is conserved by each of the kits in the litter.

Leader Notes

List main points on chalkboard or flip chart, or develop a skillathon situation and see how members use the materials.

Leader Notes

Nest boxes that are too large encourage the doe to sit in the box to protect herself from the cold. If this happens, the doe oftentimes urinates and defecates in the nest box. Moisture in the nest box results in nest box fatalities.

Absorbant materials should be placed on the bottom of the nest box. Wood shavings, peanut hulls, finely shredded paper, cat litter, etc., should be used to absorb moisture from the developing young.

The colder the temperature, the more absorbant the nesting materials need to be.

Wooden nest boxes are best for cold weather kindling. Strict attention should be given to the floor of the nest box. Most of the heat loss from the kits is through the floor of the nest.

To prevent loss through the floor, use several layers of newspaper in the bottom of the box or put in a layer of Styrofoam. You need to put a board or wire bottom over the Styrofoam or the doe will tear up the Styrofoam.

Some breeders attach Styrofoam to the outside bottom of the nest box.

Heat lamps and heated nest box pads have been used by some breeders. The heat pads have proven more successful.

If heat lamps are used, they are more effective if the rays are directed at the bottom of the nest box from the underside of the cage.

Disadvantages of heat pads and heat lamps are that many small rabbitries do not have electricity available, it is difficult to control the temperature of the nest box, the possibility of fire, and that rabbits tend to chew electrical cords.

Some breeders discontinue mating during cold weather. However, this is disappointing and detrimental to the breeder. Junior animals will not be available for the spring shows. Does not on a regular breeding schedule have a tendency to become overly fat and difficult to breed.

A management practice known as “nest box rotation” can be used to perpetuate a breeding program throughout the entire year. The doe is allowed to kindle in an appropriately prepared nest box. Within a short period of time, after the doe has kindled, the entire nest box is removed taken to an area that is dry and warm (72°F).

Ask to see if anyone can explain or describe “nest box rotation.”

This allows the core temperature of the nest to be maintained somewhere between 67 and 69°F by the heat that is produced from the small kits’ bodies.

The nest is then returned to the doe's cage at approximately 12-hour intervals to allow the doe to nurse the young. The nest box is left in the doe's cage for about 30 minutes and then returned to the warm, dry area.

This practice is continued for 10 to 12 days or until the environmental temperature increases to the point that the kits will be kept warm.

Disadvantages are that this is somewhat time consuming and one must use caution to return the proper nest box to the proper cage.

This practice is used in many foreign countries year-round.

The reason this method is successful is due to the following facts:

1. The doe normally feeds the young only once or twice a day.
2. The doe has the ability to allow for milk let down and rapid lactation.

List advantages and disadvantages of "nest box rotation."

Some breeders move the expectant doe into a warm area for kindling and return her to her cage after the kindling process. The manager will then use the "nest box rotation" method.

By adapting one of several management practices available, one can successfully raise young rabbits on a year-round basis.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What are several management techniques used to protect young kits when the weather drops below 45°F?
2. What "core temperature" should be maintained for the nest?

Process:

3. Why is constant year-round production important to the commercial rabbit breeder?

Generalize:

4. What are other management techniques you will use to keep cost of production low when working with other project animals?
5. In what other activities might you encounter additional production costs?
6. What is the significance of constant production as opposed to seasonal production?

Apply:

7. How do you determine when the costs of time, energy, and inputs are justified?

Leader Notes

GOING FURTHER:

- Visit a rabbitry during the winter to see how they are utilizing this lesson.
- Make a list of the costs and returns if these cold weather practices were used.

REFERENCES:

Domestic Rabbits, January-February 1989

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

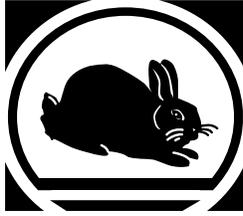
Reviewed by:

Rabbit Design Team



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Making a Rabbit Wire Cage

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to cut out and assemble a wire cage

ABOUT THEMSELVES:

- Following directions and understanding consequences

Materials Needed:

- 14 Gauge 1 × 2-inch wire 30 inches wide for top
- 14 Gauge 1 × 2-inch wire 18 inches wide for sides
- 16 Gauge 1 × ½-inch wire 30 inches wide for bottom
- J clips
- J clip pliers
- Wire cutters
- Measuring tape
- Latches
- Chalkboard or flip chart

ACTIVITY TIME NEEDED: 40 MINUTES

ACTIVITY

Leader Notes

Members need to know how to make cages for their rabbits in order to replace cages and make additional cages as the size of their herd increases.

First, you need to decide what you want to use the cage for—is it to house a doe and her litter, a buck or a growing rabbit. The breed you raise also will make a difference in the size of the cage. Today, we will build a cage for the commercial type doe and litter.

A good size for this cage would be 30 × 48 × 18 inches. We need to cut a piece of 1 × ½-inch wire 30 × 48 inches for the bottom.

We need to cut a piece of 1 × 2-inch wire 30 × 48 inches for the top.

We need to cut two pieces of 1 × 2-inch wire 18 × 48 inches for the front and back.

We need to cut two pieces of 1 × 2-inch wire 18 × 30 inches for the ends.

Using the J clip pliers, put the cage together.

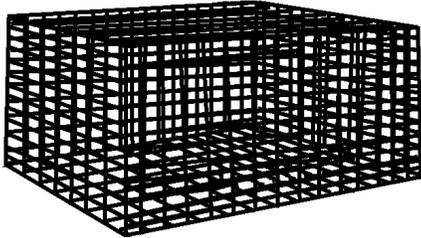
List steps or pieces on chalkboard or flip chart.

Help each member or do project in small groups.

Have the members help cut out the wire.

Leader Notes

Here is a picture of what your cage should look like when finished.



Now we have a cage but don't have any way to get a rabbit in it. Therefore, we need to cut a door. Starting 6 inches from the left side, cut an opening 14×16 inches in the front. Be sure to leave 2 inches at the top and bottom of the opening.

For the door, cut a piece of 1×2 -inch wire 15×18 inches. Using J clips, attach the door to the top of the opening in the front. Now attach the latches to the door.

If you are going to use self-feeders, an opening will have to be made for the feeder.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What purpose is your rabbit cage going to serve?
2. What do you think will be the easiest/hardest part of building a rabbit wire cage?

Process:

3. How did you organize your materials and directions for building your rabbit wire cage?
4. Did you have a major drawback or barrier to building your wire cage? If so, what was it? If not, what was a problem that you thought might occur?

Generalize:

5. In what other projects have you needed to follow directions?

Apply:

6. Why are some directions important to follow?
7. What are some of the positive consequences of following directions? Negative consequences of **not** following directions?

GOING FURTHER:

- Research the size of cage you need for each of the breeds.
- Help the fair superintendent make rabbit cages for the fair.

REFERENCES:

Official Guide to Raising Better Rabbits, American Rabbit Breeders Association
Cooperative Extension Service, University of Arizona

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

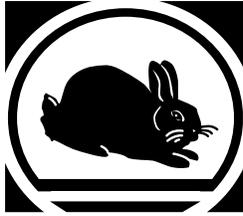
Rabbit Design Team



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Making a Rabbit Carrier

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to make a rabbit carrier

ABOUT THEMSELVES:

- Importance of precision and accuracy in their lives

Materials Needed:

- Metal tray 16 × 16 × 2 inches
- 1 × 1-inch wire
- 1 × ½-inch wire
- J clips
- J clip pliers
- Wire cutters
- Pine board ½ × 3 × 70 inches
- Pine board 1 × 8 × 42 inches
- Nails
- Staples
- Hammer
- Saw
- Springs and hooks (3)
- Member Handout 1, Pictures of Wire Rabbit Carriers

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Leader Notes

The most popular rabbit carrier is one made out of wire with a tray. Beginners can make a carrier out of wood and wire.

Wire Carrier

In order to make a carrier out of wire, cut **four** pieces of 1 × 1-inch wire 16 inches long and 10 inches wide, **one** piece of ½ × 1-inch wire 16 × 16 inches, **one** piece of 1 × 1-inch wire 8 × 16 inch and **one** piece of 1 × 1-inch wire 18 × 20 inches.

Demonstrate the steps as you go along.

Using J clips, make a square out of the four 16 × 10 inch pieces of 1 × 1 inch, attaching the pieces at the 10-inch sides. Attach the 16 × 16 piece of ½ × 1-inch wire 2 inches from the bottom. Now attach the 8 × 16 piece of 1 × 1-inch wire in order to divide the compartment into two cages.

We are now ready to make the lid. Take the 20 × 18-inch piece of 1 × 1-inch wire and, along the 20-inch side, cut out 2-inch square pieces of wire. Now bend the wire up 2 inches on the three sides next to where

Leader Notes

You may wish to have the wire cut ahead of time, so it will take less time to demonstrate how to make the carrier.

the squares were cut out. Using J clips, attach the other side to the carrier. To complete the lid, J clip the area when the bend up sides meet.

Now we are ready to attach a spring and hook for a latch. The other two springs and hooks are used to hold the tray to the carrier. You can put wood shavings, cat litter, etc., in the tray when you are taking your rabbit to a show.

Wooden Carrier

A wooden carrier can be made by cutting a 1 × 8-inch pine board 16 inches long and two 1 × 8 × 11 inches. These are the bottom and ends of a one-hole carrier. Nail the bottom to the ends. Cut two pieces of 1 × 1-inch wire 16 × 11 inches for the sides. Using staples, attach to the wood. Cut two pieces of ½ × 3-inch pine lumber 16 inches long. Attach these to the sides and bottom.

Now we are ready to make the lid. Cut a piece of 1 × 1-inch wire 16 × 9 inches. Along the 16-inch side, bend the wire over 1 inch. Attach the other side of the lid to the carrier using J clips. Use a spring and hook for a latch. The carrier may be painted if you wish.

When you use the wooden carrier, put straw in the bottom of the carrier before putting in the rabbit.

These carriers are for medium-sized rabbits; if you have smaller or larger rabbits, the size will change.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What are the two most popular materials for making a rabbit carrier?
2. How easy/difficult was it to make the carrier?

Process:

3. What is the purpose of having a rabbit carrier if you have a rabbit cage?
4. What do you think will be the best materials to make the rabbit carrier with? Why?
5. When bending the wire or nailing the wood for the carrier, why is it important to use precise measurements.

Generalize:

6. What other projects require you to measure accurately?

Apply:

7. What other activities require precision and accuracy?
8. How do the outcomes of precision and accuracy relate to following directions?

GOING FURTHER:

- Make a wire hutch for your rabbits.

REFERENCES:**Author:**

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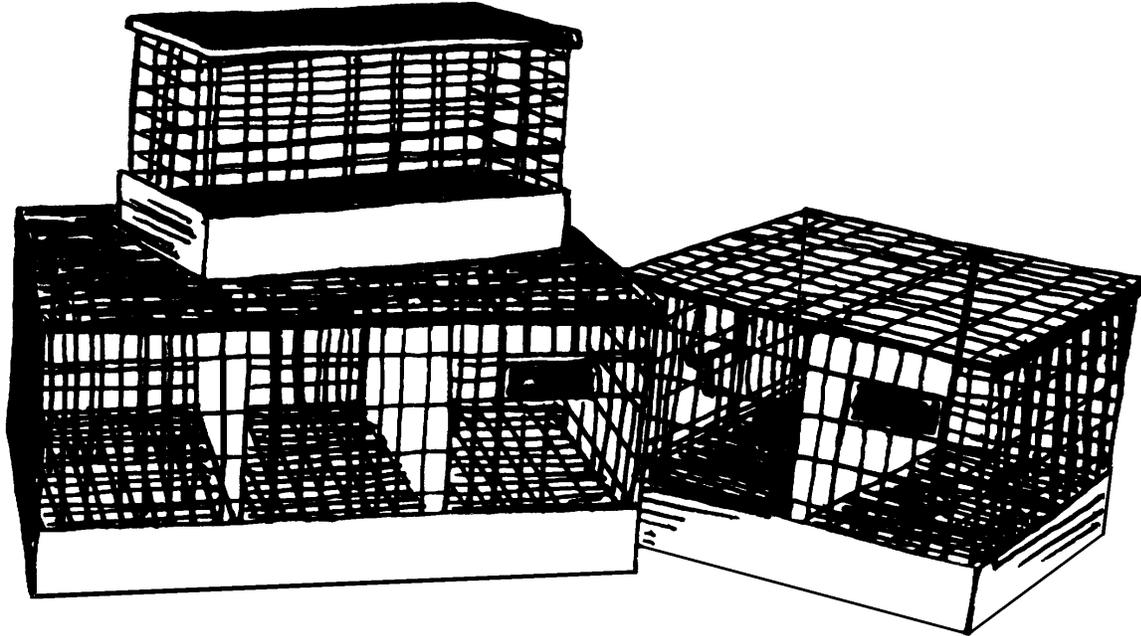
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MAKING A RABBIT CARRIER

RABBITS, LEVEL III

Member Handout 1, Pictures of Wire Rabbit Carriers

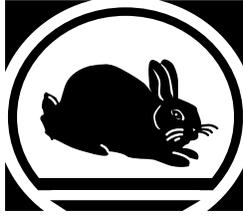


Think back:

What is significant to you about the history and basic structure of rabbits?

How does this aspect affect the barriers to reaching your goals?

How does cold weather affect the use of wire cages or carriers?



Administering Rabbit Medicines

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- To properly administer medicines

ABOUT THEMSELVES:

- Appropriate use of medication

Materials Needed:

- Bottle of sterile water
- Oranges
- Syringes
- Medicated feed

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

The member needs to know how to care for the sick rabbit. Being able to administer medicines to your rabbits can save veterinary expenses.

There are three common ways to administer medicines to rabbits:

1. In the feed.
2. In the drinking water.
3. By injection.

Sulfaquinoxaline at the rate of 0.025 percent in feed is used to control liver coccidiosis. Griseofulvin at a rate of 0.37 g/lb of feed is used for the control of fungal infections. Long-term usage is not recommended.

Piperazine citrate, 100mg/100ml water, is administered to eliminate round worms. The treatment is for one day only.

Penicillin G injections are used for vent disease and pneumonia. Penicillin injections should be given intramuscularly. Check with your veterinarian for the actual dosage.

To learn how to give an intramuscular injection, use an orange as the rabbit. Put 2 or 3 cubic centimeters of water in the syringe and inject the orange. Stick in the needle and squeeze out the water.

Sometimes the veterinarian will prescribe a powdered drug, capsules or liquid medication. To administer these, grasp the rabbit by the loose skin behind its neck and tip it back, sliding your other hand under its haunches at the same time. Allow the animal to lean against you as if you were checking the sex. Tip the rabbit's nose up, gently press the jaws apart

Demonstrate how to fill the syringe.

Now demonstrate how to inject the rabbit using an orange as the rabbit.

Have the members try to inject an orange.

Remind the members:

1. That some medicines must be injected just under the skin while others must be given intramuscularly. Check the medicine bottle to find the method to use.
2. That they should check with a veterinarian on the dosage to be used.
3. That all medicines should be withdrawn for a period of time before slaughtering. Check the medicine bottle or feed label for the length of time.

Leader Notes

with the thumb and forefinger. Place the medicine on the back of the rabbit's tongue. Allow the rabbit to close its mouth and gently stroke the chin until the rabbit swallows. Liquid medication can be given this way using an eye dropper to put the medicine on the rabbit's tongue.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. Name three ways of administering medicines to a rabbit.
2. Which way of administering medicines do you think will be the most difficult to do?

Process:

3. What is the difference between giving an injection under the skin and intramuscularly?
4. What rabbit medications would you give under the skin and which rabbit medications would you give intramuscularly?

Generalize:

5. When have you used medications for other project animals?
6. Why is it important to know when to use medications?

Apply:

7. How do you determine when it is appropriate to use over-the-counter medications and when it is appropriate to seek help?

GOING FURTHER:

- Research common rabbit diseases.
- Investigate how to control all kinds of parasites.

REFERENCES:

Cooperative Extension Service, The Ohio State University
Domestic Rabbits: Diseases and Parasites, United States Department of Agriculture
Cooperative Extension Service, New Mexico State University

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

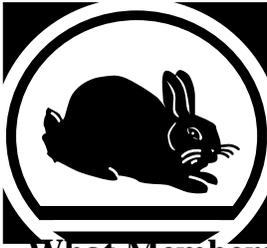
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Controlling External Parasites

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- To have an understanding about the common external parasites
- To control common external parasites

ABOUT THEMSELVES:

- Taking responsibility for preventing problems

Materials Needed:

- Chalkboard or flip chart

ACTIVITY TIME NEEDED: 20 MINUTES

ACTIVITY

Leader Notes

An understanding of potential parasite problems and how to control them is essential for a successful rabbit-raising project.

List cause, symptoms and treatment for each parasite on chalkboard or flip chart.

EXTERNAL PARASITES OF RABBITS

Ear Canker or Ear Mange—Ear canker is caused by the common ear mite (*Psoroptes cuniculi*). The mites live in the ear canal and damage the skin. A brown, waxy material soon covers the inner ear. This encrustation consists of dried blood, cellular debris, keratin and mites in various stages of development.

Describe symptoms or show a rabbit with symptoms and see if members can discuss treatments.

An effective treatment is to remove the encrustation with a cotton swab soaked in mineral or vegetable oil. Allow some of the oil to run into the ear passage. Repeat this procedure in four days. A 0.25 percent suspension of Lindane in mineral oil is an effective medication. Ivermectin has proven to be very effective at controlling ear canker. Inject 0.20 cc of Ivermectin just beneath the skin at the nape of the neck. Remember, all your rabbits need to be treated if you find an infected animal. Sanitation is important for control.

Mange—Mange is caused by *Psoroptes cuniculi*, *Notoedres cati*, and *Cheyletiella parasitovorax*. These mites cause the skin to be come dry, scaly, irritated and itchy with hair loss in the affected areas. Treat with a powder containing 0.25 percent Lindane. The best control method is good sanitation.

Fleas—The rabbit flea, *Spilosyllus cuniculi*, and the dog and cat fleas, *Ctenocephalides canis* and *Ctenocephalides felis*, occasionally have been reported on rabbits. There are four stages in the life cycle of a flea—egg, larva, pupa, and adult. The eggs are deposited in nesting materials and cracks of the nest boxes. The eggs hatch into larvae who form the pupae from which the adult emerges. Treat the rabbits by dusting with a com-

Leader Notes

mercial preparation of Pyrethrum or Rotenone. Properly destroy nesting materials and wash the nest boxes using bleach. Keep cats and dogs away from all rabbit supplies, especially nesting materials.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. Name two external parasites that might affect a rabbit's well being.
2. Have you ever observed any of these parasites? Explain what they look like.

Process:

3. What are some signs that a rabbit is infected with mites or fleas?
4. How would you attempt to control these parasites?
5. What is significant about understanding these external parasites?

Generalize:

6. What other project animals have you had that have similar external problems?
7. Why is it important to be responsible for preventing problems?

Apply:

8. Why is it important to be responsible for yourself no matter what the situation?

GOING FURTHER:

- Visit a veterinarian to see if they have animals or visuals to show examples of external parasites.

REFERENCES:

Rabbits USA, March 1989, Volume I, Number 3

Domestic Rabbits: Diseases and Parasite, Agriculture Handbook No. 490, Agricultural Research Service, United States Department of Agriculture

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

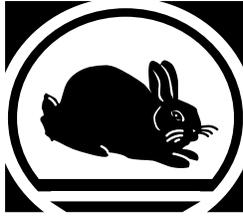
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Controlling Internal Parasites

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- The common internal parasites
- How to control these parasites

ABOUT THEMSELVES:

- Importance of good sanitation practices

Materials Needed:

- Chalkboard or flip chart
- Member Handout 2, Life Cycles of Coccidia and Tapeworm
- Activity Sheet 4, Common Parasites

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

INTERNAL PARASITES OF RABBITS

Members need to learn about the common internal parasites in order to be able to control these internal parasites.

List each parasite on chalkboard or flip chart as it is discussed. Also list symptoms and controls.

Coccidia—Coccidiosis is the most common parasite disease in domestic rabbits. The microscopic parasites invade the liver and small intestines. Here the parasites multiply and are passed out of the body in the feces.

Discuss coccidia life cycle on hand-out.

Four species of coccidia live in the small intestines and one specie of coccidia infects the liver. Infections of the liver after (or more than) 16 days can be recognized by white, circular nodules on the liver.

Control involves the minimization of fecal contamination of feed and water. Feed containing 0.025 percent sulfaquinoxaline is an effective treatment for liver coccidia. Intestinal coccidia develop a tolerance to the drug thus it should not be fed continuously.

Stomach Worms—*Obelisoides cuniculi* are slender, cylindrical reddish roundworms about ½ inch long. Life cycle involves the eggs being passed in the feces; after a short time the eggs hatch into infective larvae. The larvae are ingested and pass to the stomach where they grow to adults. Diarrhea and emaciation may result. Stomach worms are rarely found when the rabbits are raised in hutches aboveground. The best control is good management practices.

Intestinal Worms—*Trichostrongylus calcaratus* live in the small intestines. They are about the same size as stomach worms and have a similar life cycle. Infection is rare when rabbits are raised in hutches

Leader Notes

aboveground. Good sanitation and management practices are the best control.

Pinworms—*Passalurus ambiguus* is a common parasite of rabbits. These are ½ inch long, glistening, white worms. They often are seen on the surface of the freshly passed feces. These parasites are spread by contaminated feed and water. A one-time treatment with Piperazine citrate (100 mg/100 ml water) is effective. Sanitation is the best control.

Discuss tapeworm life cycle on Member Handout.

Tapeworms—Tapeworms occur in rabbits as adults in the intestines and as larval forms in the liver and abdominal cavity. Adult forms are very rare in hutch-raised rabbits but larval forms are observed.

The rabbit tapeworm, *Cittotenia ctenoides*, is flat, ribbon shaped and made up of numerous segments. The head has four suckers with which the worm attaches to the lining of the intestine. When many tapeworms are present, diarrhea and emaciation occur. Control is accomplished by good sanitation.

The larval forms of tapeworm most often found are those of *Taenia pisiformis*, dog and cat tapeworm. These are acquired when the rabbit ingests feed or water contaminated from the feces of dogs or cats. The eggs hatch and the larvae penetrate the intestine and migrate to the liver. They migrate in the liver leaving a white streak. Later, they leave the liver and enter the abdominal cavity. They may form small, fluid-filled cysts. Each cyst contains an embryonic tapeworm which when consumed by cats or dogs, will develop into a mature tapeworm.

Exclude dogs and cats from all areas where rabbit supplies or rabbits are kept. Dogs and cats should not be given raw rabbit carcasses. Management is the best control.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. Name three internal parasites that might affect a rabbit's well being.
2. Have you ever had to treat your rabbit for an internal parasite? If so, what did you do?

Process:

3. What are some signs that your rabbits might be infected with these internal parasites?
4. What management techniques would you use to eliminate these parasites?

Generalize:

5. Sanitation is important for managing internal parasites. Discuss what sanitation measures you would take that would apply to other project animals you've worked with.

Apply:

6. What are some sanitation practices that you use on a daily basis?
7. What are some sanitation practices that everyone needs to follow?

GOING FURTHER:

- Visit a veterinarian and see samples of these parasites.

REFERENCES:

Domestic Rabbits, January-February 1989

Domestic Rabbits: Diseases and Parasites, Agriculture Hand Book No. 490, Agricultural Research Service, United States Department of Agriculture

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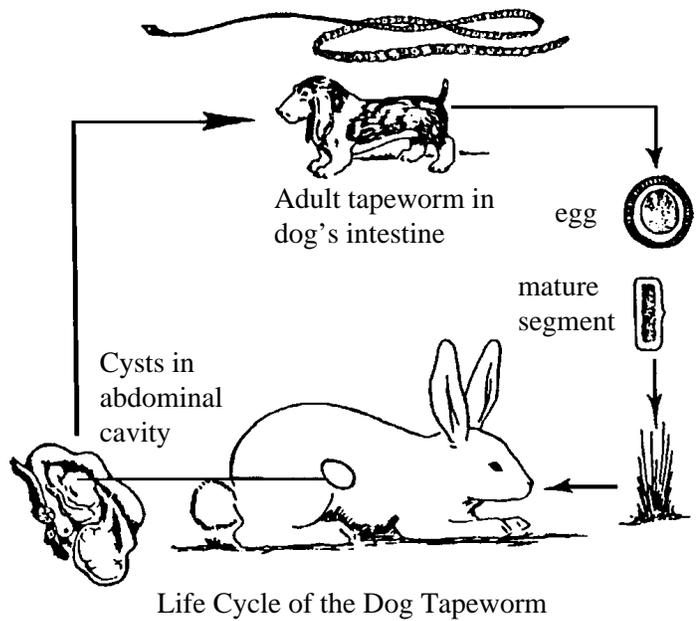
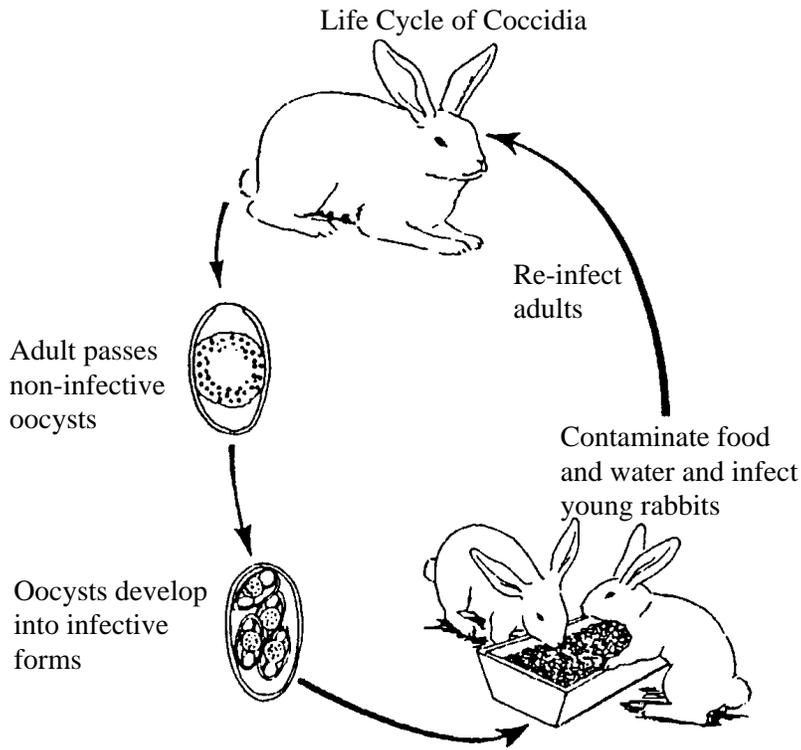
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CONTROLLING INTERNAL PARASITES
RABBITS, LEVEL III
Member Handout 2, Life Cycles of Coccidia and Tapeworm



CONTROLLING INTERNAL PARASITES

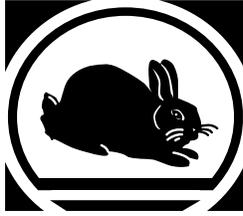
RABBITS, LEVEL III

Activity Sheet 4, Common Parasites

For each parasite listed, identify the symptoms, treatment and best control. Work in teams of two or three to get your answers.

| Parasite | Symptoms | Treatment | Best Control |
|------------------|-----------------|------------------|---------------------|
| Coccidia | _____ | _____ | _____ |
| | _____ | _____ | _____ |
| | _____ | _____ | _____ |
| Stomach Worms | _____ | _____ | _____ |
| | _____ | _____ | _____ |
| | _____ | _____ | _____ |
| Intestinal Worms | _____ | _____ | _____ |
| | _____ | _____ | _____ |
| | _____ | _____ | _____ |
| Pinworms | _____ | _____ | _____ |
| | _____ | _____ | _____ |
| | _____ | _____ | _____ |
| Tapeworms | _____ | _____ | _____ |
| | _____ | _____ | _____ |
| | _____ | _____ | _____ |





Common Diseases of Rabbits

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- The common diseases of rabbits, the causes and methods of prevention

ABOUT THEMSELVES:

- The benefits of preventative health care

Materials Needed:

- Chalkboard and chalk or flip chart and marker
- Paper
- Pencils
- Rabbit Diseases and Health Problems (video) — optional

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

The members need to know when their rabbit is ill. Members need to know about rabbit diseases so they can recognize them and treat the rabbits when needed.

DISCUSS THE FOLLOWING COMMON RABBIT DISEASES:

I. *Coccidiosis*

- Symptoms**—Common and serious problem especially in young rabbits. Symptoms vary with severity of exposure but include loss of appetite, diarrhea, tough coat, and loss of weight. Depending upon the type of coccidia present, the disease may involve the liver (liver form) or the intestines (intestinal form). Post-mortem examination reveals small white spots on liver when liver form is present. In severe infections, the liver may be enlarged. With the intestinal form no visible lesions may be observed, although careful examination may reveal small hemorrhages on inner surface of intestines.
- Cause**—five different species of protozoan parasites or one-celled animals, which injure the lining of the bile ducts of the liver, intestines, or cecum depending on the particular species present, is the cause of the disease.
- Control**—Sulfa added to the drinking water at a rate of 1½ ounces per gallon. Treat for 14 days. If necessary, the treatment may be repeated after seven days on plain water. To be fully effective, treatment should be accompanied by strict sanitary practices. Clean and disinfect hutches twice weekly with disinfectant. Remove manure daily and do not allow droppings

Leader Notes

Discuss the common rabbit diseases.

Have each member make three columns on their paper. Label the columns:

1. Symptoms
2. Cause
3. Control

Members will record information in each column for each disease as it is discussed or viewed.

Pictures of rabbits with each disease, if available, from library or veterinarian would be helpful.

to come in contact with feed and water. Feeder should be cleaned and disinfected regularly with disinfectant. Separate young from other rabbits as soon as possible. Where disease is a persistent problem, special feeds can be used for prevention.

II. *Mycoid Enteritis* (“Bloat” or “Scours”)

- A. **Symptoms**—Symptoms include loss of appetite, depression, rough coat, may grit teeth, abdomen often bloated, and diarrhea often containing gelatinous material. Post-mortem examination may reveal excess mucus or fluid in the intestines. Fluid often present in stomach. The condition often can be demonstrated in live animals by shaking it close to the ear. If it sounds as if it is full of fluid, *mucoid enteritis* is present.
- B. **Cause**—Specific cause still unknown. Not believed to be contagious or of nutritional origin, but may be primarily due to constipation.
- C. **Control**—Strict sanitation of hutches, feeding and watering equipment important for control. Be sure the rabbit has access to a constant supply of water. (If automatic watering nipples are used, be sure the rabbits know how to drink.)

III. *Salmonellosis* (“Scours”)

- A. **Symptoms**—Disease may be acute or chronic. Characterized by diarrhea, loss of appetite, loss of weight, nasal discharge, rapid breathing, and fever.
- B. **Cause**—Post-mortem examination reveals few to numerous small white spots on liver, spleen, kidneys, or pancreas. Pneumonia may be present. Ulcers are sometimes found along the intestines. Petechial hemorrhages (pin-point, measles-like, red spots) are occasionally seen on the intestinal wall.
- C. **Control**—Several members of the *Salmonella paratyphoid* group of bacteria affect rabbits. Usually *S. typhimurium*, *S. enteritidis*, or *S. aertryche*. Some feeds can be used as a preventive when the problem is troublesome. For specific recommendations see your local veterinarian.

IV. *Enterotoxemia*

- A. **Symptoms**—Diarrhea usually only symptom. May go off feed and is found dead in 24 hours. Usually seen in 4 to 8-week-old rabbits.
- B. **Cause**—*Clostridium Spiroformes*, a bacteria, is the specific cause. It produces a toxin that kills the rabbit. The disease is brought on by overfeeding with a high carbohydrate feed (contains a lot of grain).
- C. **Control**—Change to a higher fiber (low energy) diet and reduce the amount of feed. The addition of hay or straw to the ration also is helpful. Antibiotics may be helpful.

V. *Pasteurellosis* (“Snuffles”)

- A. **Symptoms**—May be acute or chronic. Symptoms include nasal discharge, sneezing, coughing, watery eyes, head shaking and

loss of weight. Rubs nose with front feet. Post-mortem examination reveals a reddening of the windpipe, hemorrhages and solidified red patches in the lungs; membranes of the nose and sinuses may be inflamed.

- B. **Cause**—Bacterial organism known as *Pasteurella mulocida*. (*Brucella*, *streptococcus*, *bordatella*, and other bacteria occasionally may produce similar condition.) Infection of the reproductive tract by *pasteurella* organisms occurs and may result in sterility.
- C. **Control**—Antibiotics are not effective. Strict sanitary practices should be applied to hutches. Culling of affected rabbits is the most effective method of control to date. Selection of resistant breeding stock may be helpful.

VI. *Listeriosis*

- A. **Symptoms**—Young most frequently affected. Animals become emaciated. May show nervous disturbance—twist head to one side.
- B. **Cause**—Bacterial organism, *Listeria*, is the cause.
- C. **Control**—Affected animals should be destroyed and properly disposed of.

VII. *Mastitis*

- A. **Symptoms**—“Blue Breasts” mammary glands become hot, reddened, and swollen—later may appear blue in color. May go off feed and run temperature. Condition may spread through rabbitry.
- B. **Cause**—Usually *Staphylococcus* or *Pasteurella* infections, but various other bacteria may be responsible.
- C. **Control**—Strict sanitary program and thorough disinfection of contaminated hutches. For specific recommendations see your local veterinarian.

VIII. *Caked Breasts*

- A. **Symptoms**—“Caked Udder,” one or more of mammary glands swollen, and hot and firm.
- B. **Cause**—Milk not drawn from glands as rapidly as formed. Too few young or young not nursing sufficiently.
- C. **Control**—Correcting faulty management most important. Reduce ration by one-half on the day doe kindles and gradually increase to full feed in 7 days. Relieve congested glands by partial milking. Rub lanolin into affected glands to soften. Do not abruptly wean young from a heavy milking doe.

IX. *Ear Canker*

- A. **Symptoms**—“Ear Mange”—Shake head and flop ears. Scaly crusts starting at base of inner ear.
- B. **Cause**—Infestation of skin with mites.
- C. **Control**—Remove the crust and scabs with a Q-Tip. Then apply mineral oil, containing a miticide, to the affected ears with an eye dropper. Use the 3 x 3 x 3 method. Treat every day

Leader Notes

for 3 days, every other day for three treatments and once a week for three treatments.

X. *Ringworm*

- A. **Symptoms**—Loss of hair usually in circumscribed patches, often starts on head but may involve any part of body. Not accompanied by scratching as a rule. Infection may spread to humans; gloves should be used in handling affected animals.
- B. **Cause**—Fungus infection of the skin. The fungus can be transmitted from human to rabbit or vice versa. Cats and other animals also can carry the fungus and transmit it to rabbits.
- C. **Control**—Clip ½-inch area around lesion and treat with good fungicide such as strong tincture of iodine or mixture of 2 ounces tincture of iodine, 2 ounces tincture benzoine, and ½-ounce salicylic acid mixed with alcohol to make a total of 6 ounces. Culling the affected rabbit is sometimes the best method of control.

X. *Sore hocks*

- A. **Symptoms**—Bruised areas on under surface of hocks. Often become infected or abscessed. Front feet may become involved. Prevention by good management is best means of handling this problem—clean, dry floors or wire that provides good supporting area without compromising sanitation. Cull nervous rabbits known as “stampers” and protect herd from exciting influences.
- B. **Cause**—Due to irritation from wire floors, stamping or irritation from urine often starts condition. Nervous and heavy animals more often affected.
- C. **Control**—Regular inspection by breeders for tenderness of feet or early lesions. At first sign, place affected animals on ground or put lath platform in hutch. This often is sufficient to clear up early cases. Clip and clean affected areas with disinfectant. Treat locally with wide-spectrum antibiotic ointment. Penicillin injections helpful in some cases. If lesions are abscessed, surgical drainage may be necessary.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. Name two common diseases of rabbits.
2. Name the causes for these common diseases of rabbits.

Process:

3. Why is it significant to know common diseases of rabbits?
4. Why are some of these diseases more serious than others?

Generalize:

5. Which of these diseases also are common to other project animals you've worked with?
6. What are some standard management techniques that can be used to prevent common diseases?

Apply:

7. What are some preventive health care measures that you do routinely?
8. What additional preventive health care measures should you consider in the future?

GOING FURTHER:

- Invite veterinarian to meeting to discuss disease problems in your area.

REFERENCES:

Cooperative Extension Service, Montana State University
Official Guide to Raising Better Rabbits, American Rabbit Breeders
Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P.
Adams, Extension Specialist, 4-H Youth Programs, Kansas State
University

Reviewed by:

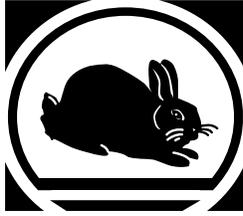
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The Rabbit's Digestive System

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- The parts of the digestive system
- The functions of the digestive system

ABOUT THEMSELVES:

- Better understanding of the digestive system

Materials Needed:

- Preserved digestive system of a rabbit (optional)
- Member Handout 3, Rabbit's Digestive System

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

It is important to know the function of each of the parts of the digestive system if one is to understand rabbit nutrition.

The rabbit can digest roughages because of its digestive system. The digestive system consists of the mouth, esophagus, stomach, small intestines, cecum, large intestine, rectum and anus. The esophagus functions as a tube for the passage of food from the mouth to the stomach. The simple stomach is where digestion of the food begins. In the small intestines, digestion continues. It is in the small intestines where many of the nutrients from food are absorbed. The cecum is a holding area where bacteria digest portions of the feed not digested in the stomach or small intestines. The cecum provides the ability for rabbits to digest roughage. In the large intestines, water and mineral absorption occurs. It is in the large intestines where the fecal pellets are formed. The fecal pellets are stored in the rectum.

Fecal pellets are not always formed. Usually during the night hours, soft stools are passed. These soft stools are caught and eaten by the rabbit. Stool eating, coprophagy, is an essential part of rabbit nutrition. It is thought that essential B vitamins not found in commercial foods are absorbed from the soft stool. Prevention of stool eating can result in malnutrition of rabbits. Rabbits kept in all wire cages still practice coprophagy. They get the soft stools directly from the anus.

Leader Notes

Pass out diagrams of the Rabbit's Digestive System.

Now have the members identify the parts of the preserved digestive system.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What are three of the major organs of a rabbit's digestive system?
2. What are the functions of these major organs?

Process:

3. Why is it important to understand a rabbit's digestive system?
4. How is the rabbit's digestive system similar/different from other simple-stomached animals?

Generalize:

5. How important is the cecum in the digestive system of other animals?
6. How is a digestive system with a well-developed cecum similar to a ruminant's digestive system?

Apply:

7. What have you learned from this lesson that you will use in the future?

GOING FURTHER:

- Preserve a rabbit's digestive system.
- Invite a medical researcher to discuss how rabbits are used.

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

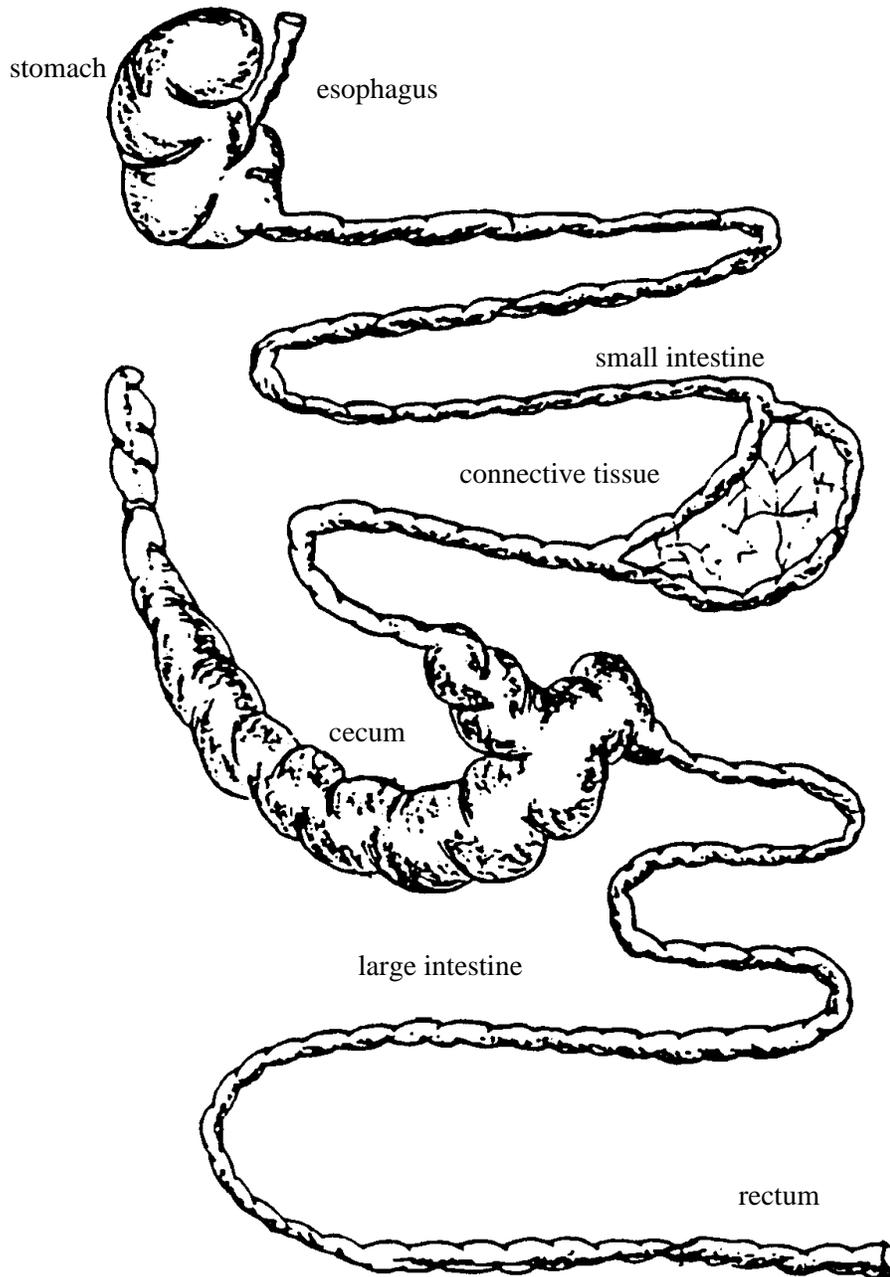
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THE RABBIT'S DIGESTIVE SYSTEM
RABBITS, LEVEL III
Member Handout 3, Rabbit's Digestive System

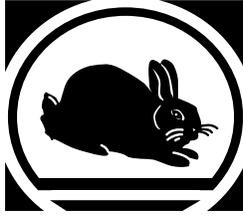


Think back:

Record and share with a friend the most unique aspect of a rabbit's digestive tract.

What do you remember about how to prevent parasites and diseases?

How might this information help you in the future?



Understanding a Rabbit's Estrous Cycle

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- To understand rabbit ovulation
- To understand maturation time and why some does don't conceive

ABOUT THEMSELVES:

- Importance of various cycles
- Importance of sequence and timing in their lives

Materials Needed:

- Several does

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Rabbits will breed more or less at any time of year. Rabbits do not have an estrous cycle in the strict sense of the word.

The female rabbit ovulates only after coitus (copulation, mating). The usual interval between stimulation (mating) and ovulation is 10 hours. Within one hour of mating, sufficient follicle-stimulating hormone is produced by the pituitary to cause the ripening of the follicles.

Females can remain in heat for a month or more in the absence of mating.

Age of puberty in rabbits varies among the breeds, with smaller breeds maturing earlier. Does born in the fall reach fertility (puberty) in about 5½ months, but those born in the spring require 8½ months. Does tend to copulate one to two months before ovulation.

Some does are believed to pass into an anestrous (non-fertile) condition during late summer. However, many people produce young rabbits throughout the entire year. Fall litters often are smaller than those born at other times of the year, which would suggest that fertility in rabbits is lower in late summer.

The doe ovulates immediately following a pregnancy. This is why you can breed a healthy doe that loses her litter immediately.

The vulva of the doe in heat usually is purple to reddish pink and somewhat swollen. This is a good indication that the doe will conceive if mated at this time. Usually the vulva is a pale pink.

Leader Notes

Discuss the differences in estrous cycles between a rabbit and another familiar animal.

Have the members examine the does present and decide if they are likely to conceive if mated today.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What time of the year is best to breed rabbits?
2. Why is it important to understand a rabbit's estrous cycle in your planning?

Process:

3. What is the age of puberty in rabbits and how does it vary?
4. What might be some factors affecting rabbit fertility?

Generalize:

5. What are the economic and management implications of knowing about a rabbit's estrous cycle?
6. What other cycles impact rabbit production?

Apply:

7. What is the significance of each cycle that affects you as a rabbit manager?
8. How will this discussion of cycles help you in the future?

GOING FURTHER:

- Visit a rabbitry.

REFERENCES:

Patterns of Mammalian Reproduction, S. A. Asdell, Cornell University Press

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

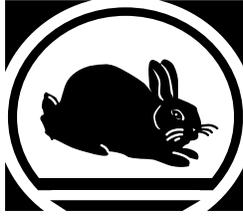
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Determining Pregnancy in Rabbits

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- To palpate a doe

ABOUT THEMSELVES:

- Understanding the importance of timing/time

Materials Needed:

- Does that have been bred about 14 days
- Carpet for the table
- Member Handout 4, Female Rabbit's Reproductive Tract
- Chalkboard and chalk or flip chart and marker

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Learning to palpate a doe has many advantages. Reasons to palpate include the following:

1. Proper feeding practices for bred and non-pregnant does, thus preventing non-pregnant does from becoming obese.
2. Non-pregnant does can be rebred earlier.
3. Early elimination of does who have breeding problems.

PALPATION (Determining Pregnancy)

Palpation is a skill that allows the breeder to keep the herd in production. Does that aren't bred can be rebred at a much earlier time than when waiting for the gestation period to be completed. Conception does not take place with all matings in rabbits. This is common in all species of animals. Rabbits should have about 70 percent conception on the first mating. If the conception rate falls below 70 percent, examine the breeding program for management problems or health reasons for the decrease in conception.

Palpation can be frustrating to the beginner that does not understand the anatomy of the female reproductive system. The reproductive tract in rabbits consists of the vagina, body of the uterus, cervix (2), horns (2) of the uterus, oviducts and ovaries (2). The ovaries are located lateral to the midline and attached to the dorsal portion (back of the abdominal cavity in masses) of ovarian fat. This attachment is just behind the kidneys on each side of the body. The ovaries are about the size of a small bean. The function of the ovary is to produce the eggs (ova) that are capable of being fertilized by the male sperm. The ovaries are connected to the horns of the uterus via small tubes, the oviducts. The function of the oviducts is to transport the eggs to the uterine horns.

Leaders Notes

Ask the members how they determine if their does are pregnant. Allow everyone a chance to participate in the discussion.

Outline on chalkboard or flip chart or show diagram of rabbit female reproductive tract.

Leader Notes

The uterus is Y-shaped and is attached on the anterior end to the oviducts. The length of the uterine horns are determined by heredity and in essence will control the size of the litter. The uterine horns and body of the uterus are where the sperm and egg unite and where the feti will develop to maturity.

The cervix divides the uterus from the vagina and provides a barrier through its secretions that prevent organisms from entering the uterus and disrupting the pregnancy. The vagina extends from the cervix to the vulva and is the receptacle used for receiving the sperm.

Palpation Technique

Demonstrate this technique.

1. *Position:* The doe and breeder should be relaxed and comfortable. The posterior abdominal area of the doe should rest in the palm of the breeder's hand.

Outline steps on chalkboard or flip chart.

2. *Palpation Site:* The area to be explored is behind the last rib and in front of the pelvis. Early in the gestation period (9 to 13 days) the feti will lie mostly posterior and high in the abdominal cavity. Later, the feti will be lower and more anterior in the abdominal cavity.

3. *Restraint:* When the doe and breeder are in position, gently lift the hand to come into contact with posterior abdominal muscles just in front of the hind legs and pelvis. The thumb should be on one side of the abdominal cavity and the four fingers on the opposite side. The doe should be in a "stretched out" position with the breeder raising her rear quarters until just the tips of her rear feet are touching the table. Wait for the doe to relax in this position. The breeder uses his other hand to restrain the doe by holding her head gently.

4. *Hand Movement:* When the abdominal muscles are relaxed, feel for internal structure between the thumb and fingers (held tight together) starting at the most posterior area of the abdominal cavity. Never use more pressure than it would take to rupture a grape. Move the hand to explore the entire abdominal cavity. One feels for a very round, firm, marble-shaped object in the early stages of pregnancy. After 15 days the fetus will start to elongate. Once a fetus is located, one should discontinue the evaluation.

Have members palpate a doe.

For beginners it is easiest to palpate the does at about 14 days into the gestation period. The marble-sized feti are easiest to feel and are the most difficult to damage at this time. Beginners may find it advisable to withhold feed for 24 hours before palpation. Withholding feed will reduce digestive tract fill and make it easier to palpate.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What are two reasons to palpate a rabbit?
2. What are the steps in the palpation technique?

Process:

3. When is the most important time to palpate for pregnancy in rabbits?
Why?

Generalize:

4. Why is timing important in determining or not determining pregnancy?
5. When is timing important in your daily routine?

Apply:

6. How important will time management be in the future?

REFERENCES:

Official Guide Book of The American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



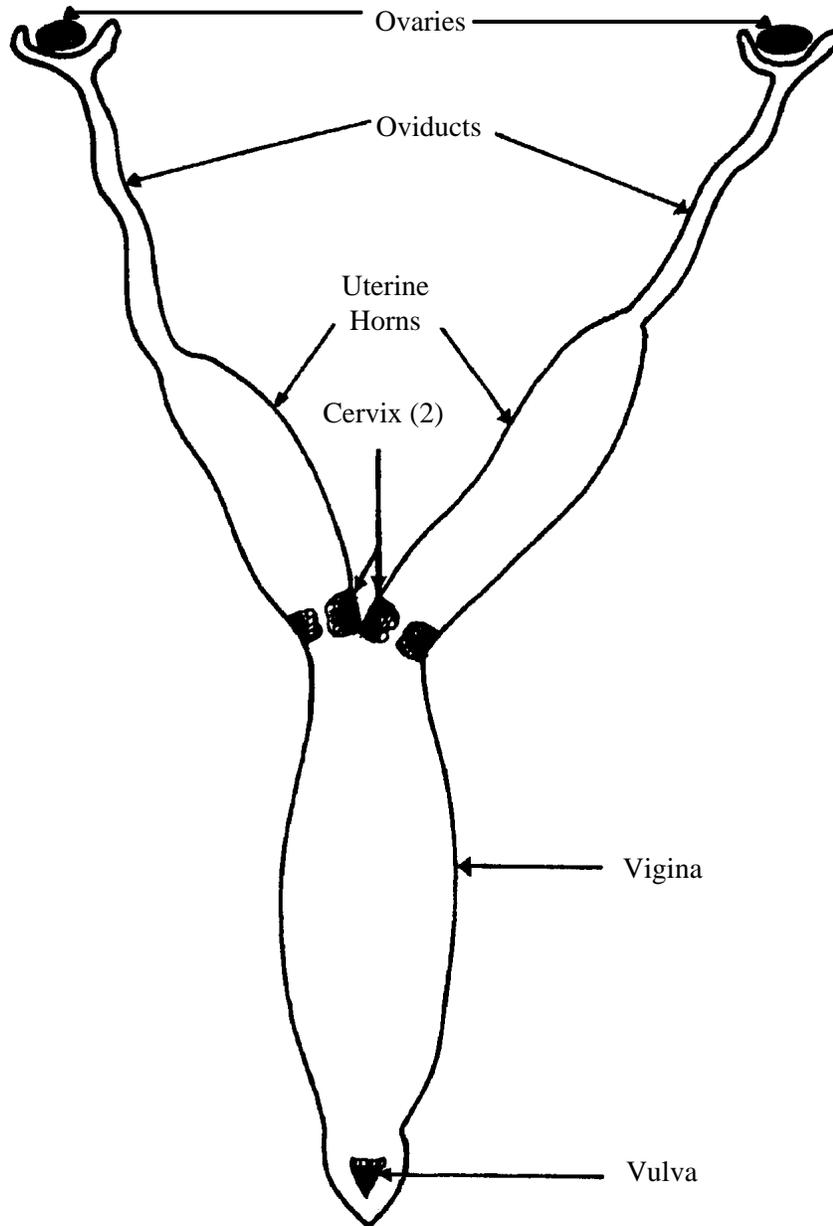
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DETERMINING PREGNANCY IN RABBITS

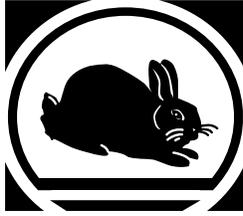
RABBITS, LEVEL III

Member Handout 4, Female Rabbit's Reproductive Tract



Think back:

What do you remember that is unique about rabbit reproduction? Why?



Raising the Orphaned Rabbit

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to foster kits to another doe
- How to feed and care for orphaned animals

ABOUT THEMSELVES:

- How to make important decisions
- Understanding the process of management

Materials Needed:

- Kit or small rabbit
- 1 pint 2-percent milk
- 2 egg yolks
- 2 Tablespoons powdered milk
- 2 Tablespoons corn syrup
- 1 teaspoon bone meal
- A large bowl
- Spoon
- Chalkboard and chalk or flip chart and marker

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

On occasion, a doe will die during the kindling process due to unforeseen and non-preventable complications, or a doe will have a litter so large in number that all of the young cannot be properly cared for by their mother. If a foster doe cannot be located, the breeder needs to take care of the orphaned rabbits.

Fostering can be a very successful and rewarding experience. However, there are some general guidelines that must be followed if this practice is successful.

1. There should be a record of each kit fostered. This can be accomplished by placing small tattoo marks in one or both ears. For distinctly marked animals, a photograph of the side profile of each kit also is a method of identifying the young.
2. The young should be fostered to litters that are within 72 to 96 hours of the same age.
3. The kits should be about the same physical size.

Leader Notes

Ask members to help you list things to consider when fostering kits to another doe before you list these guidelines. Compare youth list with this list.

Leader Notes

4. Don't "overload" the foster doe, so the original litter isn't deprived of sufficient milk. Small breeds should not be expected to care for more than six kits. The commercial type breeds should not be expected to care for more than eight kits.
5. Before transferring the kits, the breeder should thoroughly cleanse his or her hands in plain water. Avoid the use of soaps, hand creams, etc.
6. Each of the original kits should be examined, then examine the kits to be fostered before being placed in the nest.
7. Check the nest box every 12 to 24 hours after the fostering process for the next five to seven days to see if the young are being properly cared for and fed.

Discuss the responsibility of time and patience to rear orphaned kits. List steps and discuss thoroughly. Emphasize the importance and responsibility of the decision to attempt to feed the orphans.

Demonstrate if at all possible!

If there is not a foster mother available, then the kits must be hand fed. Feeding orphaned kits is not a difficult endeavor and results can be very gratifying. However, it requires a lot of time and patience.

To be successful it is necessary to implement strict management practices:

1. The young kits must be provided a warm, dry nest. The nest temperature must be kept at 95 to 98°F.
2. The kits must be confined to a small area. This can be accomplished by putting the kits in a small bowl or pan lined with soft nesting material, fur or a soft towel.
3. The artificial nest must be provided heat in order that the temperature can be maintained. This temperature must be maintained for 10 to 15 days.
4. Hold the kit in an upright position and gently stroke the area between the hind legs several times with a cotton ball or other soft material until elimination has occurred.
5. When natural eliminations are noticed in the nest, the manual stimulation process can be discontinued.
6. The kits should be nursed two times per day at 12-hour intervals.
7. The kits can be fed with a small nipples bottle or and an eye dropper.
8. Care must be used during the feeding process to ensure the kits do not inhale any fluid into the respiratory tract and they are not overfed. One to three eye droppers of formula per feeding depending on age and size are probably sufficient.
9. At about 14 days, the kits can be offered bread that has been soaked in milk, two or three times per day.

10. The kits will readily adapt to using the bread as a “nursery,” and bottle feeding can gradually be discontinued.
11. The young will start eating rolled oats at 14 to 21 days.
12. After 21 days, start feeding rolled oats/pelleted feed mixture, until the diet can consist of totally commercial pellets at approximately 30 days of age.

THE FORMULA FOR THE ORPHANED RABBIT**Ingredients:**

- 1 pint 2-percent milk
- 2 egg yolks
- 2 Tablespoons powdered milk
- 2 Tablespoons corn syrup
- 1 teaspoon bone meal

Put all the ingredients into a bowl and mix thoroughly with a spoon. The formula must be kept refrigerated and only a small portion warmed to 90°F as needed.

Demonstrate how to prepare the formula for the orphaned.

DIALOGUE FOR CRITICAL THINKING:**Share:**

1. If you ever attempted to raise an orphaned rabbit, what was it that you did?
2. When would it be necessary to foster kits?

Process:

3. Why should the fostered kit be about the same age as the new litter-mates?
4. When raising an orphaned rabbit, what are the most important management practices to consider? Why?

Generalize:

5. How do you decide when to raise other orphaned animals?
6. What management practices might you need to be concerned with when raising other orphaned animals?

Apply:

7. How will you use these management techniques in the future?

Leader Notes

GOING FURTHER:

- Invite a rabbit breeder who has reared orphaned kits to come to your meeting.

REFERENCES:

Official Guide to Raising Better Rabbits, American Rabbit Breeders Association
Domestic Rabbits, May-June, 1989

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

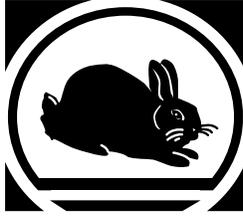
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Culling Rabbits Through Records

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- To use records to cull their herd

ABOUT THEMSELVES:

- Importance of good record keeping

Materials Needed:

- Member Handout 5, Doe and Buck Breeding Record
- Activity Sheet 5, Using Records to Cull

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

The rabbit breeder needs to constantly cull those rabbits that are not producing up to their potential. Records will allow one to use objective facts when culling the herd.

A Red New Zealand doe #345 was born 6-7-94. Her sire is #7, her dam is #45, and she was born in litter 3.

#345 was bred 1-8-95 to buck 34. She kindled 2-7-95. Five live young, one dead young, five were weaned on 3-21-95, total weight of the litter was 16 pounds.

#345 was rebred 3-7-95 to buck 45. She kindled 4-7-95. Nine live young were born, no dead young, eight were weaned on 6-7-95, total weight of the litter was 35 pounds.

#345 was bred 5-24-95 to buck 34. She kindled 6-24-95. Four young were born, there were two dead young, four were weaned on 8-24-95, total weight of the litter was 20 pounds.

#345 was bred 9-1-95 to buck 45. She kindled 10-2-95. Eleven live young were born, two dead young, eight were retained and three fostered off, eight were weaned 12-8-95, total weight of the litter was 36 pounds.

Should we keep the doe in our herd?

Answer: She has kindled four times and weaned a total of 25 rabbits for an average of 6.25 per litter. However, we must note that when bred to buck 34 she had smaller litters. Therefore, she should be kept in the herd. We should check out buck 34.

Leader Notes

Pass out Activity Sheet 5, Using Records to Cull. Explain that you can cull both bucks and does using records. Use the records for the doe.

Ask the members to answer the question. Discuss the reasons for keeping the doe.

Leader Notes

Use the Buck breeding record on Activity Sheet.

Does should average seven to eight young to be weaned from each litter in order to be kept in the commercial rabbitry. Does of fancy breeds will have smaller litters.

Using the buck records, buck #34 is a Red New Zealand. 34 was born 2-3-94. 34's sire is 4 and 34's dam is 35.

345 was bred 1-8-95, 5 live and 1 dead were kindled, 4 were weaned, total weight 16 pounds.

26 was bred 1-20-95, 4 live young born, 4 were weaned, total weight 23 pounds.

345 was bred 5-24-95, 4 live and 2 dead were kindled, 4 young weaned, total weight 20 pounds.

Should we keep 34 in the herd?

Ask members this question. Discuss the reasons for their answers.

Answer: No, if we are raising rabbits commercially. If fryers are why we are raising rabbits we will raise more rabbits using a different buck. If 34 was a fancy rabbit, the size of his litters is acceptable.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. How have you used records in the past?
2. How many kits should an average doe wean from each litter?

Process:

3. Why is it important to use records when culling your rabbit herd?
4. Why are records kept on male and female rabbits?

Generalize:

5. What other records besides breeding are important to keep track of when raising project animals? Why?
6. What is the advantage of keeping records?

Apply:

7. Record keeping is an important part of everyday life. What are some types of records you keep?
8. What might be the significance of computerizing your records in the future?

GOING FURTHER:

- Have the members use records to cull their herds.
- Computerize your records to help you cull your herd.
- Visit a commercial rabbitry and see how they use records to cull.

REFERENCES:

Cooperative Extension Service, University of Arizona

Cooperative Extension Service of the Northeast States, University of New Jersey

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

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CULLING RABBITS THROUGH RECORDS

RABBITS, LEVEL III

Activity Sheet 5, Using Records to Cull

Doe Breeding Record

Doe No. 345 Born 6-7-94 Breed Red New Zealand
 Sire 7 Dam 45 Litter No. 3

| Date Bred | Date Due | Buck No. | Date Kindled | No. Young Born | | Number Young Retained | Litter No. | Date Weaned | No. Weaned | Weaning Wt. |
|-----------|----------|----------|--------------|----------------|------|-----------------------|------------|-------------|------------|-------------|
| | | | | Alive | Dead | | | | | |
| 1-8 | 2-7 | 34 | 2-7 | 5 | 1 | 5 | 1 | 3-21 | 5 | 16 lbs. |
| 3-7 | 4-6 | 45 | 4-7 | 9 | 0 | 9 | 2 | 6-7 | 8 | 35 lbs. |
| 5-24 | 6-23 | 34 | 6-24 | 4 | 2 | 4 | 3 | 8-24 | 4 | 20 lbs. |
| 9-1 | 9-30 | 45 | 10-2 | 11 | 2 | 8 | 4 | 12-8 | 8 | 36 lbs. |
| | | | | | | | | | | |
| | | | | | | | | | | |

Should we keep doe 345 in our herd? Why or why not?

Buck Breeding Record

Buck No. 34 Born 2-3-94 Breed Red New Zealand
 Sire 4 Dam 35 Litter No. 5

| Doe | Date Bred | Result of Breeding | | | Weaned | | Notes |
|-----|-----------|--------------------|------|--------|--------|---------|-------|
| | | Kindled | | Passed | Number | Weight | |
| | | Alive | Dead | Date | | | |
| 345 | 1-8-95 | 5 | 1 | | 4 | 16 lbs. | |
| 26 | 1-20-95 | 4 | 0 | | 4 | 23 lbs. | |
| 345 | 5-24-95 | 4 | 2 | | 4 | 20 lbs. | |
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Should we keep buck 34 in our herd? Why or why not?

CULLING RABBITS THROUGH RECORDS
RABBITS, LEVEL III
Member Handout 5, Doe and Buck Breeding Record

Doe Breeding Record

Doe No. _____ **Born** _____ **Breed** _____
Sire _____ **Dam** _____ **Litter No.** _____

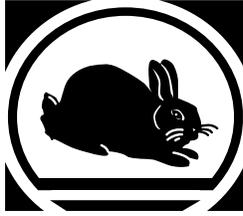
| Date Bred | Date Due | Buck No. | Date Kindled | No. Young Born | | Number Young Retained | Litter No. | Date Weaned | No. Weaned | Weaning Wt. |
|-----------|----------|----------|--------------|----------------|------|-----------------------|------------|-------------|------------|-------------|
| | | | | Alive | Dead | | | | | |
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Buck Breeding Record

Buck No. _____ **Born** _____ **Breed** _____
Sire _____ **Dam** _____ **Litter No.** _____

| Doe | Date Bred | Result of Breeding | | | Weaned | | Notes |
|-----|-----------|--------------------|------|--------|--------|--------|-------|
| | | Kindled | | Passed | Number | Weight | |
| | | Alive | Dead | Date | | | |
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When to Remate the Doe After Kindling

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- The factors that determine time between mating rabbits
- The best times to remate doe after kindling

ABOUT THEMSELVES:

- Decision making

Materials Needed:

- Chalkboard and chalk or flip chart and marker

ACTIVITY TIME NEEDED: 20 MINUTES

ACTIVITY

Leader Notes

The members need to know when to breed their does after they have kindled. The length of time allowed to elapse from the time the doe kindles until she is remated varies considerably depending upon the circumstances. Several factors determine the length of time between kindling and remating:

1. The total number of young being raised by the doe.
2. The intended production purposes of the doe and litter.
3. The genetic ability of the doe to maintain physical condition during lactation.

List these on the chalkboard or flip chart.

The determining factor must be made by the member utilizing the individual rabbit's physical condition. Can the doe withstand remating, gestation and lactation at this time? This will vary from doe to doe and upon the desired goals of production.

Once a doe is in production, ideally it is best to keep the rabbit in production in order to minimize reproductive problems.

Excessive fat accumulation within the doe's abdominal cavity is the number one cause of breeding difficulties.

Most members do not realize the small amount of feed needed to maintain a "non-working" doe and, therefore, overfeed her.

Excessive fat accumulation in the abdominal cavity acts as a physical barrier to prevent the egg (ovum) from entering the reproductive tract to be fertilized. Thus, the conception rate is drastically reduced. Obese does exhibit decreased receptiveness to the buck.

The doe usually is more receptive to the male about 72 hours after kindling.

Leader Notes

Some rabbit breeders recommend that the producing doe be remated two weeks prior to weaning the litter.

The doe can be palpated for pregnancy 12 to 14 days after mating, and if the doe is pregnant, the litter can be weaned and then she will have two weeks to recuperate before kindling the next litter.

If the palpated doe is not pregnant, the doe can be remated immediately and the litter left with the doe for two more weeks. If the doe fails to conceive the second time, she should be labeled a problem breeder.

Ideally, the doe should be bred and palpated pregnant prior to weaning. The member must consider each doe as an individual and remate her for the specific conditions that exist. Let us consider some specific situations:

DOES WITH COMPLICATIONS: A number of situations can occur such as difficult births, reproductive infection, respiratory infection, ketosis, etc. It is important that any problem be identified and precautions be taken to prevent them from reoccurring.

WHEN ONLY ONE TO THREE LITTERS PER YEAR ARE DESIRED: The member must be sure not to let the doe become fat. This mandates that the doe be fed a restricted diet to maintain good breeding condition.

DOES THAT LOSE THE ENTIRE LITTER: If no complications are present, does that lose their litters during kindling or shortly after kindling should be remated three to seven days after kindling. If the doe loses her litter during the lactation, she should be remated immediately.

DOES WITH SMALL LITTERS: Occasionally, a doe has twins or triplets and there isn't any chance to foster the young to another doe. The doe should be remated 14 days after kindling. The young are weaned at 5 weeks of age and must be given some special creep feed after weaning to keep growing.

DOES WITH EXTREMELY LARGE LITTERS: Does with extremely large litters may have a deteriorated flesh condition and should not be remated until a sufficient flesh condition exists. The litter may need to be weaned in order for the doe to recuperate before being remated.

GENERAL GUIDELINES:

When to Breed:

- | | |
|---|---------------------------------------|
| 1. Does that lose their litter at or during kindling (no complications) | 3 to 7 days |
| 2. Does with very small litters | 14 days |
| 3. Commercial production does | 0-21 days |
| 4. Commercial/fancy rabbits | 2 weeks prior to weaning |
| 5. Does with complications | when appropriate for specific problem |

List this summary on chalkboard or flip chart.

Have the members tell what breeding schedule they are using and discuss why.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What is the number one cause for breeding difficulties in does?
2. What are two factors that you should consider before remating does?

Process:

3. What affect might remating have on a doe?
4. What has been the most signigicant factor in getting does rebred after kindling? Why?

Generalize:

5. What impact on your rabbit program would result if remating complications ocured?
6. What kind of adjustment might you need to make in your breeding program?

Apply:

7. What might you do differently in the future as a result of this dicussion? Why?

GOING FURTHER:

- Develop a feeding schedule for non-pregnant does.

REFERENCES:

Domestic Rabbits, March-April, 1989

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



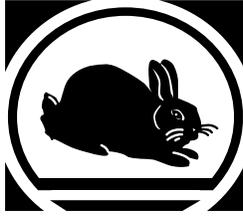
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Think back:

What is the most significant item of interest to you when raising or culling rabbits? Why?

Are you interested in cost-effective rabbit production? Why or why not?



Formulating Rabbit Show Classes

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- The various classes they may enter rabbits in at an American Rabbit Breeders Association sanctioned show

ABOUT THEMSELVES:

- The importance of planning

Materials Needed:

- Chalkboard and chalk
- Rabbit classes from your local fair book or show
- State Fairbook
- Activity Sheet 6, When to Breed for Show Classes
- Leader's Key, Activity Sheet 6, When to Breed for Show Classes

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

There are several classes one can enter at a rabbit show. However, some shows will not have all these classes available.

In order to find out what classes are available we need to know if you are showing six-class or four-class rabbits.

Six-class rabbits are larger with the ideal weight of the senior animals being 9 pounds or more. They have three age groups for each sex.

Classes for six class rabbits are:

- Senior Buck (over 8 months)
- Senior Doe (over 8 months)
- Intermediate Buck (6 to 8 months)
- Intermediate Doe (6 to 8 months)
- Junior Buck (3 to 6 months)
- Junior Doe (3 to 6 months)

List the classes as you discuss each of them. Compare your local classes with those at the state fair and other shows.

A few of the six-class rabbits also have:

- Pre-junior Buck (under 3 months)
- Pre-junior Doe (under 3 months)

Not all six-class rabbits have pre-junior classes. For instance, the French Lops do not have pre-junior classes.

Leader Notes

In what classes can the four-class rabbits be exhibited? Four-class rabbits are smaller with the ideal weight of the senior animals being less than 9 pounds. They have two age groups for each sex.

Classes for four-class rabbits:

- Senior Buck (6 months and over)
- Senior Doe (6 months and over)
- Junior Buck (under 6 months)
- Junior Doe (under 6 months)

Fur and wool classes:

- Breed fur classes
- Normal White Fur class
- Normal Colored Fur class
- White Satin Fur class
- Colored Satin Fur Class
- Colored Rex Fur class
- White Rex Fur class
- English Angora White Wool class
- English Angora Colored Wool class
- French Angora White Wool class
- French Angora Colored Wool class
- Giant Angora White Wool class
- Giant Angora Colored Wool class

The normal colored and normal white fur classes are rarely used at local American Rabbit Breeders Association (ARBA) sanctioned shows but are the fur classes used at 4-H shows. Generally at an ARBA sanctioned show, the rabbits are exhibited in breed fur classes instead of the normal fur classes.

The meat classes:

- Meat Pen
- Single Fryer

The single fryer class is popular in eastern Missouri, but isn't very often used in Kansas.

These are the classes normally found in Kansas.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. At what age is a rabbit considered to be in the junior class?
2. At what age is a rabbit considered to be in the senior class?

Process:

3. Why is it important to know when to breed your rabbits?
4. Why is it important to plan for the birth of kits?
5. Which is more important—the doe's age or weight when getting ready to breed?

Generalize:

6. What other project animals are categorized by age or weight?
7. Why is planning for breeding and birthing necessary to formulate show classes?

Apply:

8. What planning techniques will you need to prepare for future activities?
9. Why do you need to plan for major activities?

GOING FURTHER:

- Identify breeds of rabbits that are six-class according to weight.

REFERENCES:

Standard of Perfection, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



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FORMULATING RABBIT SHOW CLASSES

RABBITS, LEVEL III

Activity Sheet 6, When to Breed for Show Classes

You want to show some Californians in the 6- to 8-month classes at the county fair, when should you breed so your rabbits will be the right age?

Answer: The county fair is held July 20-25. You will want your rabbits to be about 6½ months old. Since it takes about _____ days for gestation, you will need to breed your rabbits _____ months before the fair.

When should you breed so you can show in the junior classes?

Answer: Juniors must be under 6 months of age. You probably would like to have them at least _____ months old. Therefore, you should breed your rabbits any time between _____ and _____. If you breed January 5 the rabbits will be _____ months old.

The state fair 4-H rabbit show is September 15. When should you breed so you will have a meat pen for the state fair?

Answer: Meat pen rabbits must not be over _____ days of age. Count back _____ days and add _____ days gestation time. You should breed your rabbits no earlier than _____.

The annual county 4-H spring show is to be held May 20. What classes can you enter your rabbits from the following breedings:

| Doe | Date Bred | Kit Class |
|-----------------------|------------------|------------------|
| Black Dutch #45 | November 25 | _____ |
| Blue Satin #56 | October 12 | _____ |
| White New Zealand #32 | January 15 | _____ |
| Californian #B54 | February 15 | _____ |

FORMULATING RABBIT SHOW CLASSES

RABBITS, LEVEL III

Leader's Key, Activity Sheet 6, When to Breed for Show Classes

You want to show some Californians in the 6- to 8-month classes at the county fair, when should you breed so your rabbits will be the right age?

Answer: The county fair is held July 20-25. You will want your rabbits to be about 6½ months old. Since it takes about **30** days for gestation, you will need to breed your rabbits **7 ½** months before the fair.

When should you breed so you can show in the junior classes?

Answer: Juniors must be under 6 months of age. You probably would like to have them at least **4 ½** months old. Therefore, you should breed your rabbits any time between **January 5** and **February 5**. If you breed January 5 the rabbits will be **5 ½** months old.

The state fair 4-H rabbit show is September 15. When should you breed so you will have a meat pen for the state fair?

Answer: Meat pen rabbits must not be over **70** days of age. Count back **70** days and add **30** days gestation time. You should breed your rabbits no earlier than **June 7**.

The annual county 4-H spring show is to be held May 20. What classes can you enter your rabbits from the following breedings:

| Doe | Date Bred | Kit Class |
|-----------------------|------------------|------------------------|
| Black Dutch #45 | November 25 | Junior |
| Blue Satin #56 | October 12 | 6 to 8 months |
| White New Zealand #32 | January 15 | Junior |
| Californian #B54 | February 15 | Pre-junior or meat pen |

Answer: Black Dutch doe should have kindled December 25. The offspring would be almost 5 months old, and could be shown as juniors.

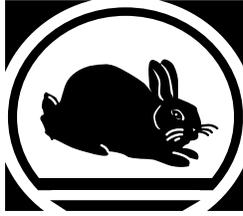
The Blue Satin Doe should have kindled November 11. The offspring would be over 6 months of age and should be shown in the 6- to 8-month classes.

What if one of the Blue Satin bucks weighs 9 pounds? **Answer:** You should show him as a senior buck.

New Zealand White doe should have kindled by February 14. Therefore, the offspring are over 3 months of age. Enter them in the junior classes.

The Californian doe should have kindled March 17. The offspring would be 64 days old; they can be shown in the meat pen class and as pre-juniors.





Talking Like a Rabbit Judge

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- The vocabulary/terms used by rabbit judges

ABOUT THEMSELVES:

- Understanding and using information resources

Materials Needed:

- Cards with different rabbit terms listed on them
- Cards with the definitions of the rabbit terms
- Member Handout 6, Judging Glossary
- Member Handout 7, Gaming Cards

ACTIVITY TIME NEEDED: 40 MINUTES

ACTIVITY

The members need to be able to understand the terms used by the rabbit judge if the members are to know the good and poor characteristics of their rabbits.

Leader Notes

Divide the group into teams. Give each team a set of cards with terms and definitions. See if they can match the definitions with the correct terms. Give the members the correct answers. Rabbit Judging Glossary.

Now play a game. Read the definition of a term and see which team can give the term. Keeping score gives the members a chance to see how well they know rabbit terms.

Now select a term and ask the members to use it in a sentence. Continue until every member has a chance to participate.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What are several rabbit terms you have learned?
2. What is a glossary?

Process:

3. Why is it important to know the various terms that a rabbit judge would use?
4. When and where will you use these terms when working with rabbits?

Generalize:

5. What are several terms used in rabbit judging that are similar to terms for judging other animals?
6. Why is it important to understand the terminology of various businesses, jobs, or careers?

Apply:

7. Why is it important to know where to find referral and information resources when working in jobs?
8. What are other activities in your life where you will need various resources?

REFERENCES:

A Progressive Program For Raising Better Rabbits And Cavies, American Rabbit Breeders Association
Standard Of Perfection, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



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TALKING LIKE A RABBIT JUDGE

RABBITS, LEVEL III

Member Handout 6, Rabbit Judging Glossary

A glossary of words and terms peculiar to rabbits and rabbit keeping. These are not necessarily the dictionary definitions.

Albino—A pink-eyed, white-furred rabbit. Since they are recessive to color, albinos will always breed true when bred together.

Arch (arc)—A gentle curvature of the spine; extended from the neck (or shoulders in some breeds) to the rear of the rabbit, best observed by viewing the animal in profile.

Back—The top portion of the rabbit's shoulders, loin and rump.

Balance—Type—shape or conformation, an orderly and pleasing arrangement of physical characteristics so as to present a harmonious appearance. **Markings**—equal distribution of corresponding markings, such as color divisions of the Harlequin, equal amounts of color on the cheeks of the Dutch. Equal distribution of color in the pattern and side markings in Checkered Giants, English Spots and Rhinelanders.

Bare Spots—A portion of the rabbit's body that lacks fur due to molt or any other cause.

Base Color—The fur color next to the skin.

Bell Ears—Ears that have large, heavy tips with a distinct fall or lop to them.

Belly—The lower part of the body—the abdomen. From the bottom of the last rib to the pelvis. Contains the intestines.

Belly Color—The color underneath a rabbit, extending from the forelegs to the crotch area.

Blaze—The white markings found on the head of the Dutch rabbit. It covers the nose and whisker bed and runs along the jawline. The shape is that of a wedge which tapers from the nose area to the base of the ears.

Bloom—The sheen or luster of a coat in good condition.

Boots—The colored markings on the rear feet of pointed animals, as in Himalayan-marked rabbits.

Bowed Legs—May be applied to the forelegs and hindlegs. Bent like a bow, legs curved outwardly from the middle, involving radius and ulna in front legs; tibia and fibula in hindleg.

Breed—A class of domestic rabbits which reproduces stock with distinctive characteristics, such as fur, markings, shape and size. A breed may be divided into varieties, such as the color differences within a breed. A further subdivision of the breeds lists several varieties into different groups as in Netherland Dwarfs and Harlequins.

Broken Coat—Fur with guard hairs missing or broken in spots, which exposes the undercoat; areas where coat is affected by molt which exposes the undercoat.

Broken Ear—A distinct break in the cartilage of the ear, which prevents erect ear carriage.

TALKING LIKE A RABBIT JUDGE

RABBITS, LEVEL III

Member Handout 6, Rabbit Judging Glossary, *continued*

Buck—An unaltered male rabbit.

Buff—A rich, golden orange with a creamy cast.

Bull Dog—As applied to the head, a short, broad, bold head with a definite masculine appearance.

Butterfly—A nose marking found on many breeds of rabbits. The wing portions cover the whisker bed from lip to lip, with the body extending up the center of the face.

Butting—A form of malocclusion (disqualification), the incisors meeting together evenly without the upper incisors “overlapping” the lower incisors in proper fusion (also called “pegged” teeth).

Carriage—The manner in which a rabbit carries itself; the style or characteristic pose of a rabbit.

Chest—The front portion of the body between the forelegs and the neck—the breast.

Cheeks—The sides of the face below the eyes.

Chopped—As it applies to type, a condition in which there is an abrupt and sharp, vertical fall of the rump to the tail. Not well filled out and rounded.

Cobby—Short and stocky, close-coupled; very compact.

Compatible—Pertaining to eye color; a normal color that complements or matches the body of the colored portions of a marked rabbit.

Condition—The overall physical condition of a rabbit in relation to health, cleanliness, fur and grooming (see full ARBA definition).

Cow Hocks—Hind legs that turn inward at the hock, causing the foot portion to turn outward from the body.

Crown—A strong basal ridge of cartilage at top of head between the base of the ears of some lop-eared breeds.

Dead Hairs—Fur which lacks life, caused by molting or hutch stain.

Density—The property or quality of a thick coat of fur. The amount of fur in a given area.

Definition—The sharpness and clarity of a color break, as the ring color in the Agouti fur.

Dew Claw—An extra toe or functionless digit on the inside of the front legs.

Dewlap—A pendulous fold of loose skin, which hangs from the throat. Common in does. Should be in proportion to total body size. Not allowed in some breeds.

Disqualification—One or more defects, deformities or blemishes which renders a rabbit unfit for competition, and ineligible for registration.

TALKING LIKE A RABBIT JUDGE

RABBITS, LEVEL III

Member Handout 6, Rabbit Judging Glossary, *continued*

Doe—An unaltered female rabbit.

Ear Lacing—A colored line of fur which outlines the sides and tips, or inside of the ears (depending on breed standard).

Eye Color—The color of the iris, the circle of color which surrounds the pupil of the eye.

Fine Coat—A coat of fur too fine in texture, lacking body. Guard hairs are weak and thin in structure; lacking the proper amount of guard hairs.

Finish—The desired degree of perfection in condition. Fully prime in coat, color and flesh.

Flabby—The condition of a rabbit when the skin hangs loosely on the rabbit by its own weight. Not trim and shapely.

Flat Coat—Fur lying too close to the body. Lacks spring or body as noted by touch. Usually a fine coat coupled with lack of density.

Fly Back—A coat of fur which flies back to its smooth, normal position when stroked from the hindquarters to the shoulders (see Commercial Normal Fur Standard).

Flying Coat—A loose, fluffy coat of fur, caused by long length and thinness of underfur and weak guard hairs.

Foot—The portion of the skeleton on which the rabbit walks or stands. On the foreleg—that portion below the the pastern (wrist). On the rear leg—that portion below the hock.

Forehead—The front part of the head between the eyes and the base of the ears.

Furnishings—The tassels and fringes on the ears, the bangs and side trimmings on the head, and the wool on the front feet of the English Angora.

General Fault—One or more defects of a rabbit assumed to be curable and temporary in nature. An elimination prevents a rabbit from being placed at a show or being registered until it is cured or corrected.

Glossy—The reflection, a luster or brightness from naturally healthy fur in rabbits, a natural property of fur (improved by grooming).

Guard Hair—The longer, coarser, projecting hair of the rabbit's coat that offers protection to the undercoat and furnishes wearing quality to the coat in addition to providing sheen.

Herring Bone—The spine or dorsal stripe on the English Spot. A herringbone or serrated edge to the spine markings.

Hindleg (rear)—Consists of the foot, hock, stifle (knee), and hip joint; that portion distal to the attachment of the leg to the pelvis.

TALKING LIKE A RABBIT JUDGE

RABBITS, LEVEL III

Member Handout 6, Rabbit Judging Glossary, *continued*

Hindquarters—The rear portion or section of the body; composed of the loin, hips, hindlegs and rump. From the last rib posterior.

Hip—The joint that attaches the hindlegs to the trunk of the body.

Hock—The joint in rabbits that corresponds to the ankle in man. The joint distal to the stifle.

Hog Fat—A rabbit that is obviously over-fattened and, consequently, out of proportion for the true type of the breed.

Humpback—A hump or protrusion on the back which mars the appearance of the rabbit.

Knee—The second joint of the hindleg—connects the thigh to the leg. Also known as stifle.

Knock-Kneed—On the front legs, bones that turn inward from the middle. A misnomer of terminology that conflicts with the definition of knee, but often used.

Lap Spots—Intensification of belly color in the area of the groin (inside the hindlegs). Normally associated with shaded selfs, agoutis and wide band agoutis (fawn and red).

Loin—That portion of the back on each side of the vertebrae from the last rib posterior to the hip joint.

Loose coat—Fur not set tightly in coat and slipping.

Lopped Ears—Pendulous ears not carried upright, falling to the front or sides.

Luster—Brightness and brilliance of fur.

Malocclusion—Any departure from the occlusive (opposing) surfaces of the upper and lower jaw meeting properly; causing an improper meeting of the incisors which produces as one condition buck, or wolf, teeth which has hereditary connections.

Mandolin—Having the appearance of a mandolin laid face down. The back and saddle arch toward the loins to make noticeable broader hindquarters. Formation starts behind the shoulders.

Marked—A rabbit, usually white, which is broken up by an orderly placement of another color; also rabbits which carry the Tan pattern.

Massive—Large, bulky and heavy, ponderous.

Meaty—The quality of being able to carry a good portion of meat in proportion to the bone, size and type of the rabbit. A noticeably well-proportioned meatiness of the forequarters, back, loin, and haunches.

Molt—The act of shedding or changing fur. The baby fur is molted at approximately 2 months; the first prime coat is developed at 4 to 6 months of age.

TALKING LIKE A RABBIT JUDGE

RABBITS, LEVEL III

Member Handout 6, Rabbit Judging Glossary, *continued*

Muzzle—The lower part of the face and nose of the rabbit.

Neck—That part of the rabbit connecting the head to the body.

Nostrils—The two openings of the nose leading to the internal structures of the head.

Off-Colored—Several hairs or patches of fur foreign to the color standard of the rabbit; also a departure from the desired color of fur or eyes (see Foreign Colored).

Open Coat—Fur lacking density in undercoat, accompanied by fine guard hairs and lacking texture.

Patch—A small section of fur.

Paunch—The prominent portion of the abdomen.

Pearl—The intermediate color band of Chinchilla rabbits; off-white in color.

Pepper and Salt—A flat, unattractive appearance of black and white ticking, as found in Chinchillas. Caused by a lack of contrast and waviness in the ticking and weakness of color on the tips of the guard hairs.

Pigeon Breasted—A narrow chest with protruding breastbone.

Pinched Hindquarters—Hindquarters tapering toward the tail at the lower hindquarters, giving the rabbit a “pinched” appearance.

Points—The ears, tail, nose, rear feet, and the forelegs of a rabbit such as a Himalayan or Color Point.

Pot Belly—A distended condition of the stomach and intestines, usually found in young rabbits.

Poor Coat—Fur not in good condition due to molting, rust or ill health of the rabbit, or of general poor quality due to genetic factors.

Racy—Slim, trim, alert and active. Slender in body and limbs, hare-like.

Ribs—The curved portions of the sides immediately back and under the shoulders and above the belly.

Roll Back—A gradual return of the coat of fur to normal position when it is stroked from the hindquarters to the shoulders.

Roman Nose—A nose whose bridge is so comparatively high as to form a slightly convex line from the forehead to the nose tip. (Dictionary: “Aquiline—curving like an eagle’s beak.”)

Rump—The upper, rounded part of the hindquarters.

Rust—A reddish-brown coloration of the fur, usually appearing on the sides, flanks or feet of rabbits. Rust appears in Blues, Blacks, Chocolates, Lilacs and Sables. It may be caused by exposure to sunlight, dirty hutches or dead hair about to molt.

TALKING LIKE A RABBIT JUDGE

RABBITS, LEVEL III

Member Handout 6, Rabbit Judging Glossary, *continued*

Saddle—The whole upper back portion of a carcass, including both loins, rumps and hindlegs. Also a marking on the Dutch rabbit where the white color ceases on the upper portion of the hindquarter marking.

Shape—General conformation; the rabbit's overall appearance as shown by body structure. Synonym for "type."

Sheen—The principal feature of the Satin mutation. A bright, natural luster attributed to the unique structure of the hair shaft, because glass-like, transparent hair shell has the ability to reflect light. Sometimes used in error to describe fur condition in the normal fur.

Shoulder—The upper joint of the foreleg, connecting it to the body.

Slipping Coat—A coat of fur that is shedding or molting, a profusion of hairs.

Snipey—A long, elongated, narrow head.

Solid—A rabbit with the same basic coloration over the entire body, not mixed with any other color to create a pattern or markings. In a broad sense, it may include: Sells and Shaded Sells, Agouti and Wide Band Agouti, ticked as in steel, silver and d'Argent rabbits, but not those of the basic Tan pattern. (Pointed Whites in Angoras and some Lop breeds are classified as "Solids"—see breed standard.)

Spraddled (Spraddle-Legged)—A condition where the rabbit cannot hold (abduct) the front or back legs inside the body, and they spread out from the body.

Ticking—Longer guard hairs throughout the fur, of a color distinct from the underwool or body fur which presents a wavy appearance. Ticking is characterized by longer, black and/or tipped guard hairs.

Top Color—The surface color of the fur lying in its normal position.

Tucked Up—The trim appearance of the Belgian Hare, with the flank and belly gathered in closely to form an arch when the rabbit is in a sitting position.

Type—Denotes conformation of a rabbit, or shape or size of a particular part of a rabbit; head type. The general physical makeup of the rabbit.

Undercolor—The color at the base of the fur shaft, next to the skin. Not belly color.

Undercut—The belly marking on a Dutch rabbit; a continuation of the saddle marking.

Undercut Hindquarters—Where the skeletal and/or muscular structure does not fill the lower hindquarters.

Variety—A division within a breed. Type indicates the breed; color determines the variety. (In some breeds, Broken Color is an added variety.)

Wall Eye (Moon Eye)—An eye that is whitish on the surface (cornea) of the eye; having a milky film over the eye.

TALKING LIKE A RABBIT JUDGE

RABBITS, LEVEL III

Member Handout 6, Rabbit Judging Glossary, *continued*

Wool—The soft, fleecy hair on Angora rabbits. The guard hair and underfur is from 2½ to 3 inches in length and resembles fine wool in texture.

Wolf Teeth—Protruding or elongated incisors in either the upper or lower jaw causing malocclusion, improper alignment of the upper and lower teeth which prevents normal wear.

Wry Tail—An abnormal tail, bent, carried or twisted permanently to one side; a corkscrew tail with one or more turns.

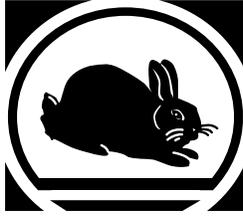
TALKING LIKE A RABBIT JUDGE

RABBITS, LEVEL III

Member Handout 7, Gaming Cards

Make as many copies as needed. Then handwrite selected terms from the glossary and cut out. For definitions, make extra copies of glossary (one-sided) and clip definitions of terms selected for game. Use any combination of squares to make size of card desired.

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Presenting Oral Reasons

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- The steps used when giving oral reasons

ABOUT THEMSELVES:

- Improving organizational skills
- Enhancing communication skills

MATERIALS NEEDED:

- Member Handout 8, Sample Judging Class
- A class of rabbits to be judged
- Judging cards

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Even if you can place a class of rabbits correctly, you will not learn much unless you know why you placed the class as you did and can explain the reasons for your decisions.

Points to Consider when Judging Rabbits

- I. Body Conformation
 - A. Firm body—not overly fat
 - B. Well balanced
 - C. Rump well-rounded; smooth (shaped like half-basketball)
 - D. Wide, meaty loin
 - E. Full front shoulders
 - F. Short neck—well-placed head
- II. Other Features
 - A. Erect ears—balanced to body (not too long or too short); exception is lop eared rabbits.
 - B. Straight leg bone (not cow-hocked or bowlegged)
 - C. Fur: condition—tight fur, no breaks, stains or mats
 - D. The rabbit should be free of disqualifications and general faults.

4-H Judging Card

Constantant number refers to a number you were given when you registered.

Class number or name refers to what you are judging—in this case, Dutch.

Remember to circle your placing of the class—here you would want to circle 2-4-1-3.

Leader Notes

Remind the members that there are several things to look for when judging a class of rabbits.

Hand out Sample Judging Class sheet. The sheet has a class of Dutch rabbits for us to judge. Discuss the judging card.

Leader Notes

Reasons' Score—Score given to contestant

Remember to hand in the card to the person in charge. The scorer or reasons judge will fill in the rest of the card.

GIVING ORAL REASONS

Discuss the steps in giving oral reasons.

1. Opening Statement—Name of Class and order of Placing.

I placed this class of Dutch Senior Does 2-4-1-3.

2. General Statement—How you felt about the class.

I thought it was a fairly hard class to judge because all except number 2 have obvious disqualifications.

3. Reasons For Top Pair—Comparison

Number 3 was an obvious bottom. I placed 2 over 4 because 2 is more perfectly marked, correct color with no runs in saddle area. Both 2 and 4 show proper body conformation, color, erect ears, correct size, and weight with well-rounded hips and shoulders.

Criticism of second animal in the pair

However, number 4 has a white tail and a black front foot.

4. Reasons For Middle Pair—Comparison

I placed 4 over 1 because 1 has color running into the saddle. Number 4 is marked much better.

Give good things about second rabbit in pair

I grant that 1 is correct in size and weight.

Give criticism of second animal in pair

But I criticize 1 because it has color running into the saddle and on two feet, flat hips and short ears. Number 1's head is not a good shape and face is poorly marked. She has a white tip on the tail.

5. Reasons For Bottom Pair—
Comparison

I placed 1 over
3 because of weight,
size and body
characteristics.

Give criticism of second
rabbit in pair

I place 3 last and
at the bottom of the
class because she is
obviously a cross-
breed. She shows
definite Californian
body lines, ears and
weight. She is poorly
marked with none of
the Dutch
characteristics.

6. Closing Statement

Therefore, I placed
this class of Dutch
Senior Does 2-4-1-3.

This is not a very good class. All but number 2 have disqualifications. After you have selected 2 for your top placing, body type becomes the important factor.

Now pass out the judging cards and have the group judge the class. After each has placed the class, have the members give oral reasons. (You may need to use several older members or parents here.)

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What is something you learned about judging rabbits?
2. What is the most difficult part of preparing to give a set of oral reasons? Why?

Process:

3. What judging skills do you need to effectively take notes and prepare a set of reasons?
4. What is the significance of being able to explain and defend a decision?

Generalize:

5. What did you learn about your ability to organize thoughts?
6. How will this reasoning process help you make other decisions?

Apply:

7. How do you think this process of judging, notetaking, and giving an oral defense will help you in the future?

GOING FURTHER:

- Participate in a rabbit judging contest.
- Invite an ARBA rabbit judge to discuss oral reasons.

Leader Notes

REFERENCES:

Cooperative Extension Service, Wyoming

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

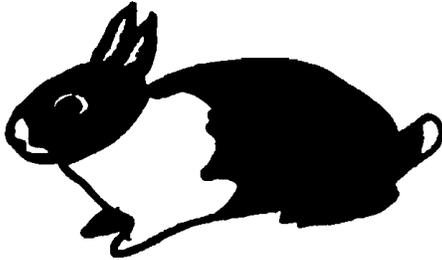
Rabbit Design Team



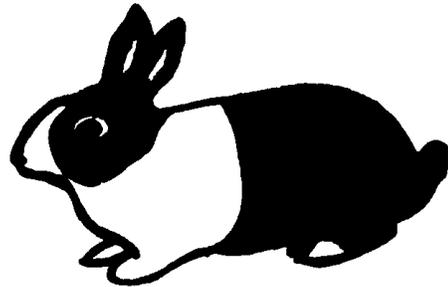
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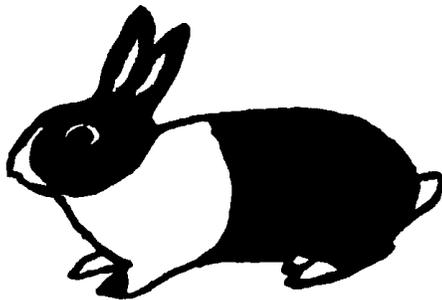
PRESENTING ORAL REASONS
RABBITS, LEVEL III
Member Handout 8, Sample Judging Class



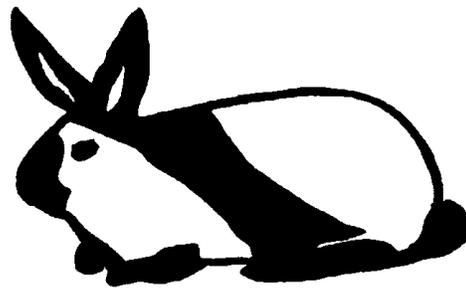
1



2



4



3

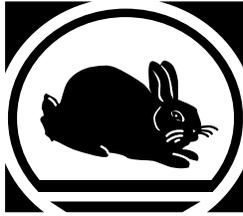
In judging rabbits, look for the characteristics of the breed size, shape, color, correct markings, body conformity, weight, etc. Study the classes, select the best rabbit, second best, third best, and poorest. Remember how the numbers arrange themselves.

Now look at the card used for placing and scoring a judging event. Place the class and fill out the card.

On this page, the traditional approach to judging is shown, using the four-animal class. In real life, you may select from many animals, both your own and/or those of other breeding establishments. Using this approach, evaluate groups of animals and answer questions about their strengths and weaknesses on several important factors.

| 4-H JUDGING CARD | | Circle | Official |
|-------------------------|---|--------------|----------|
| | | Your Placing | Score |
| | A | 1234 | |
| | B | 1243 | |
| | C | 1324 | |
| | D | 1342 | |
| | E | 1423 | |
| | F | 1432 | |
| Contestant No. _____ | G | 2134 | |
| | H | 2143 | |
| | I | 2314 | |
| | J | 2341 | |
| Class No. _____ | K | 2413 | |
| | L | 2431 | |
| | M | 3124 | |
| | N | 3142 | |
| Class Name _____ | O | 3214 | |
| _____ | P | 3241 | |
| | Q | 3412 | |
| | R | 3421 | |
| | S | 4123 | |
| | T | 4132 | |
| | U | 4213 | |
| | V | 4231 | |
| | W | 4312 | |
| Reasons' Score _____ | X | 4321 | |





Scoring a Judging Class

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to score a class by hand
- How to use the Hormel computing slide

ABOUT THEMSELVES:

- Importance of prioritizing

Materials Needed:

- Hormel computing slide(s)
- Judging Score Cards
- Pencils

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

Often, junior leaders are called upon to help with various judging events. One of the events is the scoring of the contestants' score cards.

SCORING A CLASS

Two methods are available to score the members placings:

1. Score it themselves.
2. Use the Hormel Computer Slide either directly or make a key to use with the 4-H Judging Placing Card.

Score it themselves

Members may score their own classes by knowing the official placings and cuts. Here's how this works:

Example 1: Official Placing 1 - 3 - 2 - 4. Cuts 5 2 6

Members placing: 2 - 4 - 3 - 1. Simply compare the members placing to the official placing and ask six questions — one for each possible pair. Every time the answer is “no” in relation to the value of the cuts, points are lost for all pairs involved.

Leader Notes

| | |
|--|------------------|
| Q: Did I place 1 over 3 (like the official judge did)? | |
| A: No, so I lose | 5 points |
| Q: Did I place 1 over 2? | |
| A: No, so I lose | 5 + 2 points |
| Q: Did I place 1 over 4? | |
| A: No, so I lose | 5 + 2 + 6 points |
| Q: Did I place 3 over 2? | |
| A: No, so I lose | 2 points |
| Q: Did I place 3 over 4? | |
| A: No, so I lose | 2 + 6 points |
| Q: Did I place 2 over 4? | |
| A: Yes, so I don't lose points. | _____ |
| Total: | 35 points lost |
| 50 | |
| <u>-35</u> | |
| 15 is members score | |

Provide several combinations of placings and cuts. Let members figure scores until they are comfortable with the method. Other variations may be taught with same results.

Example 2: If members placing was 3 - 1 - 4 - 2 what would the score have been on this same class?

Answer: (-5, 0, 0, 0, 0, -6)

| |
|--|
| 50 |
| <u>-11</u> |
| 39 is members score (simply reversed both pairs) |

USING THE HORMEL COMPUTING SLIDE

1. Given the official placings and cuts used above, find the 1 - 3 - 2 - 4 placings at the top of one of the columns of the plastic overlay cards.
2. Locate the listing of the scores desired by adding the cuts ($5 + 2 + 6 = 13$), finding this total at the top corner of one of the white cards with the black scores and locating the correct combination of three cuts at the bottom of the card.
3. Place the correct column of placings beside the indicated combination of scores. Double check before transferring.
4. Make a key out of one of the Judging Placing Cards.

Now give the members different official placings and cuts and have them score the judging score cards. Continue until all understand how to use the Hormel computing slide.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. When did you first learn to score a judging class?
2. What aspects of scoring were easiest/hardest? Why?

Process:

3. When you prioritize or rank rabbits in a class, what does the ranking indicate about the animal?
4. Why is it important to understand how to prioritize rabbits when serving as a judge?

Generalize:

5. What steps do you go through to prioritize activities that you are involved with?

Apply:

6. What would a daily routine of prioritized items look like in your life?
7. How will you prioritize other events or activities in the future?

GOING FURTHER:

- Set up and run an entire judging contest with several classes and oral reasons.

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team

Think back: (Record this question and answer on a page in your record book.)

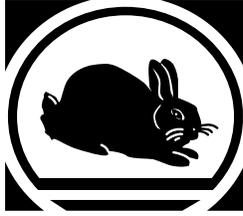
What do you think is the most important thing to remember when planning to show (to be judged) or judging rabbits yourself? Why?



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Determining a Rabbit's Condition

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- To know what to look for in a well-conditioned rabbit

ABOUT THEMSELVES:

- Importance of using predictions

Materials Needed:

- Rabbits in different conditions

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

It is important to know when your rabbit is in good condition. Condition refers to the condition of the fur as well as the flesh condition. Examine your rabbit. Is the fur free of moult, shiny and does it return to its natural position when stroked in the opposite direction? The coat should be shiny, free of stain and moult.

Run your hand over the body of your rabbit. Does the body feel smooth without any bones protruding? Or, is the rabbit like a washboard? A rabbit in good condition should be firm of flesh and feel smooth when a hand is ran over the body.

A rabbit may have excellent conditioned fur but have poor flesh condition. Some strains of rabbits never develop good flesh condition.

A rabbit may have good flesh condition but the coat isn't finished. The fur doesn't return to its natural state when stroked towards the head. The fur may be in a state of moult. A few rabbits never seem to have finished fur.

Sometimes the word "finish" is used for condition. When we talk about the finish of a market animal, we usually are talking about the flesh condition. A finished coat is free of stains, moult, and is shiny and full of life.

Now have the members examine the rabbits present. Have the members determine the fur and flesh condition of each rabbit.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What does “condition” refer to when talking about rabbits?
2. What is your rabbit’s condition? Include both flesh and fur condition.

Process:

3. Why is it important to know and understand the condition of your rabbit’s fur and flesh?
4. What condition is more important, fur or flesh? Why? Can the condition of the fur be the opposite of the condition of the flesh? Why?

Generalize:

5. How do the fur and flesh conditions predict the animal’s general health?

Apply:

6. What other predictions have you used? Why?
7. How can you use predictions in the future?

GOING FURTHER:

- Research the rabbits that are not expected to develop good flesh condition.

REFERENCES:

A Progressive Program For Raising Better Rabbits And Cavies, American Rabbit Breeders Association
ARBA Standard of Perfection, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Program, Kansas State University

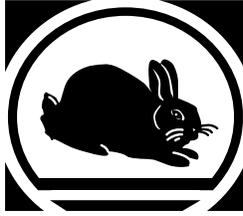
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Figuring Dressing Percentages and Average Daily Gain

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to determine the average daily gain
- How to figure dressing percentages

ABOUT THEMSELVES:

- How you measure success

Materials Needed:

- Scales
- Fryers
- Calculator
- Equipment to process the fryers (optional)
- Chalkboard and chalk or flip chart and marker

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

The rabbit producer needs to know how well his rabbits are producing. The dressing percentage and average daily gain are good indications of the success of the rabbit production.

The average daily gain is easy to figure if you have the weight of the rabbit and its age. Divide the weight of the fryer by the age of the rabbit. For example, if a rabbit weighs 4½ pounds and is 60 days old, the average daily gain is .075 pounds per day.

$$(4\frac{1}{2} \text{ pounds}/60 \text{ days}) = .075$$

Did all the fryers have the same average daily gain?

If you were going to keep some of these fryers for a commercial rabbitry, which ones would you keep?

To determine the dressing percentage, you need to have the weight of the live rabbit and the weight of the carcass. The liver, heart and kidneys need to be left in the carcass when determining dressing percentage.

To calculate the dressing percentage, divide the weight of the carcass by the weight of the live rabbit and multiple by 100 percent. If your live rabbit weighs 4.5 pounds and the carcass weighs 2.3 pounds, your dressing percentage is 51.1 percent.

Leader Notes

Use a chalkboard to demonstrate this and other math problems.

Now weigh a fryer and give the members the age of the rabbit. Have the members calculate the average daily gain. Continue until all the fryers have been weighed and the average daily gain calculated.

At this point, you will want to dress the fryers. However if it isn't possible to dress the rabbits at this time you still can study dressing percentages.

Leader Notes

Have the members calculate dressing percentages for the following:

| | Live Weight | Carcass Weight |
|------------|-------------|----------------|
| Rabbit I | 5.05 lbs | 3.10 lbs |
| Rabbit II | 4.85 lbs | 2.76 lbs |
| Rabbit III | 4.24 lbs | 2.05 lbs |

Answers:

| | |
|------------|-------------------------------------|
| Rabbit I | $(3.10/5.05) \times 100\% = 61.4\%$ |
| Rabbit II | $(2.76/4.85) \times 100\% = 56.9\%$ |
| Rabbit III | $(2.05/4.24) \times 100\% = 48.3\%$ |

We want rabbits that have a large dressing percentage and a large average daily gain for a successful rabbitry.

If you dressed the fryers and calculated the dressing percentages for them, compare the dressing percentage with the average daily gain. Did the fryer with the best average daily gain have the best dressing percentage?

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What is one indicator that rabbit breeders use as a measure of successful production?
2. Are there other measures that you use to indicate that you have had a successful production year?

Process:

3. Why do rabbit breeders need to know the average daily gain and the dressing percentages?
4. How do you determine the average daily gain?
5. How do you determine the dressing percentage?
6. Is one measure more important than the other?

Generalize:

7. What measurements are used to determine success in other project animals?
8. How do you measure success? Why?

Apply:

9. How will the issues raised by this lesson, be useful to you in the future?

GOING FURTHER:

- Have the members calculate dressing percentages and average daily gain for their rabbits.

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

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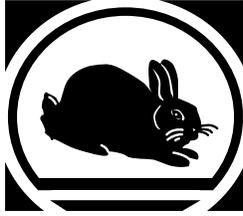
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Home Processing a Rabbit

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- Equipment needed in home processing
- Steps in home processing a rabbit

ABOUT THEMSELVES:

- Importance of food safety

Materials Needed:

- Rabbit fryer
- Sharp knife
- A bucket of water
- A bucket of ice water
- Trash can and trash bags
- Freezer wrap
- Activity Sheet 7, Steps in Home Processing a Rabbit
- Leaders's Key, Activity Sheet 7, Steps in Home Processing a Rabbit
- Member Handout 9, Steps in Rabbit Processing

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

The best way to learn how to dress a rabbit is by watching someone demonstrate the proper procedure.

1. Rendering the rabbit unconscious—The rabbit may be stunned by hitting it with a rod at the base of the skull behind the ears. It is then suspended and the head removed immediately to permit thorough bleeding. Another method is breaking the neck. Press base of your thumb against the back of the rabbit's head while grasping the hind legs in your other hand. Bend head back as far as possible and pull with both hands until you feel the head break away from the neck.
2. Suspending and bleeding—The rabbit should be suspended immediately and head removed so proper bleeding will occur. A number six screw hook fastened to a wall 5 feet above the floor is handy for suspending the carcass while it is being dressed. The hook is inserted between the tendon and bone of the right hind leg just above the hock.
3. The tail and front feet are cut off.
4. The free rear foot is removed at the hock joint.

Leader Notes

5. The skin is cut just below the hock of the suspended leg and opened inside the leg to the root of the tail and extended to the left hock joint.
6. The edges of the skin are separated from the flesh and the skin is pulled down off the carcass.
7. The pelt should be set aside if you wish to tan or dry it.
8. Make a slit in the carcass along the median line of the belly. Remove the entrails. You may wish to leave the heart and kidneys. Save the liver but be sure to remove the gall bladder.
9. Remove the right hind foot at the hock.
10. Clean the carcass by rinsing in cold water to remove stray hairs and blood.
11. Cool the carcass for 15 minutes in ice water.
12. Cut up the carcass if desired.
13. Wrap in freezer wrap and freeze.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. Which part of the home processing lesson was most interesting? Least interesting?

Process:

2. What would be the result if any of these steps were eliminated in the process?
3. What steps should you take to ensure a high quality and safe product?

Generalize:

4. Who should be responsible for maintaining quality standards in food processing?

Apply:

5. How can you apply what you learned about home processing to food safety?
6. What is the significance of food safety in home processing?

GOING FURTHER:

- Visit a rabbit processing plant
- Have the members try to dress a rabbit at home or at this meeting.

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

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HOME PROCESSING A RABBIT
RABBITS, LEVEL III
Activity Sheet 7, Steps in Home Processing a Rabbit

Number the steps below in the correct order according to the proper way to slaughter a rabbit.

- _____ Cut off tail
- _____ Cut off front feet
- _____ Remove the skin from the flesh
- _____ Rendering the rabbit unconscious
- _____ Cool the carcass in ice water
- _____ Remove the entrails from the carcass
- _____ Suspend the body and bleed it by removing the head
- _____ Clean the carcass by rinsing it
- _____ Freeze
- _____ Remove free hind foot
- _____ Cut the skin on inside of hind legs
- _____ Remove the last foot

HOME PROCESSING A RABBIT

RABBITS, LEVEL III

Leader's Key, Activity Sheet 7, Steps in Home Processing a Rabbit

Number the steps below in the correct order according to the proper way to slaughter a rabbit.

- 7 Cut off tail
- 3 Cut off front feet
- 6 Remove the skin from the flesh
- 1 Rendering the rabbit unconscious
- 11 Cool the carcass in ice water
- 8 Remove the entrails from the carcass
- 2 Suspend the body and bleed it by removing the head
- 10 Clean the carcass by rinsing it
- 12 Freeze
- 4 Remove free hind foot
- 5 Cut the skin on inside of hind legs
- 9 Remove the last foot

HOME PROCESSING A RABBIT

RABBITS, LEVEL III

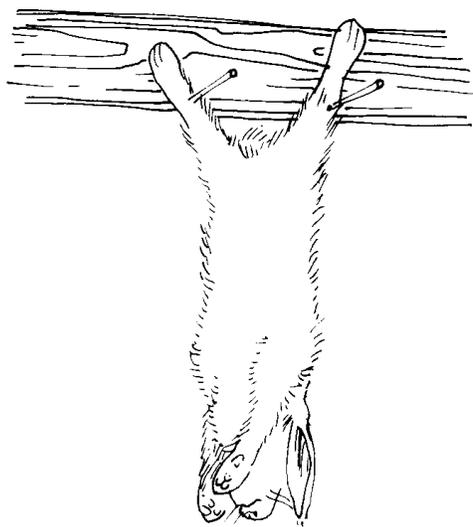
Member Handout 9, Steps in Rabbit Processing



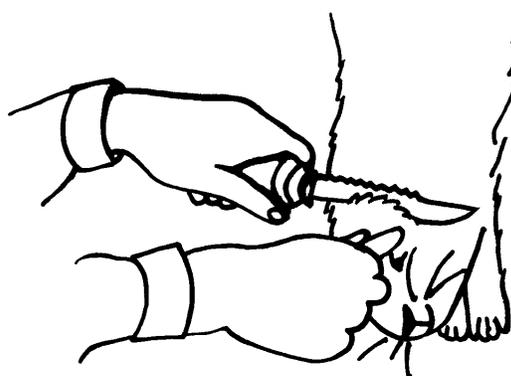
1. Render the rabbit unconscious. The rabbit may be stunned by hitting it with a rod at the base of the skull behind the ears.



2. Kill rabbit by breaking its neck. Press base of your thumb against back of rabbit's head. Bend head back as far as possible. Pull until you feel head break away from neck. There are other methods which you may wish to use.



3. You may hang your rabbit with both hind feet. This is recommended.

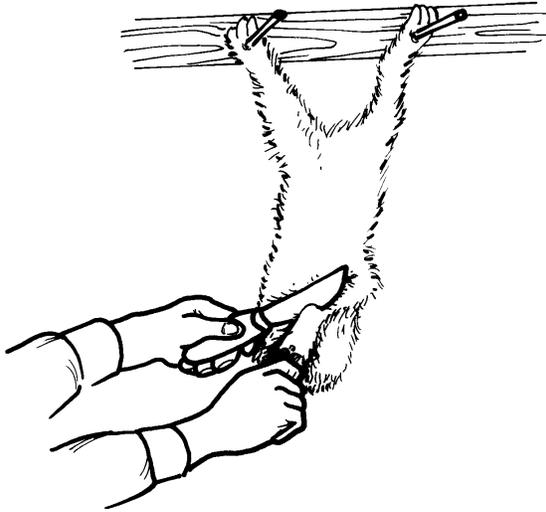


4. Immediately cut off head. Cut close to head and through the place where head was broken away from neck.

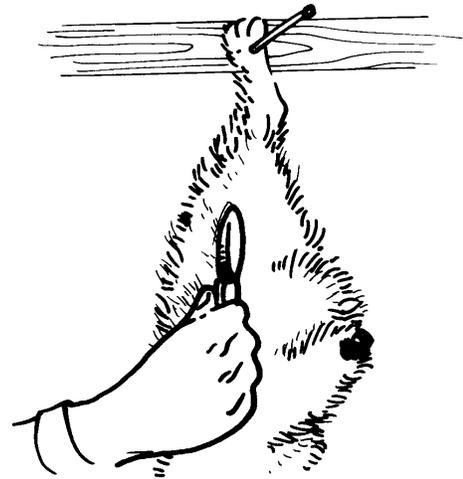
HOME PROCESSING A RABBIT

RABBITS, LEVEL III

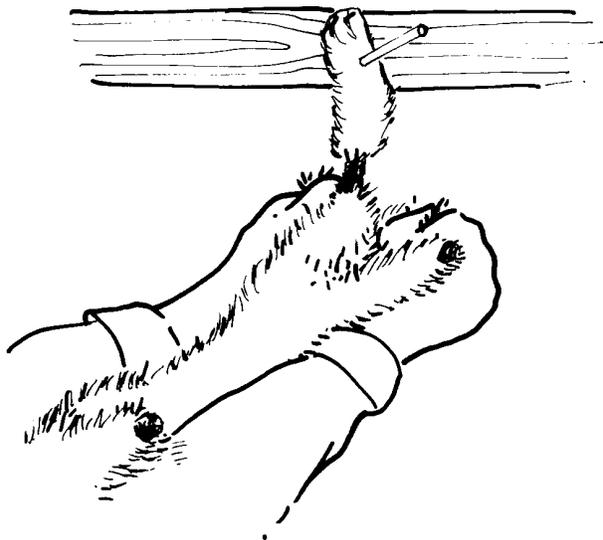
Member Handout 9, Steps in Rabbit Processing, *continued*



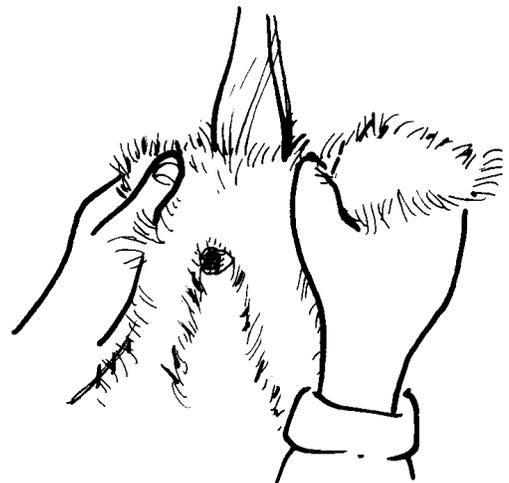
5. Cut off both front feet. Then unhook the right-hind foot and cut it off.



6. With a chicken-sticking knife, slit up inside of both hind legs.



7. Tear hide away from hind leg on hook.



8. Tear hide from tail and vent by working fingers between hind and body ahead of tail over rump.

HOME PROCESSING A RABBIT

RABBITS, LEVEL III

Member Handout 9, Steps in Rabbit Processing, *continued*



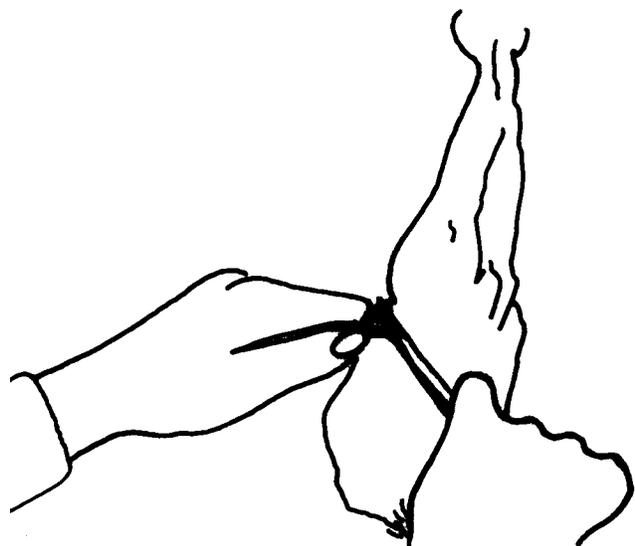
9. Force fingers between hide and body and pull hide from free hind leg.



10. Cut as shown, leaving the fat on the flanks, not on the pelt.



11. As soon as the whole pelt can be held with one hand, remove it with one strong pull.

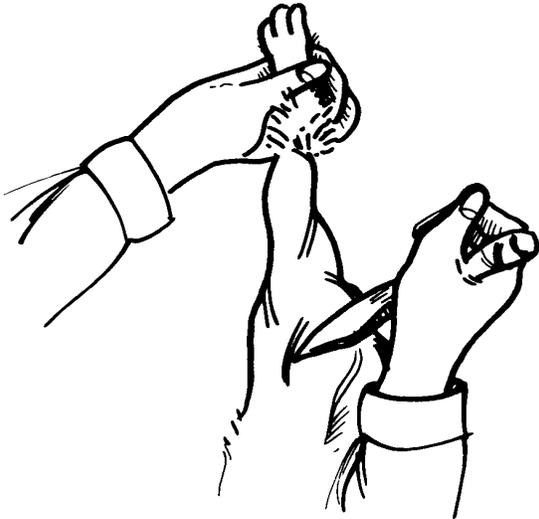


12. Cut off tail.

HOME PROCESSING A RABBIT

RABBITS, LEVEL III

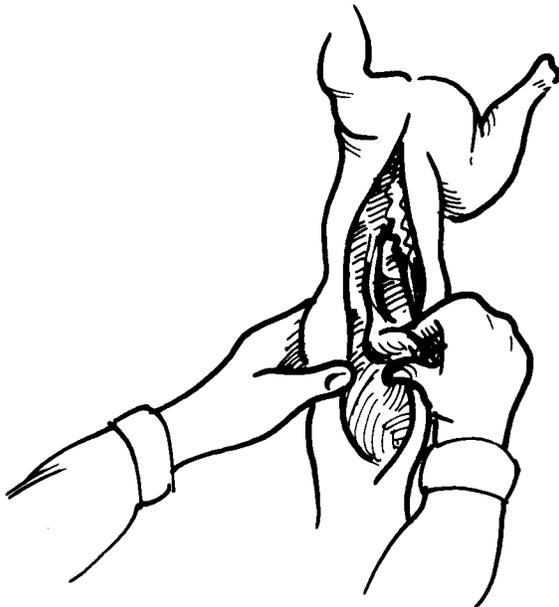
Member Handout 9, Steps in Rabbit Processing, *continued*



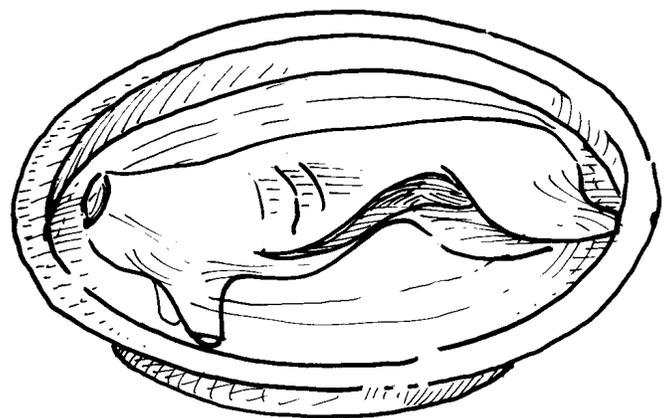
13. Cut pelvic bone between hind legs inserting knife from above and prying out.



14. Slit down belly, being careful not to cut bladder, intestines, or stomach.



15. Pull out insides by grasping stomach and holding liver in place with thumb of other hand. Carefully remove gall bladder without cutting or breaking it. The bitter green bile of the gall bladder must not be spilled on the meat.

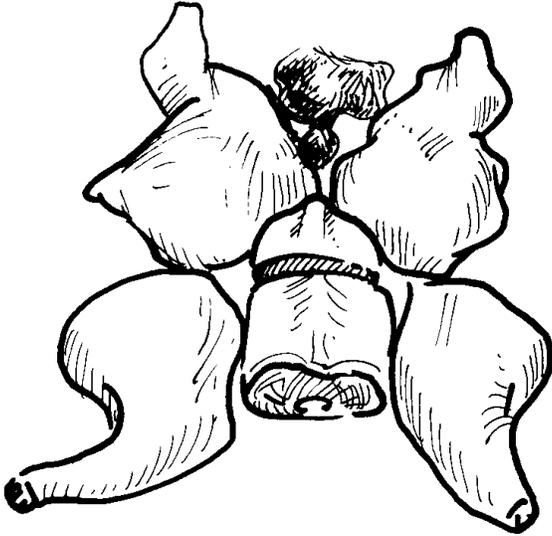


16. Wash the carcass in cold water. It may be left in cold water for 15 minutes for cooling. Remove and place in a pan or wire basket in a natural position.

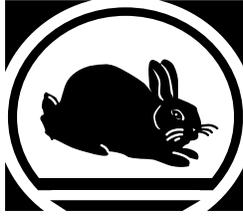
HOME PROCESSING A RABBIT

RABBITS, LEVEL III

Member Handout 9, Steps in Rabbit Processing, *continued*



17. One method of cutting up a fryer rabbit. Rabbits are usually marketed as a cut up fryer rather than a whole.



Cutting Up and Wrapping a Rabbit Carcass

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to cut up a rabbit
- How to wrap the rabbit and make it attractive to the customer

ABOUT THEMSELVES:

- Importance of safety

Materials Needed:

- Rabbit carcasses
- Sharp knives
- Cutting board
- Styrofoam meat trays
- Plastic wrap
- Parsley

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

The member needs to know how to prepare the rabbit for the customer since many will wish to have the rabbit cut into pieces ready to cook.

Steps in cutting up a rabbit carcass

1. Start with a front leg. Pull the leg out and with a sharp knife cut through the shoulder joint. Twisting the leg helps to locate the joint.
2. Repeat for the other front leg.
3. Pull out a rear leg and cut where the thigh joins at the hip joint. Again, twist to help locate the joint. Leave the thigh and hind leg in one piece.
4. Repeat for the other hind leg.
5. Cut the carcass through the backbone just where the rib cage ends.
6. Slice along the cartilage that joins the ribs and backbone. This makes two pieces of rib.
7. Cut the rear section of the back if desired. This is the loin and is considered the best portion of the rabbit.

Now we are ready to package the rabbit. If you are selling fresh rabbit meat, you will want to make it look attractive. Arrange the pieces on a Styrofoam tray and garnish with parsley. Now wrap with plastic wrap.

Leader Notes

Demonstrate how to cut up a rabbit carcass.

If enough carcasses are available, let each member cut a carcass as you demonstrate.

Leader Notes

Demonstrate wrapping step by step. Let members wrap their cut carcasses. Commercial producers need to be aware of federal, state, and local food safety regulations.

If you are selling frozen meat, you should use freezer wrap to prevent freezer burn and loss of palatability.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. How easy or difficult was it to locate the joints for cutting locations?
2. What tools did you need?

Process:

3. What problems occurred during the activity?
4. Why do you cut at some joints and not others?

Generalize:

5. How does safety play a role in processing other project animals?

Apply:

6. How can you use the information you learned in other situations?

GOING FURTHER:

- Visit a market that sells rabbit meat to observe their packaging.

REFERENCES:

Rabbits For Food And Profit, Edited by Lee Schwanz, Copyright 1982 by Farmer's Digest, Inc. Box 363, Brookfield, WI 53005

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

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Think back: (Record these questions and answers in your record book.)
When raising rabbits for meat, what do you consider most important?
Why?

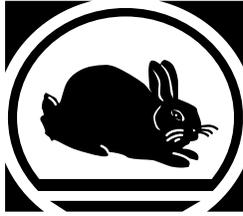
What contribution do you think rabbit meat will make to the world food supply in the future? Why?

Present a talk or lead a discussion of one of these topics with a group or club.



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Caring for a Rabbit Pelt

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to dry and store a pelt

ABOUT THEMSELVES:

- To evaluate the importance of following directions

Materials Needed:

- Pelt stretchers
- Pelts that have been dried
- Naphtha flakes

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

The members should know how to care for rabbit pelts since they can be an additional source of income. Pelts not cared for properly are worthless.

While the skin is still warm, it should be placed on a stretcher, secured with clothes pins and hung up to dry.

The skin should be placed flesh side out with forepart over the narrow end of the stretcher.

The legs should be kept on one side, thus avoiding any possible damage to the back fur.

All wrinkles should be removed.

Even though the shaper is called a stretcher, the skins should not be stretched excessively since stretching tends to weaken certain parts and to open the fur.

After one day, examine the pelt to see that the edges are drying flat and that the skin on the front legs is straight.

Do not dry the pelts in the sun or by artificial heat.

The pelts should be hung so that air freely circulates around them.

Remove all the fat from the pelts.

All pelts must be thoroughly dry before they are packed.

Leader Notes

This lesson should be done in conjunction with lesson on "Home Processing a Rabbit."

Demonstrate to the members the stretching of a fresh pelt.

If enough rabbits are processed, let each member stretch and prepare a fresh pelt.

Leader Notes

If the pelts are not to be shipped for some time, hang in loose bundles of 50 in a cool, dry place.

Keep pelts where rats and mice will not get to them.

If pelts are to be kept any length of time in a warm climate or during the summer, they should be sprinkled with Naphtha flakes.

Have the members look at the stretchers and pelts.

Salt should never be used in curing rabbit skins.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What was the easiest/most difficult thing about caring for a rabbit pelt?

Process:

2. What problems occurred when you were preparing your pelt?
3. Why was it important to follow the correct order of activities when preparing a rabbit pelt?

Generalize:

4. How does following directions play an important role in any activity you do?

Apply:

5. What are some of the results you've encountered when you don't follow directions?

GOING FURTHER:

- Practice drying a pelt.
- Have each member bring a pelt to a meeting and practice judging each other's pelts.

REFERENCES:

Cooperative Extension Service, Colorado State University
Cooperative Extension Service, Washington State University

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

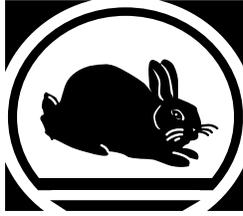
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Tanning a Rabbit Pelt

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to make a tanning solution
- How to tan rabbit hides

ABOUT THEMSELVES:

- To evaluate the importance of using safety procedures

Materials Needed:

- Large, hard plastic or rubber pail with lid
- Sulfuric acid or battery acid
- Goggles or safety glasses
- Salt
- Rubber gloves
- Pelts in various stages of being tanned

ACTIVITY TIME NEEDED: 35 MINUTES

ACTIVITY

Leader Notes

In order to increase the income from the rabbit project, pelts can be tanned and either sold or made into useful items. The following lesson describes how to do this.

Use the large pail with a lid to mix the tanning solution. Either of the following recipes can be used:

| | |
|------------------------|-----------------------|
| A | B |
| 2 gallons water | 2 gallons water |
| 2½ pounds salt | 2½ pounds salt |
| 2 ounces sulfuric acid | 8 ounces battery acid |

You should wear gloves and safety goggles or glasses when preparing and working with this solution. Mix the salt and water. Add the acid to the salt solution. (DO NOT POUR WATER INTO ACID.)

Have members observe the pelts in different stages of tanning.

Now you are ready to prepare the pelt. Split the pelt down the belly, cut off the front legs, and remove any excess fat.

If this is a fresh pelt, you are ready to put it into the tanning solution. If the pelt has been dried, soak it in water until soft before putting the pelt into the tanning solution.

Leave pelt in solution for 24 hours or more.

Leader Notes

Remove pelts and rinse in cool water. Pull flesh from the skin, working from the tail end.

Return the pelts to the solution for 48 hours or more.

Have members work pelts in the process of drying.

Remove and wash in a mild detergent solution. Rinse well and squeeze out excess water.

Let dry slowly. As the pelts dry, stretch to break the fibers. This will cause the skin to turn white and will soften it. The more it is pulled and rubbed, the softer it will become.

Try to keep the pelt flat until drying is complete.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What was the most difficult ingredient to obtain for the tanning solution?
2. What did you like about this activity?

Process:

3. What is the significance of the sequence of tanning a pelt?
4. Why is it important to carefully work with acid?

Generalize:

5. How does safety play a role when working with dangerous ingredients?

Apply:

6. How can you use the information you learned in other situations?

GOING FURTHER:

- Make a project using a tanned pelt.
- Research potential buyers of pelts.
- Have someone who buys pelts attend a meeting and describe what they look for when buying pelts.

REFERENCES:

Your 4-H Rabbit Project, A Pacific Northwest Extension Publication,
Oregon, Washington, Idaho, PNW 163, Revised July 1984
Official Guide to Rabbit Raising, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P.
Adams, Extension Specialist, 4-H Youth Programs, Kansas State
University

Revised by:

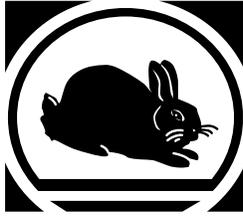
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Marketing Your Rabbits

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- The different ways to market your rabbits

ABOUT THEMSELVES:

- Importance of first impressions and perceptions

Materials Needed:

- Newspaper ads
- Telephone yellow pages
- Signs
- Business cards
- Chalkboard and chalk or flip chart and markers

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

It is important that the public know that you have rabbits for sale. Good advertising can be the difference between success and failure. There are several methods in which you can advertise your rabbits.

SIGN: Put up a sign in your yard. If the road past your home isn't very heavily traveled, the sign would get better results elsewhere. Have the sign made professionally if it is to be a permanent sign.

LIST IN THE YELLOW PAGES: You can list your rabbitry in the classified directory for a relatively small amount each month.

NEWSPAPER ADS: Small classified ad that is regularly run seems to be the best. Check your local papers to see how much it would cost to run an ad.

ELECTRONIC ADS: If your rabbit operation is a large one, electronic advertising is a good way to go. However, you need to be able to supply many customers. Most members will not have a large enough operation to justify electronic advertising.

USE OF BULLETIN BOARDS: In every community, feed stores, grocery stores, etc., have places where you can post for sale notices. Take advantage of this free advertising.

BUSINESS CARDS: An attractive business card is a good way to promote.

Leader Notes

Ask the members how they market their rabbits. Make a list of these on the flip chart or chalkboard. The members may have some very unusual ways to market. Discuss each method listed.

Display several examples of promotion.

Leader Notes

PREPARE A SIMPLE BROCHURE: You may want to prepare a simple brochure that explains what you have available to sell. These are good to pass out at fairs, shows, etc.

SHOW YOUR RABBITS: Show your rabbits at the local fairs and other shows. This will get your name in the public eye. Attend swap meets.

Check with local health and food safety ordinances before attempting to sell meat products.

PROMOTE RABBIT MEAT: You could set up a small booth at local events and give away samples of prepared rabbit.

FARMER'S MARKET: Display live rabbits or dressed fryers.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What methods of marketing have you used? Why?
2. What methods of marketing did you prefer? Why?

Process:

3. If you didn't market your rabbits, what might be the results?

Generalize:

4. What are the first impressions that marketing may convey to the public?

Apply:

5. How do you think you will use marketing in the future?
6. What do you think are the perceptions that marketing has on consumerism or purchasing power?
7. How will you act differently in the future as a result of this discussion?

GOING FURTHER:

- Have the members check the local newspapers for rabbit advertisements.
- Have the members check the yellow pages for listing of rabbitries.
- Design your own business card.
- Prepare a sample brochure.

REFERENCES:

Rabbits For Food And Profit, Edited by Lee Schwanz, Copyright 1982 by Farmer's Digest, Inc. Box 363, Brookfield, Wisconsin 53005

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

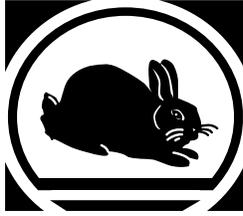
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Using Rabbits in Science Fair Projects

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to conduct a science fair project

ABOUT THEMSELVES:

- To evaluate personal organizational skills

Materials Needed:

- Chalkboard and chalk or a flip chart and marker

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

It is possible for members to expand their rabbit project by conducting science fair projects using rabbits.

Have members brainstorm other kinds of problems and hypotheses for potential projects.

In order to conduct a science fair project, you need to attempt to solve a problem. The problem might be: Which commercial rabbit pellets will produce the most rapid gain in young rabbits?

Then you need to set up a hypothesis. Our hypothesis might be that Family Ration will produce the most rapid gain in young rabbits. Remember that in your science fair project, you wouldn't use commercial names so each feed would be given a letter code. Family Ration might be feed A. So the proper way to state our hypothesis would be: Feed A will produce the most rapid growth in young rabbits.

Now you need to plan your procedure, how will you conduct the experiment. In this case we will assume that we are going to use 15 New Zealand White rabbits and three different commercial feeds. The following steps should be followed:

1. Each of the rabbits need to be tattooed so you can keep track of them. For instance rabbits fed feed A, could be tattooed 1A, 2A, 3A, 4A and 5A. Those fed feed B and feed C could be tattooed in a similar fashion.
2. Weigh each of the rabbits and record the weight.
3. Make sure that the only difference in how the rabbits are being cared for is the feed.
4. Provide the rabbits all the feed they will eat.

Leader Notes

5. Weigh the rabbits every week; record the weight of each rabbit.
6. Examine the rabbits and record your observations each time the rabbits are weighed.
7. After six weeks, see which rabbits have gained the most. Subtract the initial weight of each rabbit from the final weight.
8. Calculate average daily gain during the experiment by dividing the number of days (42) into the net gain for each rabbit.
9. Compare results; which feed produced the most gain?
10. Write your conclusion. Feed B produced the most rapid gain in young rabbits. Feed C produced the least amount of gain.

Discuss how you can use these topics as science fair projects for rabbits.

Other science fair project ideas:

- | | |
|------------------------------|-------------------|
| 1. Rabbit's Digestive System | 4. Color genetics |
| 2. A Rabbit's Skeleton | a. Selfs |
| 3. Fur genetics | b. Himalayan |
| a. Satin | c. Chinchilla |
| b. Rex | 5. Buck teeth |

DIALOGUE FOR CRITICAL THINKING:

Share:

1. Why would you choose a rabbit project for a science fair exhibit?
2. What do you think is the easiest/most difficult thing about preparing a science fair project? Why?

Process:

3. What is the significance of using rabbits in a science fair project?
4. What scientific techniques are easily demonstrated at a science fair?

Generalize:

5. What organizational skills did you use in this project?

Apply:

6. How will the organizational skills that you learned in this activity, help you in the future?

GOING FURTHER:

- Plan to give your science fair project talk for other groups.

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

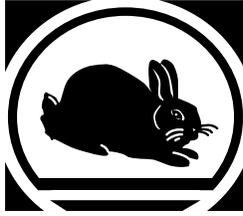
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Harvesting Angora Wool

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to pluck and shear the Angora rabbit

ABOUT THEMSELVES:

- Decision making

Materials Needed:

- Member Handout 10, Illustrations for Plucking and Shearing Angora Wool
- Plucking blade
- Scissors
- Containers for wool
- Angora rabbit

ACTIVITY TIME NEEDED: 40 MINUTES

ACTIVITY

Leader Notes

All Angora have wool that must be harvested with some regularity. The English and French moult somewhere in the 8- to 12-week range. The Giant Angora does not really moult and, therefore, needs to have the wool harvested every 90 days.

The method you use to harvest the wool is dictated by the rabbit and the end use of the wool.

Plucking should be used on any rabbit that is going to be shown. The major disadvantage to plucking is that it can and does cause wool loss over a period of time. Another disadvantage is that it is labor intensive. Plucking should be done so that the rabbit feels no pain.

STEPS IN PLUCKING

1. Hold the animal with your left hand. Using the thumb and index finger of the right hand, or a plucking blade, begin pulling the wool.
2. Start right behind the neck and work back in an even manner.
3. Pull out as much wool as will easily come out with a firm tug.
4. Use your left hand to hold down the surrounding skin.
5. Work down the sides of the Angora as far as you can reach.

Demonstrate the plucking method.

Leader Notes

Demonstrate the shearing methods.

STEPS IN SHEARING

1. Make a part down the rabbit's back from the tail to the nape of the neck.
2. Using your scissor blade, section off a parallel piece no more than an $\frac{1}{8}$ of an inch.
3. Use your left hand to pull the wool out slightly from the body.
4. Before actually cutting, use the blunt edge of the scissor blade to "comb through" the wool section being held by the left hand.
5. It will take practice to shear the Angora so that you are getting a prime wool product.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What is the time range for harvesting Angora Wool?
2. Which method of harvesting have you used?

Process:

3. Why is it important to know the different methods of harvesting Angora Wool?
4. When deciding which method of harvesting to use, what would you base your choice on?

Generalize:

5. What other types of decisions do you have to make when working with animals?
6. What are some decisions that you make on a daily basis?

Apply:

7. How has this activity made you think about decisions for the future?

GOING FURTHER:

- Have the member try to harvest the wool from an Angora Rabbit.
- Have the member try to spin the wool.

REFERENCES:

Rabbits USA, February 1989

Rabbits USA, March 1989

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

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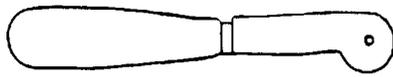
HARVESTING ANGORA WOOL

RABBITS, LEVEL III

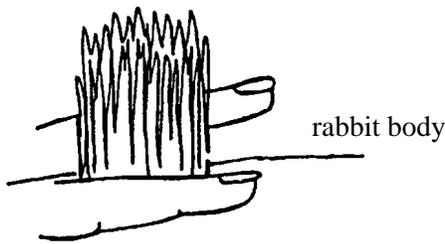
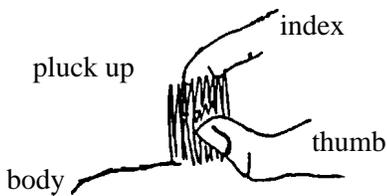
Member Handout 10, Illustrations for Plucking and Shearing Angora Wool

Wool resting on index and middle finger, held in place by thumb

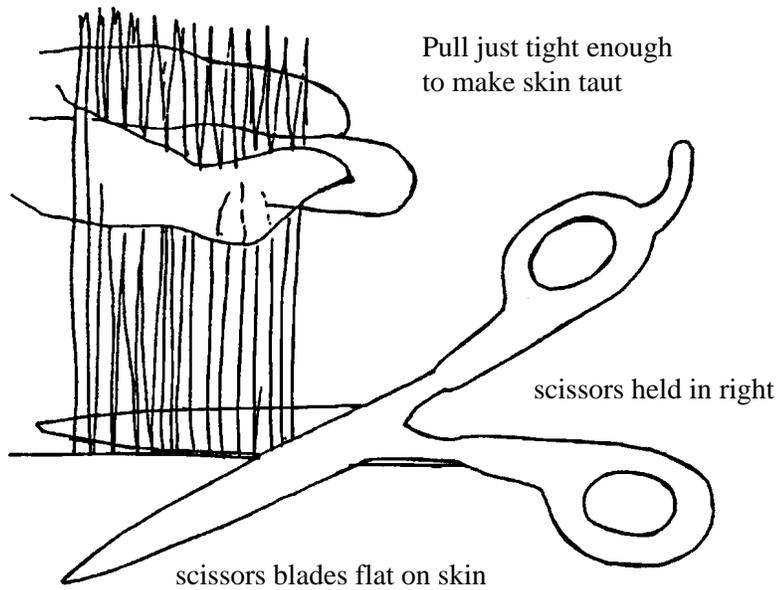
Pull just tight enough to make skin taut



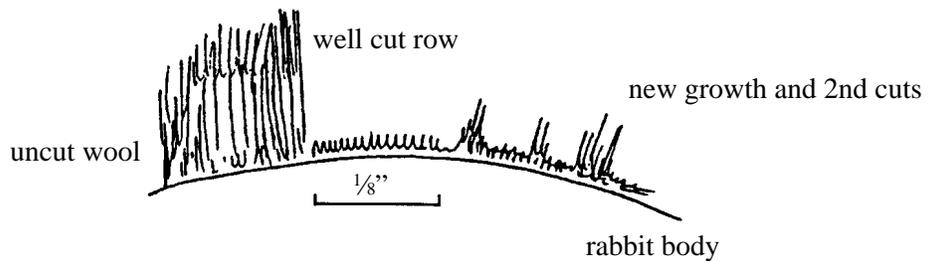
Plucking blade



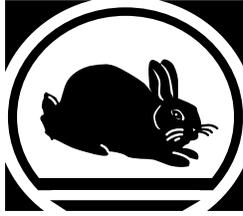
holding skin down



use blunt edge of scissors to comb second cuts and new growth out of the next section to cut



Side view of sheared sections



Recycling Rabbit Manure

Rabbits, Level III

What Members Will Learn . . .

ABOUT THE PROJECT:

- Ways to recycle rabbit manure

ABOUT THEMSELVES:

- To understand the importance of recycling
- Their individual responsibilities toward recycling

Materials Needed:

- Chalkboard and chalk or flip chart and markers
- Galvanized washtub or large plastic container
- Rabbit manure
- Screen wire for covering the container
- Small amount of lard, meat drippings or vegetable shortening
- Piece of burlap
- One quart watering jar
- 100 worms
- Cornmeal

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Each year a doe and 40 young can produce about 8 cubic feet of manure. The breeder needs to know what to do with this manure.

There are several ways that rabbit manure can be recycled. You can sell rabbit manure for use as a fertilizer in gardens. You can make a compost pile using rabbit manure and any plant materials that are available. The composted manure can be used for fertilizer.

Advantages of Using Rabbit Manure for Fertilizer

1. Rabbit manure has a high nitrogen content.
2. Rabbit manure will not burn lawns or plants and is easy to incorporate in the soil.
3. Rabbit manure is excellent fertilizer for gardens, lawns, shrubbery, trees and flowering plants.

Another way you can use rabbit manure is to grow worms to be sold for fish bait.

Leader Notes

Ask the members how they dispose of the manure produced by their rabbits. Make a list on the chalkboard or flip chart.

Leader Notes

If you have an open rabbitry, keeping hybrid earthworms beneath the rabbit cages will reduce odor, minimize fly problems and offer an opportunity for additional income from the sale of worms.

Since worm beds must be kept wet and rabbits do best at lower humidity levels, the use of worms beneath cages is not recommended for enclosed rabbitries or in cold climates where the beds stay cold for many weeks.

A worm culture requires extra time and work to keep the beds turned and moist. Developing a market and providing an adequate supply requires additional effort.

If you are planning to raise worms under your cages, you will need to prepare the beds. 1 × 12-inch boards can be used to build the beds. You will need about 6 inches of manure and rotted straw or leaves to start your bed. Moisten until you can barely squeeze out a drop of water. Add 1000 worms per doe and litter. The worms will eat the waste food and manure. Turn over the top few inches of the beds each week using a rake. The worms will keep the manure cleaned up almost daily. Therefore, no odors.

Have the members help set up a worm bed.

Worm beds need to be emptied at least twice a year and renewed. The reason for this is that the beds become too acidic if not renewed.

Another option is to raise worms in a bed outside of the rabbitry. You can use any large container.

1. Fill the container 8 inches deep with bedding material.
2. Add water until the bedding materials are moist throughout. Be careful not to add too much water.
3. Usually, you will need to add 1 quart of water every two weeks.
4. Mix 1 pound cornmeal and ½ pound of lard, meat drippings or vegetable shortening with the top 2 or 3 inches of bedding material.
5. Put 100 adult earthworms into the bed.
6. Cover the bed with damp burlap to prevent evaporation.
7. Place the screen wire over the bed. The screen wire prevents rodents from bothering the bed.
8. In order to control ants, place the container on small blocks which have been set in pans of oil.

In four to six weeks numerous small worms will be present. In six months the bedding material should be saturated with worms. A container 2 feet in diameter and 10 inches deep should produce approximately 3,500 to 5,000 fishing worms in a year.

You will need to feed the bed once after the first month and then every two weeks after that. You can use cornmeal and fat or use rabbit manure.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. How did you recycle your rabbit manure?
2. What other methods might you use that would be more profitable?

Process:

3. Why is recycling important?
4. What problems occurred as you tried to recycle?

Generalize:

5. Why is recycling more important today than it was in the past?
6. What are some items that are being recycled in your neighborhood or schools?

Apply:

7. Why is it important that you recycle in the future?

GOING FURTHER:

- Raise earthworms as described in container. Keep a record of all costs, dates of watering and feeding, pest problems, and number of worms harvested.
- Check with local nurseries or garden centers to see what kind of market you might have for rabbit manure or compost.

REFERENCES:

Rabbits For Food And Profit, Edited by Lee Schwanz, Copyright 1982 by Farmer's Digest, Inc. Box 363, Brookfield, WI 53005

A Progressive Program for Raising Better Rabbits and Cavies, American Rabbit Breeders Association

Cooperative Extension Service, New Mexico State University

Official Guide to Raising Better Rabbits, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



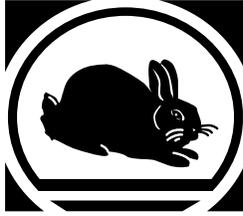
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Think back:

What do you see as the most important use for rabbit pelts? Why?

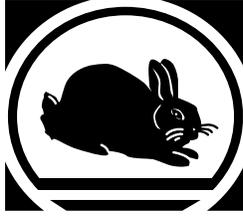
What do you think will be the major market for rabbits or rabbit by-products in the future? Why?



Kansas 4-H Rabbit Leader Notebook

Level IV

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Advancing by Setting Long-Term Goals

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- Setting goals

ABOUT THEMSELVES:

- The importance of setting goals

MATERIALS NEEDED:

- Rabbit Member Guide and Annual Report (MG-16)
- Activity Sheet 1, Preparing Long-Term Goals

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Leader Notes

Because of your involvement and achievements in past rabbit projects, you will now be helping other project members by sharing the information and knowledge that you've gained about rabbits.

As a junior leader, you also will be reviewing your own goals.

Your progress throughout Level IV is an important part of your rabbit project. Sometimes, setting long-term goals is difficult and, therefore, we don't do it. But in Level IV, we have made several places for you to look at your progress.

Setting long-term goals does not need to be intense or elaborate. Rather, it should be simple and to the point. If you take time to review your long-term goals, you will have a better chance of reaching those goals.

Goals can be long-term or short-term. When using the Rabbit Member Guide and Annual Report for Level IV, let's make both goals long-term—something you plan to do in two to five years.

Many of the things you have been learning in your rabbit projects are skills that are transferable to long-term goals, such as obtaining more education, getting a job, winning a scholarship, or even pursuing a career.

Pass out Activity Sheet 1, Preparing Long-Term Goals, and fill in the blanks.

Now that you've completed the activity sheet, let's fill out the Rabbit Member Guide and Annual Report using these two long-term goals.

Complete MAP STEPS one to seven.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What were your two goals?
2. What did you like most about this activity?

Process:

3. Why is it important to review your long term goals?
4. What skills do you have that you can use in other projects, activities or situations?

Generalize:

5. What did you learn about yourself from this activity?

Apply:

6. How will you apply what you've learned to other situations?

GOING FURTHER:

- Develop a job resume.
- Discuss developing a personal portfolio of your skills with a school counselor.

REFERENCES:

Author:

Gwen Bailey, Consultant; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

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ADVANCING BY SETTING LONG-TERM GOALS

RABBITS, LEVEL IV

Activity Sheet 1, Preparing Long-Term Goals

Long-term goals define your future. Select two of the following long-term goals that you might work on in Level IV.

CHECK TWO (of your choice)

_____ acquire more education

_____ get a job

_____ win a scholarship

_____ select a career path

_____ other _____

_____ other _____

Now take one of these long-term goals and answer the following questions.

One of my long-term goals is to:

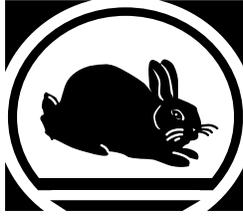
I hope to eventually use this long-term goal. How I plan to reach this goal is by:

To reach this long-term goal I will use my abilities of:

To reach this long-term goal I will need to improve on:

When I reach my goal in the future, I will know it's been met by:





Recording Judges Comments at a Rabbit Show

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to take the judge's comments during a rabbit show

ABOUT THEMSELVES:

- Understanding the importance of listening

Materials Needed:

- American Rabbit Breeders Association comment cards
- Pencils

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Sometimes, exhibitors cannot be at the judging table when their rabbits are being judged. The comment card is the only way for exhibitors to know what the judge did and didn't like about their rabbits.

When you are taking comments at a judging table, remember that the most important items to note on the comment card are the number in class and placing (award). The show secretary must have these two pieces of information to complete all the paperwork after the show.

The comment cards have areas where you can check as the judges give their comments. Often, the judge will say that the rabbit has good head, bone and ears. Put a check under good next to these items. If the judge says that the rabbit is flat over the shoulders, write *flat* next to shoulders. If the loin is narrow, write *narrow* next to loin. If the hips are full, well rounded, check *very good*. However, if the hips are pinched, write *pinched* next to hips. If the rabbit is disqualified, be sure to note why in the remarks section.

The right hand side of the comment card has some specific remarks relating to various breeds. When taking comments while a marked breed is being judged, use the right side as well as the left side of the card.

There are five New Zealand White senior does in the class. 45B will be third. She has good head, ears and bone. I fault her for having flat shoulders, and pinched hips. She has a wide loin and good type. She is losing on overall balance and condition. Fur is in good condition having good texture and density.

Leader Notes

Pass out the comment cards and pencils.

Have the members try to take comments as you give comments on a New Zealand White Senior Doe, ear #45B.

Check to see what the members have taken down. They should have put *third* in the blank for award and 5 for the number in class. They should have checked *good* for head, ears and bone, written *flat* next to shoulder and *pinched* by hips, checked *good* for loin, type, fur, texture, and density.

Leader Notes

Try to take comments on a black Dutch senior buck, ear #5V.

Let us see how well the members did. They should have put sixth in the award blank and 12 in the number in class. They should have written *ragged* next to the saddle and under cut, written *long* next to cheeks, written *wide* next to blaze, written *uneven* next to stops. They should have checked *good* for type, texture and density.

Point out that the two most important items to get on the comment card are the number in the class and the award (placing). Most people feel that any other information on the card is a bonus.

There are 12 black Dutch senior bucks. 5V will be sixth. The saddle and the under cut are ragged. The left cheek is long and the right cheek has a drag off it. The blaze is very wide and the stops are uneven. He has good type, good texture and density of coat.

The group may wish to continue practicing taking comments, you might have a class of rabbits which you judge and give comments on each placing.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What is the easiest/hardest part of writing down what the judge says?
2. How did you maintain your concentration on listening and recording instead of watching?

Process:

3. How does careful listening help you take notes?
4. Why is it important to write brief but legible notes?

Generalize:

5. What are other circumstances where you needed to carefully listen?

Apply:

6. How will these listening skills help you in the future?

GOING FURTHER:

- Take comments at a rabbit show. Compare your comment card to the recording judges card.
- Compare the skills you learn in this lesson to those of a court reporter, secretarial transcriber or any others you can think of.

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

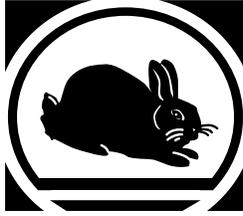
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Judging Rabbit Showmanship

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to judge showmanship

ABOUT THEMSELVES:

- Accepting responsibility

Materials Needed:

- Rabbit Showmanship score sheets (from Level I lesson)
- American Rabbit Breeders Association Standard of Perfection
- Carpet for table
- Pencils
- Members with rabbits to participate in a showmanship contest
- Certificates of achievement

ACTIVITY TIME NEEDED: 40 MINUTES

ACTIVITY

Leader Notes

As the member becomes older and experienced, he or she can be very helpful to the 4-H program by assuming roles of leadership. One way this can be accomplished is for the member to judge showmanship.

Pass out the rabbit showmanship score sheets and discuss.

Although the score sheet lists points, it is best to write down comments and not try to assess a point value for each step. If the participant has trouble carrying the rabbit to the table, note that on the score sheet.

Remember, the important thing is that all the tasks are complete. They do not have to be done in the exact order as on the score sheet. The judge must be alert and notice if the member checks everything. It is a good idea to note that a task was completed—you may want to check off the task as it is completed. If the member has a problem or if he or she does an outstanding job completing a task be sure to note this.

The rabbit should be in good condition. However, remember the member can only use what he has at this time, therefore, only a few points are on the condition of the rabbit.

The member should be confident and polite.

The judge should ask several questions after the member has finished all the tasks. Often, the member will tell what and why something is checked while performing the task. In this case you will have a lot of your questions already answered.

Leader Notes

Some typical questions are:

What breed of rabbit did you use for showmanship? Do you raise any other breeds of rabbits?

How old are you?

In what class would you enter this rabbit at a show? How many rabbits do you have?

How many varieties are there in your breed?

What is the senior weight for your breed?

Is your rabbit a 4 class or a 6 class rabbit? What were you checking for when you checked the toenails? Why did you check the tail?

After you have excused the showmanship participant, check over the score sheet and give a ribbon placing.

Generally, if the participants did a good job at checking the rabbit and they knew the answers to your questions, they will be in the purple ribbon group. Of course you will have to consider age; we would expect a 14-year-old to know more than a 7-year-old.

Using members of various ages, set up a mini-showmanship class for older members to judge.

Have the members judge the showmanship participants one at a time. After the first participant has been excused, have the group discuss how they have evaluated the performance.

Continue evaluating the showmanship participants until all have participated. The group has now placed the participants into ribbon groups. Out of the purple ribbon group, the top ones usually are called back for a second interview. Sometimes, they are asked to bring their rabbits. During the second interview, questions can be asked about any breed of rabbit or rabbit-related topic. If all seem to be equally knowledgeable, the participants often are asked to exchange rabbits and demonstrate how to examine them. Sometimes, a participant can do an excellent job at handling a particular rabbit but can not handle other rabbits.

The judge then makes the final selection of the top individuals. (If your group used the second interview, have the group decide on the top individuals.)

Distribute award certificates and ribbons. The certificates should be for participation and not for a placing.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What do you enjoy about judging rabbit showmanship?
2. What is a good, typical question to ask during a showmanship contest?

Process:

3. What do you feel is the most important component of rabbit showmanship?
4. What part does knowledge play in showmanship?
5. What is significant about the difference between showing a rabbit and being the judge?

Generalize:

6. What is significant about assuming the responsibility of a judge?

Apply:

7. How has your attitude about responsibility changed as a result of this activity?

GOING FURTHER:

- Assist the rabbit showmanship judge at a county fair.

REFERENCES:**Author:**

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University.

Reviewed By:

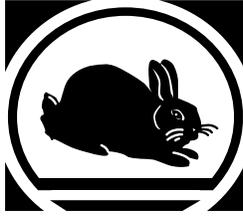
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Judging Rabbit Pelts

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- To judge a rabbit pelt
- The point value of each characteristic of the three types of fur pelts

ABOUT THEMSELVES:

- Importance of meeting standards

Materials Needed:

- Member Handout 1, Rabbit Pelt Scorecards
- Several different rabbit pelts

ACTIVITY TIME NEEDED: 40 MINUTES

ACTIVITY

One of the products of rabbit raising is the pelt. Some rabbits are raised primarily for the pelt, therefore, it is essential that the breeder knows how to judge pelts. We will discuss three types of fur pelts.

I. Commercial (normal) Fur Standards:

Designed to meet the requirements of fur normally used in the manufacture of fur garments or trim, the two fur classes of commercial, normal fur are Colored (all colors except white) and White (usable portions of pelt only). There also are classes for Satin and Rex fur.

Texture: *20 points* (Definition: The characteristic disposition or connection of threads, filaments, or other slender bodies interwoven as a fabric of close texture.) The coat should have “body.” It should not be harsh or like wire, nor too fine, silky, or woolly. It should have enough coarse guard hairs to offer resistance when stroked toward the head. This stroking action produces a reaction in the fur called “flyback.” That is the return, evenly and quickly, of the fur to its natural position over the entire body. The best furs stand straight up during and after flyback and do not assume a prone or flattened position. The undercoat should be soft and fine, interspersed thickly with heavier, longer guard hairs. These guard hairs serve to protect the soft undercoat.

Density: *15 to 20 points* (dense or thick) A good thick coat of fur all over the back, sides, chest, and flanks. Rabbits scoring high in density have a larger, more usable pelt. The underfur shall be soft and dense, thick, with heavy protruding guard hairs. These guard hairs should be visible down to the skin and extend above the underfur; the stomach fur will be shorter. Avoid soft, woolly fur on the stomach and crotch.

Leader Notes

Pass out the scorecards for judging rabbit pelts and discuss.

Have the members evaluate different rabbit pelts.

Discuss the members' evaluation of each pelt.

Pictures or rabbit samples of each of the characteristics would be beneficial

Leader Notes

Balance and Condition: *20-30 points* (balanced even and smooth) Fur length should be normal for the animal, with a differential between the tip of the guard hair and the underfur not to exceed $\frac{1}{8}$ inch. A dense coat is preferable to a thin coat. To be in proper condition, the fur must be set tight in the skin, without evidence of moult, broken spots, mats of fur, or stain. The guard hairs should be alive and not brittle or dry. The coat should be clean, bright, clear of stain.

Color: *15-25 points* Nature's natural color enhances the coat to a degree that cannot be duplicated by commercial dyeing; it is reality oriented.

Coat colors are classified as selfs, shaded, agouti and marking patterns. Any color may be expressed in terms of three factors: hue, chroma (purity or saturation) and brightness (or value). Generally, the most obvious or striking feature of color is its hue. The color is qualified as pale, dark, dull, light, clean, smutty, brindled, etc.

Matching colored pelts goes beyond selecting the ideal breed standard's surface color. The depth of surface color is important. It must be carried well down the hair shaft in the self and shaded classes. In the agouti classes, the proper intermediate color is important. To match correctly, the undercoat also must be considered. (Note color on hair shaft next to skin.)

Leather and Size: *20 points* The leather side of the pelt should be smooth, lightweight and supple. Cut pelt value if the tanned leather is heavy, bearded, torn, cut or extremely ragged on the edges, or wrinkled. The dorsal fur is the usable portion. This portion covers the area from the neck to the rump at the tail junction, and down the sides to the lower flanks. The ventral (belly) area has a shorter, softer fur. Size is important. The usable portion should be as large as possible.

Desired Qualities for Tanned Pelts: When judging pelts, we are guided by the commercial live animal fur standards. The best quality rabbit skins would be those taken from older animals during cold weather. Primeness of the pelt may be determined by blowing into the coat. A prime skin is the best condition possible. Unprimed areas can be identified by the short fibers of the new in-growing fur. Evidences of shedding and the differences in rate of growth of the new hair is clearly evident on the flesh side of the colored skins by the extent and intensity of the pigment. White skins show only a faint amount of this discoloration. Again, the poorest quality skins do not have flyback; they feel soft and the fur mats easily.

II. Satin Fur Standards:

The ideal Satin fur should be fine, very dense and thick. The soft, dense undercoat should be interspersed thickly with luminous, slightly coarser, guard hairs, visible to the skin and extending above the underfur evenly $\frac{1}{8}$ inch. The coat should be well balanced, of uniform length, about 1 inch to $1\frac{1}{8}$ inches long. Allowable lengths include plus or minus $\frac{1}{8}$ inch. It must have a distinct glossy, lustrous sheen.

III. Rex Fur Standards:

The Rex fur is short and plushlike. It stands straight upright and has guard hairs almost of identical length with those of the undercoat. Rex fur must be extremely dense, $\frac{5}{8}$ inch long, straight, upright with identical length and texture throughout the entire body. The fur has a lustrous sheen with an incredible supply of guard hairs, evenly distributed over the body without noticeably protruding. The fur is to be of good body with a plushlike effect and distinct, springy resistance to the touch. It should feel smooth to the touch without being soft or silky.

For the complete guide for grading and matching pelts, it is best to use a special card, tailored for each fur type, with delineation and point values for each factor.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What are the three types of rabbit pelts?
2. What did you find the easiest/hardest about judging rabbit pelts?

Process:

3. Why are standards important to meet when working with pelts?

Generalize:

4. In what other activities have you had to meet a certain standard?
What were the standards and how did you meet them?

Apply:

5. Standards are all around us. What are some standards that you think you will be required to meet in the future?

GOING FURTHER:

- Attend a rabbit fur or wool show.
- Work with a judge at a fur show.

REFERENCES:

Cooperative Extension Service, Washington State University
Standard of Perfection, American Rabbit Breeders Association

Author:

Daniel K. Andrews, Washington State University; Clarence W. Linsey,
Kansas Rabbit Breeders Association; James P. Adams, Extension
Specialist, 4-H Youth Programs, Kansas State University

Reviewed By:

Rabbit Design Team



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JUDGING RABBIT PELTS

RABBITS, LEVEL IV

Member Handout 1, Rabbit Pelt Scorecards

SATIN FUR PELTS

| Character | Points | Judge or Select for: |
|-----------|-----------|--|
| Texture | 20 | Roll-back qualities necessary for durability |
| Density | 15 | Lush, thick-set coat, cushiony feel |
| Balance | 10 | Evenness of texture, density, and length |
| Condition | 10 | Prime, finished, free from stain and dirt |
| Sheen | 10 | High degree of luster, bright |
| Color | 15 | Proper surface, intermediate, undercolor |
| Leather | 10 | Lightweight, soft, pliable |
| Size | <u>10</u> | Largest usable portion of pelt |
| | 100 | |

REX FUR PELTS

| Character | Points | Judge or Select for: |
|-----------|-----------|--|
| Density | 20 | Extremely thick-set, plushlike guard hairs plentiful |
| Texture | 15 | Upright, springy, smooth to the touch |
| Balance | 15 | Same length, density, texture over entire pelt |
| Condition | 15 | Prime, lustrous, free from breaks, bare spots |
| Color | 15 | Proper surface, intermediate, undercolor |
| Leather | 10 | Lightweight, soft, pliable |
| Size | <u>10</u> | Largest usable portion of pelt |
| | 100 | |

NORMAL FUR PELTS

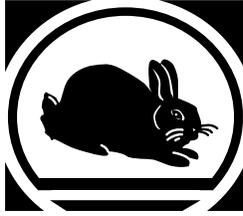
| Character | Points | Judge or Select for: |
|-----------|-----------|--|
| Texture | 20 | Flyback qualities necessary for durability |
| Density | 15 | Lush, thick-set coat, cushiony feel |
| Balance | 15 | Evenness of texture, density, and length |
| Condition | 15 | Prime, finished, free from stain and dirt |
| Color | 15 | Proper surface, intermediate, undercolor |
| Leather | 10 | Lightweight, soft, pliable |
| Size | <u>10</u> | Largest usable portion of pelt |
| | 100 | |

Think Back:

How did your responsibility change as you progressed from recording judges' comments to that of maintaining a standard when selecting pelts?

What is significant about having the opportunity for responsibility and actually accepting a responsibility?

Why are standards important?



Conducting Tours and Field Trips

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to prepare for a tour and field trip

ABOUT THEMSELVES:

- Importance of decision making

Materials Needed:

- Calendar
- Chalkboard and chalk

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY

We are going to plan a field trip to some rabbitries in this area. First, we need to decide which rabbitries we would like to visit.

Select a date and time when your group would like to make this tour.

After you have selected the rabbitries you wish to visit, you need to contact each of the rabbitries to see if you could tour the rabbitry and if it would be convenient to have the group visit on the selected date. If the selected date isn't convenient for the rabbitry, ask for a date that would be convenient.

Now, decide on transportation. Will cars be used or will a bus be available? The group needs to be sure that sufficient transportation is available to transport the group.

At this time, have the group make a list of questions that they would like to ask when the group visits each rabbitry.

After the group has completed their assignments, they will need to meet to make final plans. After the field trip is planned, each rabbitry should be contacted and given an approximate time when to expect the group.

Leader Notes

Ask the group for suggestions.

The Kansas State Yearbook or the American Rabbit Breeders Association Yearbook are good places to find rabbitries in your area.

Appoint a member to make these contacts.

Have another member check on and set up transportation.

Use chalkboard.

Leader Notes

Date of the Field Trip:

1. Meet at a central location, to carpool.
2. Arrive at the first rabbitry on time. The other times are only approximate.
3. Introduce the host to the group. Let the host conduct the tour. The group should ask questions as they are touring the rabbitry.
4. The group should be polite and not touch any of the equipment or rabbits unless given permission to do so.
5. Thank the breeders for showing you their rabbit operation.

After the tour:

The members should write thank-you notes to the breeders for sharing their rabbitries.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What are several things your group decided on before beginning the field trip activity?
2. What were the events that the group decided on together?

Process:

3. When/where would individual decisions affect the group?
4. Why was it important for the group to make decisions concerning the field trip?

Generalize:

5. What is the significance of group decisions versus individual decisions?
6. How does decision making affect other parts of your life?

Apply:

7. How will you act differently in the future as a result of reviewing group and individual decision making?

REFERENCES:

Kansas State Rabbit Breeders Yearbook, Shirley Wilson, Editor, 7415
North Yaggy Road, Hutchinson, Kansas 67502
American Rabbit Breeders Association Yearbook, American Rabbit
Breeders Association, Box 426, Bloomington, Illinois 61701

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P.
Adams, Extension Specialist, 4-H Youth Programs, Kansas State
University

Reviewed by:

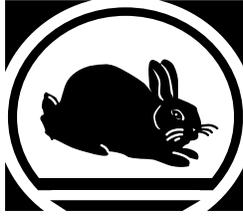
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Conducting a Rabbit Skillathon

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to conduct a rabbit skillathon
- To work as a team member

ABOUT THEMSELVES:

- Facilitator skills

Materials Needed:

See individual stations to determine the supplies needed

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

A skillathon involves experiential learning. The members learn by attempting to perform a task before being told how to do it.

Use older members as committee members and/or station facilitators to conduct for younger members.

The skillathon committee needs to:

1. Decide on the stations wanted, considering time and resources available.
2. Make up a realistic situation and task for each station.
3. Decide who will be in charge of each station.
4. Decide on the equipment or supplies needed at each station.
5. Delegate responsibility for gathering supplies.

The skillathon is an excellent teaching technique that should be considered with any lesson.

Responsibilities of the station facilitator:

1. Familiarize yourself with the topic, supplies and training aids.
2. Compile a list of questions to ask each team.
3. Set up your station to include a stand-up situation and task sign, and the necessary supplies.
4. Allow the team members to discover for themselves how to accomplish the task, instead of telling or showing them how first.
5. Respond to questions with questions so the answers will be their own.
6. Ask the members how they would set up and conduct this same activity at a 4-H project meeting.
7. Mark the team's participation card.
8. Prepare your station for the next team.
9. Following the skillathon, inventory and pack up all equipment, materials and signs.

Leader Notes

Each station will need at least one facilitator. Each station should have its own supplies.

POSSIBLE STATIONS:

1. IDENTIFYING BREEDS OF RABBITS

Supplies: Pictures of 10 to 15 rabbit breeds, cards with breed names, and cards with breed characteristics.

Directions: Have the teams match the cards with breed names and characteristics with breed pictures. Let them check their answers. Follow up with questions.

Situation: You are showing one of the new members of your 4-H rabbit project the various breeds at the fair.

Task: Identify the breeds and tell something about each breed.

2. IDENTIFYING PARTS OF RABBITS

Supplies: Picture of rabbit with the parts numbered, sheets with names of the parts, pencils.

Directions: Give the team sheets with names of the rabbit parts for the team to match names with the numbered parts of the drawing. Let them check their answers.

Situation: You are preparing for the rabbit showmanship and judging contest.

Task: Match the names with the parts.

3. DETERMINING A RABBIT'S FINISH

Supplies: Two rabbits with different finishes.

Directions: Have the teams demonstrate how to determine finish. Follow up with questions.

Situation: You want to select your most desirably finished market rabbit.

Task: Demonstrate how to determine a rabbit's finish.

4. IDENTIFYING RABBIT DISQUALIFICATIONS

Supplies: A list of disqualifications.

Directions: Have the team name as many disqualifications as they can. Follow up with questions.

Situation: A rabbit may be disqualified for several reasons.

Task: Name as many disqualifications as you can and give the reason for each disqualification.

It would be helpful to have a rabbit or two that have disqualifications.

5. JUDGING A RABBIT CLASS

Supplies: 2 to 4 easily placed rabbits, scorecards.

Directions: Allow the team to judge the rabbits. Ask questions concerning the class.

Situation: You have to judge a class of rabbits.

Task: Judge and place the class.

6. SCORING A JUDGING CLASS

Supplies: Hormel computing slide, pencils for scoring the results in station 5.

Directions: Provide teams with the official placings, and cuts. Have them find their score.

Situation: An expert rabbit judge also judged the class of rabbits and presented placings and cuts.

Task: Using the expert's decision as the "official" placing, what is your score for the class.

7. UNDERSTANDING A FEED TAG

Supplies: Feed tags.

Directions: Provide the team with feed tags and let them explain what they read. Ask questions and discuss.

Situation: A feed store customer asks your help in understanding a feed tag.

Task: Explain to the customer what information the tag contains and tell how this helps in choosing a feed for a herd.

Divide the group into teams of 2 to 4 and assign each team a station. Move the teams to the next station every 10 minutes.

After all the teams have rotated through the stations, have each team select a station and give a short presentation to the entire group on how the team solved the task at a particular station.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What station did you like the best? The least?
2. What was the easiest/hardest part of being a station facilitator?

Remember to compliment each member about a specific item.

Process:

3. What is the most important part of watching the groups work together?
4. How do you facilitate group decision making?

Leader Notes

Generalize:

5. What did you learn about your facilitating skills?

Apply:

6. When might you use these facilitator skills in the future?

GOING FURTHER:

See lessons on:

- Identifying Rabbit General Faults and Disqualifications
- Judging a Rabbit Class
- Identifying Parts of a Rabbit
- Understanding a Feed Tag
- Identifying Breeds of Rabbits
- Scoring a Judging Class

REFERENCES:

Agricultural Extension Service, University of Minnesota

Authors:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; Thomas D. Zurcher, Extension 4-H Specialist, University of Minnesota; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

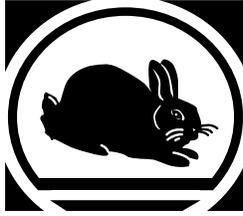
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Conducting a Rabbit Quiz Bowl

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- To conduct a quiz bowl
- To increase their knowledge of rabbits

ABOUT THEMSELVES:

- Understanding rules

Materials Needed:

- Electronic Quiz Bowl Unit (optional)
- Questions and answers about rabbits

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Leader Notes

How to Run a Quiz Bowl

It takes several people to run a quiz bowl contest in a formal way. A county- or state-level contest would use an electronic quiz bowl unit with timers and responders for each team member plus a narrator, judge, timer, scorekeeper and study-room monitors.

However, we can have a quiz bowl at our project meeting in a less formal setting. Here are a few basic steps:

1. Divide group into teams of two, three, or four members each. (County or state teams would require four members.)
2. If more than two teams participate, make a tournament type bracket to determine team play order and sequence.
3. True-false or yes-no type questions should not be used.
4. A match will consist of **32 questions**. The first half of the questions will be one-on-one. That is, each respective team member will take turns for the option of answering each question. Contestant 1A will go against 2A, 1B against 2B, etc. The last half of the questions will be toss-up for any member of either team to answer.
5. Bonus questions will be used to break a tie, as no competition may end in a tie.
6. No talking among team members in either the one-on-one or the toss-up portion of the contest should be allowed.

Have the Level IV members set up the quiz bowl. Explain the rules to them. Have them design questions and appropriate answers. Make sure they have enough questions for the desired number of matches.

Quiz bowls may be run by having a timer use a regular watch or stop watch and having members raise their hands to answer questions.

Leader Notes

7. The first person who activates the signaling device must begin to answer the question within five seconds. A correct answer is awarded **one** point. If the question is not answered or is incorrect, **the opposing team will be given a chance to answer. No points will be deducted for an incorrect answer.**
8. If no one activates the signaling device within 5 seconds, the question will be withdrawn.
9. When the signaling device is activated before the question is completely read, the moderator shall stop reading the question at once and that person may answer the question. If correct, the team will receive credit. If incorrect, the question will be re-read in its entirety and the other team will have an opportunity to answer it **within five seconds.**
10. If a team member other than the one who signaled answers, the question will be thrown out regardless of whether the response is correct or incorrect. If this happens more than once in a round by the same team, one point will be deducted for each additional time this happens, with the question thrown out each time.
11. Questions within each round (preliminary, quarter-final, semi-final) will be the same. Different sets of questions will be used for each successive round. This necessitates isolating teams until their match. No one may enter or leave the isolation room once the match has begun, unless instructed by the contest official. The winning teams may not return to isolation until the next round begins.
12. The team with the most points after 32 questions is the winner.

After the Quiz Bowl is done, have the members who conducted the quiz bowl discuss what they did well, what they need to do better next time, what mistakes were made. Do a general critique.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What did you like/dislike about setting up and carrying out a quiz bowl?

Process:

2. Why is it important to follow the specific rules of the quiz bowl?

Generalize:

3. What are rules that influence other activities that you work with?

Apply:

4. What are some rules that will be important to your future plans?

REFERENCES:

Registrar's Study Guide, American Rabbit Breeders Association
Judge's Study Guide, American Rabbit Breeders Association
A Progressive Program For Raising Better Rabbits And Cavies, American Rabbit Breeders Association
Standard Of Perfection, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team

Think back: (Record these questions and answers on a separate sheet for your record book.)

Which of the three teaching/learning methods used in the last three lessons was most effective? Why?

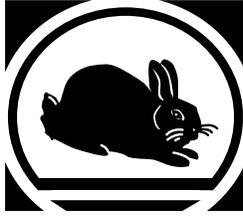
When and why might you select a different learning method?



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Selecting a Judging Class

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to select a judging class

ABOUT THEMSELVES:

- Use of purpose and prioritizing with decision making

MATERIALS NEEDED:

- Classes of rabbits to judged
- Judging score cards

ACTIVITY TIME NEEDED: 35 MINUTES

ACTIVITY

Leader Notes

A class is made up of four animals of the same sex and relatively the same age. The idea behind a judging class is not to “trick” the members, but instead to provide a learning experience. Therefore, in selecting the class, strive not to find the most difficult class to place, but instead choose a “placeable” class that requires the members to think through their decisions.

For example, a typical class could contain an easy top place, an easy bottom place and a middle pair that could arguably be placed either way. Variations of this basic theory are an easy top or bottom and the other three placings would be close, or a good class can consist of two close pairs. Avoid making a class of four animals that are very similar and, therefore, difficult to place.

When selecting animals for a class, decide what breed objective or judging principle you want to accomplish. Example: point out animals with disqualifications, type faults, marking faults, color differences, and fur or wool differences. Be sure the items are readily detectable—unless trying to make a hard class.

Obtain the services of qualified judges for official placings. Remember the animals are placed according to the American Rabbit Breeders Association Standard of Perfection—not a group or audience consensus.

For meat pen classes use the following guidelines.

Meat type—40 percent—most important criteria. Select animals that are short and compact, with well-filled and rounded bodies of firm flesh. Smooth, well-filled hindquarters and good depth of body are especially important. Hindquarters are most important, loin second, and forequarters are third.

Have the group judge the classes of rabbits. Ask the group if the classes were selected correctly.

Discuss the classes and why they were selected.

Leader Notes

Condition—30 percent—Try to have both fur and flesh in prime condition.
Uniformity—20 percent—Should be present in meat type, weight, size, appearance, condition and fur.
Fur—10 percent—Conform to breed description and uniform on all three animals.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What is a judging class?
2. What other experiences have you had in judging rabbits?

Process:

3. Why is it important to understand the selection of a class?
4. What purposes would you select classes for? Why?
5. Why is it important to prioritize or rank rabbits?

Generalize:

6. What projects or activities do you prioritize?

Apply:

7. How does having a purpose help you make a decision?
8. How will you prioritize things differently, now that you've completed this lesson?

GOING FURTHER:

- Select several classes as part of a judging school or workout.
- Help set up or conduct a complete judging contest.
- Volunteer to be a rabbit judging coach for younger members.

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

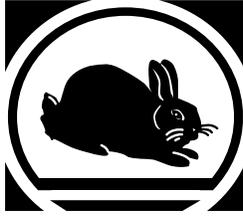
Reviewed By:

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Conducting a Judging Contest

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to conduct judging contest

ABOUT THEMSELVES:

- The importance of learning by doing
- Learn self-confidence associated with accomplishing a new task
- The importance of planning

MATERIALS NEEDED:

- Test on rabbits
- Rabbits for identification
- Identification sheets
- Rabbits to be used in judging classes
- Judging score cards
- Registration sheets
- Pencils

ACTIVITY TIME NEEDED: 90 MINUTES

ACTIVITY

Members can learn how to evaluate rabbits by participating in rabbit judging contests.

At least two judging classes should be selected for the contest.

A test on rabbits should be prepared for the contest. The test should have 25 to 50 questions.

Ten to 20 rabbits should be used in the identification contest.

Steps in Holding the Contest:

1. Select the judging classes and obtain the official placings.
2. Put the rabbits to be used in the identification contest in their cages and make a key for the identification.
3. Prepare a station for the contestants to take the rabbit test.
4. Set up a table for the official scorers to check scores and total results.
5. Set up registration table.
6. One helper is needed at each judging class, the identification and test station.
7. Several helpers will be needed to serve as official scorers.

Leader Notes

Variations of this procedure could be held depending on time, amount of help, and rabbits available. For instance, you could have any number of the three major parts: 1. Judging Classes, 2. Identification, 3. Written test.

Leader Notes

Conducting the Contest:

1. Register the contestants.
2. Divide the contestants into four groups.
3. One group will go to Judging Class I, another to Judging Class II, another to the Identification and the last group will go to the test station.
4. Collect judging cards, identification sheets, and tests after each group has completed a station.
5. Give official placings and answers to the official scorers so they can check them.
6. After every contestant has finished, the official scorers will need some time to complete the total score for each contestant.
7. Present results.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What was the easiest/hardest part of conducting a judging contest?

Process:

2. Why is it important to have everything ready to go when the contest begins?
3. What is the difference between participating in and conducting a judging contest?
4. What are the skills that you used when conducting a judging contest?

Generalize:

5. What planning and organizational skills do you think you will use when participating in other events?

Apply:

6. How will you use what you learned about conducting a judging contest in the future?

GOING FURTHER:

- Be the official judge and explain your placings and select the classes for a group of young members.

REFERENCES:

Standard of Perfection, American Rabbit Breeders Association
A Progressive Program For Raising Better Rabbits & Cavies, American
Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P.
Adams, Extension Specialist, 4-H Youth Programs, Kansas State
University

Reviewed by:

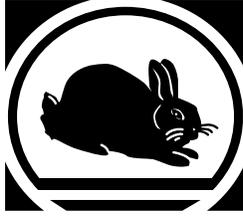
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Preparing for and Conducting a Rabbit Show

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- The steps needed to hold a successful rabbit show

ABOUT THEMSELVES:

- To understand the importance of the step-by-step process
- To recognize consequences of decisions

Materials Needed:

- Entry blanks
- Comment cards
- Sanction forms
- Chalkboard and chalk or flip chart and marker

ACTIVITY TIME NEEDED: 40 MINUTES

ACTIVITY

Leader Notes

In order to hold a successful rabbit show, it is important to know the steps needed. Understanding how to prepare and conduct a rabbit show will make members better exhibitors.

Put these steps on a chalkboard or flip chart

1. Select a date for the show.
2. Secure a location for the show.
3. Select a show superintendent, assistant superintendent and show secretary.
4. Send for an American Rabbit Breeders Association (ARBA) sanction if this is to be a sanctioned show. (Most 4-H shows are not sanctioned so this step can be skipped.)
5. Obtain entry blanks and comment cards. These can be purchased from the ARBA. If this is to be a co-oped show, co-op cards will also be needed.
6. Hire the judge(s) for the show. (Remember, if this is an ARBA sanctioned show, only licensed judges can be hired.)
7. Decide which breeds to be sanctioned.
8. Order the breed sanctions from the specialty clubs.
9. Prepare the catalog and mail to possible exhibitors.
10. Secure trophies and ribbons.
11. Appoint a committee to be in charge of the food stand.
12. The show secretary will collect all entries and entry fees.
13. The show superintendent, with the assistance of the group, should set up the showroom the day before the show if possible.
14. The show superintendent will see that the show is started on time and that the show runs smoothly.
15. Be sure to hand out the trophies and ribbons won by the exhibitors.

Leader Notes

16. If this is a sanctioned show, the show secretary is responsible to see that all the reports are completed and returned on time.
17. All members should help with the clean up after the show.

Steps 4, 7, 8 and 16 can be ignored if this isn't to be an ARBA sanctioned show.

The show superintendent is responsible to see that the rabbits get to the judging tables when needed.

Members will be needed to take comments at the judging tables.

Now have the group plan a rabbit show.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What was the easiest/hardest part of preparing and conducting a rabbit show?

Process:

2. What did you learn from this broad and involved endeavor?
3. Why is it important that all pieces of a project be ready and prepared to go at any given time?

Generalize:

4. What did you learn about yourself when doing this lesson?
5. What did you learn about others?

Apply:

6. How can you apply what you learned to other situations in your daily life?

GOING FURTHER:

- Attend rabbit shows before conducting your own.
- Have licensed judges speak to your group about being a judge, what's involved and how members can become judges.

REFERENCES:

Secretaries' Handbook, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team

Think back: (Record these questions and answers on a separate sheet for your record book.)
Compare the skills needed to select a judging class, conduct a judging contest, or conduct a rabbit show? How are they different or the same?

How does purpose and responsibility change in the three previous events?



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Checking Water Quality for Nitrates & Nitrites

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to test water supplies for nitrates and nitrites

ABOUT THEMSELVES:

- To develop an environmental awareness
- Importance of safety when working with chemicals

Materials Needed:

- Safety glasses
- Test tubes
- 4 M sulfuric acid
- Hot water bath
- 1.5 M sodium carbonate
- Litmus paper
- 0.1 M iron (II) sulfate (ferrous sulfate)
- Concentrated sulfuric acid
- 1 M ammonium sulfate
- Distilled water
- Test tube holder
- Test tube rack
- Scales
- Graduated cylinder (100ml)
- Eye droppers
- Glass stirring rod

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Leader Notes

Too many nitrates and nitrites in the rabbit's drinking water are harmful. Often, abortions are the result of too much nitrates.

To check your water supply, the following procedure can be used:

1. Collect a sample of your water.
2. Put on the safety glasses. Always wear safety glasses when working with chemicals.
3. Prepare a 0.1 M (M = mole) solution of iron (II) sulfate. Mole is the amount of a substance with a weight in grams equal to molecular weight of the substance. Weigh out 1.52 grams of iron (II) sulfate. Now add distilled water to make a total of 100 ml (milliliters) of solution. This must be freshly prepared each time you test for nitrates and nitrites.

Be sure to stress safety procedures **BEFORE** you start the activity.

If a school laboratory is available, perhaps this lesson could be held there.

You might ask a science or chemistry teacher to assist with this lesson.

Leader Notes

4. Prepare the 4 M sulfuric acid. Put 78 ml of distilled water in the graduated cylinder and add concentrated sulfuric acid until you have 100 ml of solution. NEVER POUR WATER INTO CONCENTRATED ACID.
5. To 5 ml of your water sample, add 3 ml of 1.5 M sodium carbonate. Heat for 10 minutes in the hot water bath. Separate any precipitate that forms. The liquid portion is what you will need to use in the following tests. We will call this the prepared solution. This eliminates the heavy cations (positively charged ions) that might cause interference in the following tests. (You may wish to take 20 ml of your water sample and evaporate it down to 5 ml in order to concentrate the nitrates and nitrites.)
6. To 10 drops of the prepared solution, add 4 M sulfuric acid dropwise until the solution is acidic. (Use the litmus paper to check to see if the solution is acidic. Blue litmus paper will turn red if the solution is acidic.) Stir and touch your stirring rod to the litmus paper.
7. Add 5 drops of freshly prepared 0.1 M iron (II) sulfate solution. If nitrites are present, the solution will become dark brown.
8. If the nitrite test was negative, put 10 drops of your prepared solution in a test tube. Add 4 M sulfuric acid dropwise until acidic. Now add 5 drops of 0.1 M iron (II) sulfate solution. Now add 5 drops of concentrated sulfuric acid as you hold the test tube in an inclined position so the sulfuric acid runs down the side and forms a separate layer at the bottom. Within a few minutes a brown ring will form at the interface of the two liquids if nitrates are present.
9. If nitrites are present, to 10 drops of prepared solution add 4 M sulfuric acid until acidic. Now add 4 drops of ammonium sulfate. Evaporate to a moist residue. Add 10 drops of distilled water and follow procedure 8.
10. If nitrates and/or nitrites are present in your water supply check with your county Extension agent about having the water checked at Kansas State University for the actual amount of these pollutants.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What was the easiest/most difficult thing about testing your water for nitrates and nitrites?

Process:

2. What affect could nitrates and nitrites have on your rabbit's health?

Generalize:

3. What are other concerns about water quality that we have?
4. What other environmental concerns do you have? Why?

Apply:

5. How will you act differently in the future as a result of this activity?

GOING FURTHER:

- Check your water supply for nitrates and nitrites.
- Have a chemical analysis done on your water supply.

REFERENCES:

College Chemistry With Qualitative Analysis, Holtzclaw and Robinson,
8th Edition

Semimicro Qualitative Chemical Analysis, Louis J. Curtman

Author:

Clarence W. Linsey, Chemistry Department Chairman, MidAmerica
Nazarene College; James P. Adams, Extension Specialist, 4-H Youth
Programs, Kansas State University

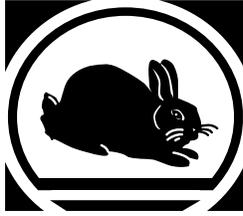
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Balancing a Ration

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to balance a ration for their rabbits

ABOUT THEMSELVES:

- Impact of calculations

Materials Needed:

- Member Handout 2, Composition of Feeds
- Calculator
- Paper and pencils

ACTIVITY TIME NEEDED: 35 MINUTES

ACTIVITY

Leader Notes

The most expensive item in the production of rabbits is feed. If one hopes to make a profit, the cost of feed needs to be kept to a minimum while at the same time providing an adequate diet for rapid growth.

The National Research Council recommendations for crude protein for the following productive functions are: Growth—16 percent; Maintenance—12 percent; Gestation—15 percent; Lactation—17 percent.

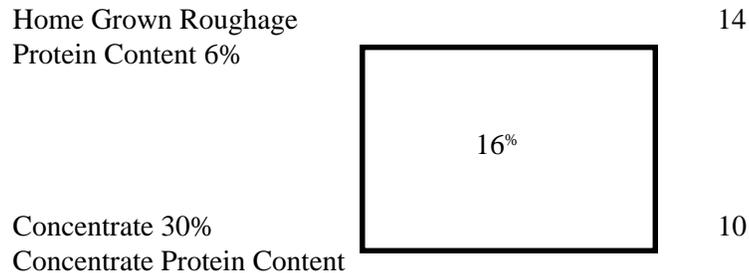
Even though rabbits are not efficient users of fiber, they can be fed a high percentage of fibrous feed including indigenous grasses and leafy shrubs. Scientists have reported the digestibility of alfalfa crude fiber in selected animals as follows: Rabbit—18 percent; Horse—35 percent; Pony—38 percent; and Guinea Pig—38 percent.

Scientists at Oregon State University have observed that adding fiber to a high-energy, low-fiber diet improved the growth of weaning rabbits. Therefore, rabbits require some level of fiber for maximum growth. Scientists have reported that diets with less than 6 percent tended to promote diarrhea. Other researchers have reported that indigestible fiber of a relatively large particle size may be of value in preventing mucoid enteritis. Currently, it is recommended that fiber levels of not less than 10 percent and of relatively large particle size should be fed.

Rabbits can be used to make use of garden waste, roadside grass and weeds, lawn clippings, home food preparation by-products such as potato peels, etc. Rabbits can convert these “wastes” into a nutritious, white meat that can add variety to the family meat diet. These are satisfactory feeds for rabbits if one uses additional protein to balance them properly. Plant protein supplements such as: soybeans, peanuts, sesame, cottonseed

Leader Notes

and linseed meals in pea-sized cake, flake or pelleted form can be used with whole grain to make up the concentrate part of the ration. To figure out how much concentrate you need, the Pierson Square is a handy tool.



Steps in using the Pierson Square:

1. Draw a square.
2. Write desired protein level of feed in the center.
3. Place in upper left, the protein content of the home-grown feed.
4. Place in lower left, the protein content of your concentrate.
5. Subtract diagonally the small number from the larger number.
6. Reading horizontally gives the pounds of each feed needed.

Have members do the Pierson Square using different roughage and concentrate levels.

Using the handout "Composition of Feeds," do a Pierson Square for a growth, maintenance, gestation and lactation ration.

Answer: Sweet potatoes have 1.8 percent crude protein and cottonseed meal has 41.6 percent crude protein. Lactating does need 17 percent crude protein in their feed. Using the Pierson Square you would need 24.6 pounds sweet potatoes and 15.2 pounds of cottonseed meal to make a diet with 17 percent crude protein.

In the example above, you need to feed 14 pounds of home grown roughage to every 10 pounds of protein concentrate. In such diets, you will need to supply the rabbits with a salt source.

Could you make a balanced diet for your lactating does using sweet potatoes and cottonseed meal? Let's also figure a balanced diet for a growth, maintenance and gestation ration.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What was the easiest/hardest thing about using the Pierson Square?

Process:

2. Why is it important to balance the ration of your rabbit?
3. Why do you need a formula to do this?

Generalize:

4. What impact does careful calculation have on other projects?
5. In what other circumstances do you use a formula to calculate an outcome?

Apply:

6. How does being able to calculate an outcome impact your approach to a problem or concern?

GOING FURTHER:

- Visit a feed mill to observe a balanced ration being made.

REFERENCES:

Cooperative Extension Service, New Mexico State University

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



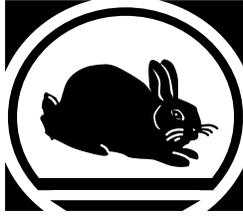
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BALANCING A RATION
RABBITS, LEVEL IV
Member Handout 2, Composition of Feeds

| | <u>DM</u> | <u>TDN</u> | <u>DE</u> | <u>CP</u> | <u>Ca</u> | <u>P</u> |
|--------------------------|-----------|------------|----------------|-----------|-----------|----------|
| | Percent | | Kcal per lb | Percent | | |
| Barley grain | 89 | 70 | 1450 | 11.7 | 0.08 | 0.42 |
| Beet pulp, dried | 91 | 70 | 1375 | 9.1 | 0.68 | 0.10 |
| Bread, dried | 96 | 100 | 1900 | 15.8 | | |
| Brewers grain, dried | 92 | 58 | 1342 | 25.9 | 0.27 | 0.50 |
| Corn dent #2 | 89 | 82 | 1661 | 8.9 | 0.02 | 0.31 |
| Cottonseed meal, solvent | 91 | 66 | 1320 | 41.6 | 0.15 | 1.10 |
| Linseed meal, expeller | 91 | 70 | 1400 | 35.2 | 0.44 | 0.89 |
| Milk, cows, whole | 12 | 25 | 298 | 3.1 | | |
| Milk, dehydrated | 94 | 117 | | 35.2 | 0.89 | 0.68 |
| Oats, grain | 89 | 65 | 1320 | 11.8 | 0.10 | 0.35 |
| Sorghum, milo, grain | 89 | 84 | 1680 | 11.0 | | |
| Soybean meal, solvent | 89 | 82 | 1640 | 45.8 | 0.32 | 0.67 |
| Wheat grain | 89 | 79 | 1595 | 13.0 | | |
| Wheat bran | 89 | 57 | 1193 | 16.0 | 0.14 | 1.17 |
| Alfalfa hay, pre-bloom | 89 | 58 | 1160 | 19.1 | 0.89 | 0.27 |
| Alfalfa hay, early bloom | 90 | 40 | 853 | 16.6 | 1.12 | 0.21 |
| Clover, red, hay | 88 | 43 | 874 | 13.3 | 1.42 | 0.19 |
| Lespedeza, hay | 90 | 39 | 837 | 14.8 | | |
| Oat hay, early bloom | 93 | 26 | 500 | 4.3 | 0.23 | 0.21 |
| Soybean hay | 89 | 45 | 683 | 14.5 | 1.15 | 0.20 |
| Sudangrass hay | 89 | 43 | 920 | 11.3 | 0.50 | 0.28 |
| Vetch, common hay | 88 | 46 | 945 | 17.6 | 1.20 | 0.30 |
| Cabbage, aerial | 8 | 8.0 | 155 | 1.7 | | |
| Carrots, roots | 12 | 10.8 | 198 | 1.2 | 0.05 | 0.04 |
| Rutabaga, roots | 13 | 10.0 | 230 | 1.3 | | |
| Potatoes, sweet, tubers | 42 | 28.0 | 709 | 1.8 | | |
| Turnips, roots | 9 | 7.4 | 140 | 1.2 | 0.06 | 0.02 |

Digestible Matter—DM; Total Digestible Nutrients—TDN; Digestible Energy—DE; Crude Protein—CP; Calcium—Ca; Phosphorus—P.



Formulating a Rabbit Ration

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- The rabbits need for crude protein in their diet
- To use a simple math formula for calculating feed needs

ABOUT THEMSELVES:

- The importance of mathematical adjustments

Materials Needed:

- Member Handout 3, Nutrient Content of Feedstuffs
- Activity Sheet 2, Checking Rations for Protein
- Calculator
- Pencils and paper

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Rabbits need sufficient crude protein in their diet. If you do not feed commercial rabbit pellets, you need to know how to formulate a balanced diet.

Let's start by trying to formulate a 16 percent crude protein ration using the following feeds:

Alfalfa hay
Barley
Salt
Corn
Soybean meal

Your task is to determine how many pounds of each feed it takes to make 100 pounds of total ration and have 16 percent (16 pounds) of crude protein. Use the handout showing nutrient content of feedstuffs to determine what percent of each feed is crude protein. **Remember** the total weight of the ration must equal 100 pounds.

Leader Notes

Ask the members to calculate the number of pounds of each feed needed in a 16 percent crude protein diet if they use alfalfa hay, corn, barley, soybean meal and salt, to make 100 pounds of feed. Pass out "Nutrient Content of Feedstuffs."

Answer: The suggested ration uses 60 percent alfalfa hay, 21.5 percent corn, 15 percent barley, 3 percent soybean meal and 0.5% salt. Thus, a 100- pound ration would need 60 pounds alfalfa hay, 21.5 pounds corn, 15 pounds barley, 3 pounds soybean meal and 0.5 pounds salt. Change percent values to decimals and multiple by 100.

Hand out Activity Sheet 2, "Checking Rations for Protein," and let members check the sample rations to see if the crude protein percentage is correct. Rations B, C, E, H are correct.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. How did you approach figuring crude protein for various diets?
2. Did you use a calculator? Why or why not?

Process:

3. Why is it important to compute the protein content of a ration?
4. How does the percent of the crude protein affect the cost of your feedstuffs?

Generalize:

5. How do you make adjustments in other projects to control costs?

Apply:

6. How can you apply what you've learned about adjustments to new situations?
7. How might a computer assist you in making calculations and adjustments?

GOING FURTHER:

- Check your rabbit rations for crude protein content.
- Visit a feed mill and watch rabbit pellets being made.

REFERENCES:

Cooperative Extension Service, New Mexico State University

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



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FORMULATING A RABBIT RATION
RABBITS, LEVEL IV
Member Handout 3, Nutrient Content of Feedstuffs

Table 1.

| | Dry Matter (%) | Crude Protein (%) | TDN (%) |
|--------------------------------|----------------------|-------------------------|------------|
| Roughages | | | |
| Fescue Hay | 88.5 | 10.5 | 54 |
| Brome Hay | 90.0 | 10.3 | 55 |
| Alfalfa Hay | 89.2 | 17.1 | 58 |
| Prairie Hay | 92.0 | 5.8 | 51 |
| Clover Hay | 87.0 | 15.7 | 54 |
| Concentrates | | | |
| Corn, Shelled | 86.5 | 9.9 | 91 |
| Corn, Ear | 87.0 | 9.3 | 90 |
| Barley | 88.1 | 13.3 | 81 |
| Oats | 89.5 | 13.5 | 77 |
| Grain Sorghum (Milo) | 87.0 | 10.1 | 84 |
| Wheat Bran | 89.0 | 17.1 | 70 |
| Wheat | 88.0 | 14.4 | 88 |
| Protein Supplements | | | |
| Cottonseed Meal | 92.5 | 44.3 | 74 |
| 44% Soybean Meal | 89.0 | 51.5 | 81 |

From United States-Canadian Tables of Feed Composition, Second Rev., 1972, National Academy of Sciences.
 Expressed on a Dry Matter Basis

FORMULATING A RABBIT RATION

RABBITS, LEVEL IV

Activity Sheet 2, Checking Rations for Protein

SUGGESTED RATIONS

Have members use Member Handout 3, Nutrient Content of Feedstuffs to compute total pounds crude protein per ration to see if it is the correct percentage of total ration.

15 Percent Crude Protein Rations

| Ration A | Percent | Ration B | Percent |
|-------------|---------|------------|---------|
| Alfalfa hay | 70 | Clover hay | 70 |
| Oats | 20 | Oats | 29.5 |
| Wheat | 10 | Salt | 0.5 |
| Salt | 0.5 | | |

17 Percent Crude Protein Rations

| Ration E | Percent | Ration F | Percent |
|--------------|---------|--------------|---------|
| Clover hay | 64 | Alfalfa hay | 50 |
| Oats | 30 | Oats | 45.5 |
| Soybean meal | 5.5 | Soybean meal | 4 |
| Salt | 0.5 | Salt | 0.5 |

16 Percent Crude Protein Rations

| Ration C | Percent | Ration D | Percent |
|--------------|---------|--------------|---------|
| Alfalfa hay | 40 | Alfalfa hay | 50 |
| Barley | 38 | Corn | 23.5 |
| Oats | 18 | Wheat bran | 5 |
| Soybean meal | 3.5 | Barley | 11 |
| Salt | 0.5 | Soybean Meal | 10 |
| | | Salt | 0.5 |

20 Percent Crude Protein Rations

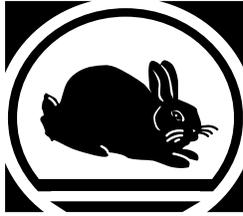
| Ration G | Percent | Ration H | Percent |
|----------------|---------|----------------|---------|
| Alfalfa hay | 40 | Alfalfa hay | 55 |
| Wheat | 25 | Wheat | 25 |
| Sorghum, grain | 25 | Sorghum, grain | 7.5 |
| Soybean meal | 10 | Soybean meal | 12 |
| Salt | 0.5 | Salt | 0.5 |

Think back:

Why is the chemical content of a rabbit ration important? Which chemicals are most important? Why?

What is the significance of math and safety when working with rabbit rations?

How will these skills and knowledge be useful to you in the future?



Keeping Financial Records With a Computer

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to use Microsoft Works spreadsheet to keep financial records

ABOUT THEMSELVES:

- Appreciation of Technology

Materials Needed:

- IBM PC Computer or IBM PC Compatible Computer
- Microsoft Works
- Member Handout 4, Rabbit Feed Example
- Member Handout 5, Feed Record

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

The computer has become a very popular and efficient way to keep records. The computer is an excellent tool for the rabbit raiser.

1. Title the spreadsheet Rabbit Feed Record
2. Label column A, line 4: Date
3. Line 4, label column C: Family Ration
4. Line 4, label column E: Calf Manna
5. Line 4, label column F: Miscellaneous Costs
6. Line 28, label column B: Total Feed Costs
7. Record feed costs as they occur. In our example, we have purchased rabbit feed about every two weeks. Remember to save the program each time you work with it. To save the program, press the "Alt" key, "F" key, and key "A" at the same time. You will be asked to name the file the first time you save your program. Afterwards, you will be asked if you want to replace the old file with the new data. Press the "Y" key or "enter" and the new data has been stored.
8. Use the directional keys to activate column D28.
9. Type =Sum(C5:C29)+Sum(D5:D29) and press the "enter" key. The total feed costs for the year have been calculated.

In a similar matter you can set up a spreadsheet for your income, miscellaneous expenses, etc.

Different software and computers will determine how you will computerize your records.

Leader Notes

Give first handout to members.

If you do not have Microsoft Works, use Member Handout 5, Feed Record, as a guide to set up a spreadsheet on your home computer.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What do you think was the easiest/hardest thing about a computer spreadsheet?
2. How have you previously kept records?

Process:

3. Why is it important to understand how computers work and how they can save you time and money?
4. Why would you use a computer to keep financial records?

Generalize:

5. In what other projects have computers been important? Why?

Apply:

6. How will you use computers in the future?

GOING FURTHER:

- Explore all the various kinds of computer programs available.
- Brainstorm all the ways you can use computers in your 4-H projects.

REFERENCES:

Microsoft Works User's Guide

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

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KEEPING FINANCIAL RECORDS WITH A COMPUTER
RABBITS, LEVEL IV
Member Handout 4, Rabbit Feed Example

| Date | Family Ration | Miscellaneous Expenses |
|------------------------------|----------------------|-------------------------------|
| 1-12-89 | \$62.45 | |
| 1-29-89 | 64.45 | \$8.50 |
| 2-12-89 | 64.45 | |
| 2-28-89 | 64.45 | |
| 3-12-89 | 63.65 | \$8.50 |
| 3-30-89 | 63.65 | |
| 4-12-89 | 64.85 | |
| 4-29-89 | 65.95 | |
| 5-14-89 | 65.95 | |
| 5-31-89 | 54.45 | |
| 6-10-89 | 63.45 | |
| 6-28-89 | 63.45 | |
| 7-12-89 | 64.45 | |
| 7-30-89 | 65.50 | |
| 8-9-89 | 65.50 | |
| 8-29-89 | 62.45 | |
| 9-8-89 | 62.45 | |
| 9-27-89 | 62.45 | \$8.50 |
| 10-11-89 | 63.45 | |
| 10-30-89 | 63.45 | |
| 11-12-89 | 63.45 | |
| 11-28-89 | 64.85 | \$8.50 |
| 12-13-89 | 64.85 | |
| 12-30-89 | 64.85 | |
| Total Feed Costs: \$1,573.10 | | |

KEEPING FINANCIAL RECORDS WITH A COMPUTER

RABBITS, LEVEL IV

Member Handout 5, Feed Record

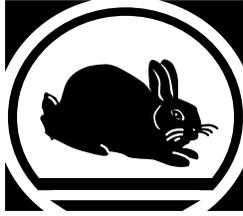
(Record the kind, amount, and value of feed each time a purchase is made or quantity of home-raised feed is set aside for the project.)

| Date | Kind of feed, hay, grain, greens, protein supplement, etc. | Amount of feed (lbs., bu.) | Cost of feed | | Remarks (Ration fed, feed changes, feeding troubles, etc.) |
|--------|---|-------------------------------------|----------------------|--------|---|
| | | | Per bu. cwt., lb. | Total | |
| Jan 10 | Pellets | 50# | \$10.96/cwt | \$5.48 | |
| | | | | | |
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| | | | | | |
| Totals | | | | | |

Other Expenses

Receipts

| Date | Who To/From Whom | Item | Amount | Market & Breeding | | | | Skins Sold | |
|--------|------------------|-------|--------|-------------------|--------------|-------------------|----------------|------------|-------|
| | | | | No. | Total Wt. | Prices Per Lb. | Total Value | No. | Value |
| 1/15 | ABC Supplies | Crock | \$2.25 | | | | | | |
| 2/15 | XYZ Rabbitry | | | 3 | 12# | .55 | \$6.60 | | |
| 3/15 | Home Use | | | 2 | 8# | .55 | \$4.40 | | |
| | | | | | | | | | |
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| Totals | | | | | | | | | |



Increasing Productivity in the Commercial Rabbitry

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to calculate conception average, weaning average, yearly production average and production number
- How to use recorded information to cull herd

ABOUT THEMSELVES:

- Value of using information in decision making

Materials Needed:

- Chalkboard and chalk
- Member Handout 6, Doe and Buck Breeding Records
- Calculator
- Paper and pencils

ACTIVITY TIME NEEDED: 40 MINUTES

ACTIVITY

Leader Notes

To be successful, a commercial rabbit breeder needs to constantly cull the herd on the basis of productivity. The following steps will help the breeder in making decisions about which animals to cull.

Keeping records that will help evaluate each doe can require time but it is time well spent. George F. Collins, Ralston Purina Company, suggests that one should be careful to keep only records that will be useful in making breeding decisions. This list for does includes:

- Doe's identification
- Date bred
- Doe's weight
- Date served and Buck's identification
- When palpated (+ or - pregnancy)
- Date kindled
- Number alive
- Number dead
- Date weaned
- Number weaned
- Number died due to diarrhea
- Production number
- Average weaning weight

Leader Notes

George Collins suggests that you use production numbers to evaluate rabbits for future breedings or for culling purposes.

Use chalkboard to show this process and define terms.

Conception Average (CA) = (number of litters/number of breeding) \times 10

Weaning Average (WA) = (number of young produced/number of litters)

Yearly Production Average (YPA) = (number of litters/number of months in production) \times 12

Productive Age: 6-12 months = 0; 12-18 months = 1; 18-24 months = 2; 24-30 months = 3; more than 30 months = 4.

Now, let us calculate the Production Number:

Production Number = conception average + weaning average + yearly production average + productive age

Work example on chalkboard.

For example, we have a Californian doe that is 26 months old. She has produced 94 young in 12 litters since she was put in production at 6 months. She has been bred 14 times. What is her production number?

$$CA = (12 \text{ litters}/14 \text{ breedings}) \times 10 = 8.6$$

$$WA = (94 \text{ young}/12 \text{ litters}) = 7.8$$

$$YPA = [12 \text{ litter}/20 \text{ months in production } (26-6)] \times 12 = 7.2$$

PA = 3 since the doe is 26 months old.

Therefore, the production number of this doe is:

$$\text{Production number} = CA + WA + YPA + PA = 8.6 + 7.8 + 7.2 + 3 = 26.6$$

The ideal production number should be 25.0 or better.

Production numbers also should be calculated for the bucks.

You will need to have the following buck information:

- Buck's identification
- Doe served
- Doe pregnant (+ or -)
- Date kindled
- Number alive
- Number dead
- Date weaned
- Number weaned

The production number for a buck equals the conception average (CA) plus weaning average (WA) plus productive age (PA).

For example: We have a White Satin buck that is 20 months old. He has been involved in producing 120 young in 20 litters since he entered the herd at 6 months of age. He has serviced 41 does.

The production number for this buck is calculated as follows:

Work example on chalkboard.

$$CA = (20 \text{ litters}/41 \text{ breedings}) \times 10 = 4.9$$

$$WA = (120 \text{ young}/20 \text{ litters}) = 6$$

$$PA = 2$$

$$\text{Therefore, the production number} = 4.9 + 6 + 2 = 12.9$$

The ideal production number for the buck should be 15.5 or better.

Now, have the members calculate production numbers for the following rabbits and decide which ones should be culled from the herd.

Doe 345 is 21 months old. She has produced 80 young in 10 litters since she entered the herd at 6 months old. She has been bred 13 times.

Doe 445 is 15 months old. She has produced 40 young in 5 litters since she entered the herd at 6 months old. She has been bred 12 times.

Buck 145 is 20 months old. He has been involved in producing 130 young in 17 litters since he entered the herd at 8 months of age. He has been used 34 times.

Buck Y18 is 25 months old. He has been involved in producing 224 young in 28 litters since he entered the herd at 8 months of age. He has been used 43 times.

Answer Key:

Doe 345 has a production number of 25.6.

Doe 445 has a production number of 19.9.

Buck 145 has a production number of 14.6.

Buck Y18 has a production number of 17.5.

Therefore, doe 445 and buck 145 should be culled from the herd. However, do not cull doe 445 until you have a replacement for her.

Remember:

1. Calculate production numbers every three months.
2. Keep only the highest quality bucks.
3. Keep only the does that are most productive.
4. The top 10 percent of the does based on production numbers should be mated with the top 10 percent of the bucks. Future replacement stock should be selected from these matings.

DIALOGUE FOR CRITICAL THINKING :

Share:

1. What did you like or dislike about this activity? Why?

Process:

2. What part does productivity play in operating a commercial rabbitry?
3. How do you think you can increase productivity in your rabbitry?

Generalize:

4. In what other projects is performance data important?

Apply:

5. How might computers assist in computing and processing performance data in the future?

GOING FURTHER:

- Have the members calculate production numbers for their rabbits and decide which ones should be culled from a commercial herd. Fancy breeds will have much lower production numbers.

REFERENCES:

Domestic Rabbits, November-December, 1984

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



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INCREASING PRODUCTIVITY IN THE COMMERCIAL RABBITRY
RABBITS, LEVEL IV
Member Handout 6, Doe and Buck Breeding Records

Doe Breeding Record

Doe No. _____ **Born** _____ **Breed** _____

Sire _____ **Dam** _____ **Litter No.** _____

| Date Bred | Date Due | Buck No. | Date Kindled | No. Young Born | | Number Young Retained | Litter No. | Date Weaned | No. Weaned | Weaning Wt. |
|-----------|----------|----------|--------------|----------------|------|-----------------------|------------|-------------|------------|-------------|
| | | | | Alive | Dead | | | | | |
| | | | | | | | | | | |
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Buck Breeding Record

Buck No. _____ **Born** _____ **Breed** _____

Sire _____ **Dam** _____ **Litter No.** _____

| Doe | Date Bred | Result of Breeding | | | Weaned | | Notes |
|-----|-----------|--------------------|------|--------|--------|--------|-------|
| | | Kindled | | Passed | Number | Weight | |
| | | Alive | Dead | Date | | | |
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Think back:

How many types of records can you name? What is the purpose of each?

Which types of records are most valuable to you? Why?



Understanding Systems of Breeding

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- The various breeding programs
- How to use a line breeding chart

ABOUT THEMSELVES:

- Significance of heredity

Materials Needed:

- Chalkboard and chalk or flip chart and marker
- Member Handout 7, Line Breeding Chart

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY

Leader Notes

The goal of a breeding program should be to develop a strain of rabbits that possess all the desired traits. A strain of rabbits is one in which individuals are related and possess similar characteristics and have the ability to pass these desirable qualities on to their offspring.

This can be accomplished by several different breeding programs: inbreeding, linebreeding, outcrossing.

INBREEDING—Inbreeding is the mating of closely related individuals designed to decrease the amount of variation between individuals and make them more alike in appearance and genetic make-up. This is accomplished by mating father to daughter, mother to son, or brother to sister. Inbreeding not only sets in the desired characteristics but the undesirable ones may appear. One needs to cull the offspring carefully to eliminate any undesirable traits.

LINE BREEDING—Linebreeding is the mating of less closely related individuals in the herd in order to maintain a high relationship to some outstanding ancestor. This is accomplished by mating cousins, uncles to nieces, or aunts to nephews. Again, culling is essential.

OUTCROSSING—Outcrossing is the mating of unrelated individuals within the same breed. This has a tendency to increase the amount of variation between animals and make them less alike in looks and genetic makeup.

REMEMBER:

1. Keep accurate records. Know which rabbits are producing the type of rabbits you desire.
2. Cull your litters. Don't keep animals which do not possess the traits you are breeding for.
3. Many breeders use a combination of these breeding programs.

List and define each breeding program as it is discussed or have small groups write a definition for a program and tell about it.

Leader Notes

Hand out the “Line Breeding Chart” to each member and discuss thoroughly.

1. Answer: The offspring will have $\frac{2}{32}$ of the original dam’s genetic makeup and $\frac{1}{32}$ of the sire’s.

2. Answer: 50 percent of the genetic makeup of the original dam and 50 percent of the genetic makeup of the original sire.

Ask each member to tell what type of breeding program he or she is using.

The linebreeding chart illustrated may be used to carry out a linebreeding program. The circles represent the offspring, a solid line leading from a circle represents the male, and a dotted line represents the female. Number 3 is a result of mating 1 and 2 and contains half of the genetic makeup of the sire and dam.

Number 4 is a result of mating Number 1 and Number 3. Number 4 now contains 75 percent of the genetic makeup of the male and only 25 percent of the genetic makeup of the female.

Mating Number 3 male to Number 2 will produce Number 5. Number 5 has 75 percent of the original dam’s genetic makeup and only 25 percent of the original sire.

Mating of a Number 4 male with a Number 5 female results in Number 7. Number 7 has 50 percent of the original sire’s genetic makeup and 50 percent of the original dam’s genetic makeup.

Using the linebreeding chart, have the members figure out the genetic makeup of the offspring if:

1. Number 7 is mated to Number 11.
2. Number 9 is mated to Number 11.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What are the three systems of breeding?
2. What did you learn from this activity?

Process:

3. What is the significance of inbreeding, line breeding, and out crossing?

Generalize:

4. What difficulties or successes did you encounter when you tried these various breeding systems?
5. How important is the breeding system to the productivity of your rabbitry?

Apply:

6. How will you breed your rabbits differently based on what you learned from this activity?

GOING FURTHER:

- Invite a geneticist to speak to your group about the values and problems with inbreeding.
- Discuss genetic mutations and their values.

REFERENCES:

Official Guide to Raising Better Rabbits, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

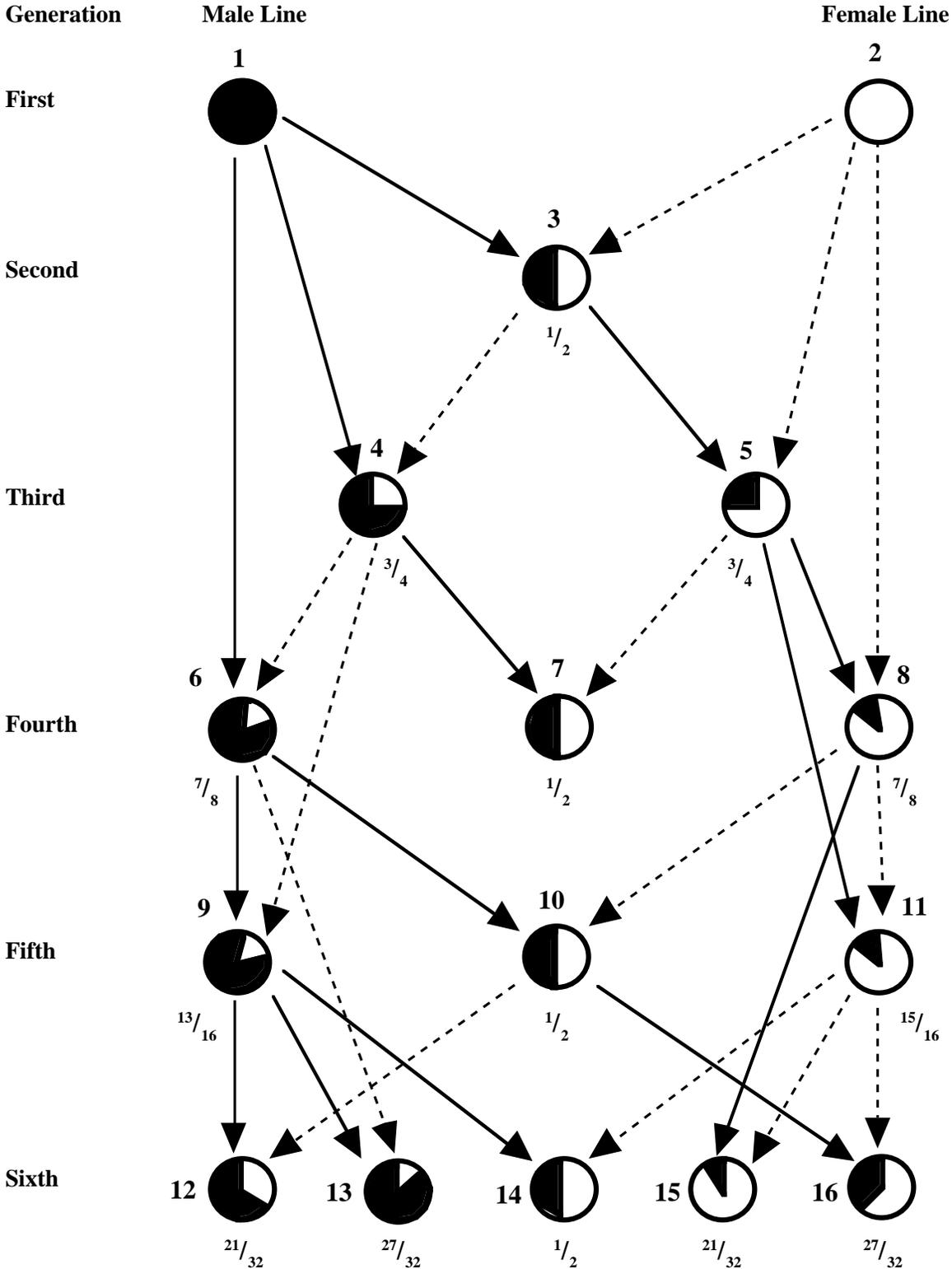
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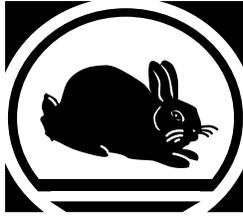


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UNDERSTANDING SYSTEMS OF BREEDING
RABBITS, LEVEL IV
Member Handout 7, Line Breeding Chart





Tracing Genetic Traits

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- A basic understanding about dominant and recessive genes
- How to use Punnet squares
- Genetic terms

ABOUT THEMSELVES:

- Importance of information

Materials Needed:

- Chalkboard and chalk or large poster board and pens
- Paper and pencils

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Leader Notes

Buck teeth are an example of a genetic defect found in rabbits. If you understand dominant and recessive genes, you will better understand how to eliminate genetic defects in your herd.

GENETICS

Each rabbit develops from a single cell, the fertilized egg. This single cell divides to form two cells, then these divide to four, then eight and so on. In the first divisions, mother and daughter cells are identical; later daughter cells are produced which change to form tissues and organs which make up the rabbit's body. The genetic materials of these cells are composed of many small units referred to as genes. Genes are located on thread-like bodies called chromosomes.

Chromosomes occur in pairs and their numbers vary from one species of animal to another. Genes also occur in pairs. Genes are passed from parent to offspring in sex cells known as gametes. Female gametes are called ova or eggs, and male gametes are known as spermatozoa or sperm.

An important step in the formation of gametes is a random separation of the paired chromosomes to form new cells having only one chromosome of each pair. This process is called meiosis. At fertilization, the female and male gametes unite and the pair of chromosomes is restored. Thus, the number of chromosomes in the offspring remain constant from generation to generation. One pair of chromosomes (referred to as X and Y) determine the sex of the rabbit. If X and Y chromosomes are paired at fertilization, a male is produced; if two X chromosomes are paired, a female is produced. The female can transmit only X chromosomes to her offspring, but a male can contribute either an X or Y chromosome.

Illustrate on chalkboard or flip chart.

Leader Notes

Define various terms by listing on chalkboard or flip chart and asking members for definition.

- Genotype
- Phenotype
- Homozygous
- Heterozygous

Pass out the paper and pencils and have the members try to work the genetic problems. Discuss the results of the problems.

Do examples on chalkboard or flip chart and discuss results.

Characteristics of rabbits may be controlled by one or many genes. Traits such as coat color are controlled by one or two pairs of genes. Growth rate, litter size, and milking ability are controlled by several or possibly many pairs of genes. Genotype refers to the make-up or combination of genes that control a particular characteristic. The response visibly observed from the genotype is called the phenotype; for example, color, size, etc.

Two genes control color in rabbits: a for albinism (absence of color) and A for full color (actual color depends on other genes). Since genes appear in pairs, combinations possible are AA, Aa, or aa. When either AA or aa occur the genes are said to be homozygous. When Aa occurs the genes are said to be heterozygous. A is called the dominant gene and a is the recessive gene. (Dominant genes are identified with capital letters and recessive genes are identified with small letters.)

Using a Punnet square we can see the genetic combinations resulting for mating an aa male with an AA female.

| | | Female Gametes | | | |
|-----------------|---|----------------|----|---|----|
| | | A | | | A |
| | | ***** | | | |
| | | * | | | * |
| Male Gametes | a | * | Aa | * | Aa |
| | | * | | | * |
| | | ***** | | | |
| | | * | | | * |
| | a | * | Aa | * | Aa |
| | | * | | | * |
| | | ***** | | | |

The genotypes will all be Aa and thus the phenotypes will all show full color.

Assume an Aa male is mated to an Aa female. The following combinations will result:

| | | Female Gametes | | | |
|-----------------|---|----------------|----|---|----|
| | | A | | | a |
| | | ***** | | | |
| | | * | | | * |
| Male Gametes | A | * | AA | * | Aa |
| | | * | | | * |
| | | ***** | | | |
| | | * | | | * |
| | a | * | Aa | * | aa |
| | | * | | | * |
| | | ***** | | | |

One-fourth of the rabbits will have a AA genotype (full color), one-half of the rabbits will have Aa genotype (full color), and one-fourth of the rabbits will have aa genotype (albino or white). Note that three-fourths of the

rabbits will have a color phenotype and one-fourth will have the albinism or white phenotype.

A second pair of genes control color pattern: s for solid body color and S for agouti. (Agouti is dominant over solid color.) If an AaSs male is mated to an AaSs female, what are the possibilities?

| | | Female Gametes | | | |
|---------|----|----------------|--------|--------|--------|
| | | AS | As | aS | as |
| | | ***** | | | |
| | * | * | * | * | * |
| | * | * | * | * | * |
| Male | AS | * AASS | * AASs | * AaSS | * AaSs |
| Gametes | * | * | * | * | * |
| | | ***** | | | |
| | * | * | * | * | * |
| | * | * | * | * | * |
| | As | * AASs | * AAss | * AaSs | * Aass |
| | * | * | * | * | * |
| | | ***** | | | |
| | * | * | * | * | * |
| | * | * | * | * | * |
| | aS | * AaSs | * AaSs | * aaSS | * aaSs |
| | * | * | * | * | * |
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| | * | * | * | * | * |
| | * | * | * | * | * |
| | as | * AaSs | * Aass | * aaSs | * aass |
| | * | * | * | * | * |
| | | ***** | | | |

Do this example on chalkboard or flip chart and count the genotype and phenotype results.

Genotypes: $\frac{1}{16}$ AASS agouti
 $\frac{2}{16}$ AASs agouti
 $\frac{4}{16}$ AaSs agouti
 $\frac{2}{16}$ AaSS agouti
 $\frac{2}{16}$ Aass solid color
 $\frac{2}{16}$ aaSs albino
 $\frac{1}{16}$ aass albino
 $\frac{1}{16}$ AAAss solid color
 $\frac{1}{16}$ aaSS albino

Phenotypes: $\frac{9}{16}$ agouti
 $\frac{3}{16}$ solid color
 $\frac{4}{16}$ albino

The type of gene action expressed in this example is known as recessive epistasis. Epitasis is a type of gene action where one pair of genes exerts influence on another pair of genes. Therefore, when albino aa is in the homozygous state, the agouti gene S or non-agouti gene s is not allowed to express itself.

Define epitasis.

Leader Notes

The gene *b* for buck teeth is recessive to the gene *B* for normal teeth. A rabbit can have normal teeth and still carry the gene for buck teeth. Such animals are called carriers of the recessive gene or heterozygous for normal teeth. Do a Punnet square for a mating of two heterozygous parents: male *Bb*, female *Bb*. Discuss results.

Ask the following questions.

1. What is a dominant gene?

Answer: Only one dominant gene is needed for a trait to appear.

Example: Normal teeth *Bb*.

2. What is a recessive gene?

Answer: Two recessive genes are required for the trait to be expressed. Example: buck teeth *bb*.

3. What is the result of mating a normal toothed buck *BB* to a normal toothed doe *Bb* that carries the recessive gene for buck teeth?

Answer: All of the offspring will be normal toothed but one-half of the offspring will be carriers for buck teeth.

Have members do a Punnet square for the mating in question 3 and count the phenotypes.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What was the easiest or most difficult thing when computing probabilities of genetic traits?
2. What was unique or the most interesting when exploring the various combinations?

Process:

3. What is the significance of recessive and dominant genes?
4. Why do you need to know the genetic traits of your rabbit?

Generalize:

5. What genetic traits are important in production animals? Why?
6. How might this information be used in tracing heritability of a family characteristic?

Apply:

7. How might you use genetic information in the future?

GOING FURTHER:

- Use a Punnet square and determine your own eye genotype.

REFERENCES:

Cooperative Extension Service, New Mexico State University
Ohio Cooperative Extension Service, The Ohio State University
Official Guide to Raising Better Rabbits, American Rabbit Breeders
Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P.
Adams, Extension Specialist, 4-H Youth Programs, Kansas State
University

Reviewed by:

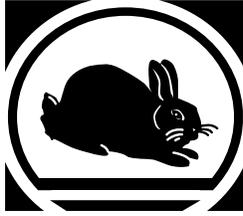
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Understanding Fur Genetics

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- The heat sensitive genes
- The dominant and recessive genes for fur traits

ABOUT THEMSELVES:

- Importance of probability in their lives

Materials Needed:

- Chalkboard and chalk or flip chart and marker
- Paper
- Pencils
- Genetic references

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Leader Notes

It is important to understand the genetics of fur, so there are fewer problems producing rabbits with the desired traits.

Coat color in rabbits involves the interaction of many genes. Formation of the normal dark pigment requires a series of steps and enzymatic reactions. In the Californian marked varieties, a phenotype is characterized by white body fur and black areas at the tips of the feet, tail, ears and nose. The pattern results from the presence of a gene (c') that controls the production of the enzyme needed to catalyze the formation of the dark pigment. This temperature effect that is responsible for the pattern can be observed by checking a doe who has pulled hair for a litter. The new fur will come in black if the weather is cold. Another way to observe this is to shave a portion of the fur and put an ice pack on the shaved area. The new fur will be black. The reason Californian marked young are dark is because they were chilled in the nest box. After the rabbit moults, white fur will come in.

In rabbits, multiple genes influence fur pigmentation: C (wild), c'' (Chinchilla), c' (Himalayan) and c (Albino). The Wild gene, C , is dominant over the other three. So that CC , Cc'' , Cc' , and Cc genotypes all produce a full colored individual. A Chinchilla rabbit is produced when the genotype is $c''c''$. A Himalayan marked rabbit is produced when the genotypes are: $c'c'$ or $c'c$. A white rabbit is produced when the genotype is cc . However, a light gray rabbit is produced when the genotype is $c''c'$ or $c''c$.

List these traits and their genetic code on chalkboard or flip chart.

Leader Notes

List these traits and codes.

Have the members work this out. Remember, you will want to use the punnet square. All offspring would have spotted pattern and short hair. What is the genotype? FfSs

Demonstrate a punnet square with a simple trait from a reference.

Again, we need to use the punnet square. Each parent can produce four gene combinations—FS, Fs, fS, fs.

Show this punnet square and discuss. The offspring are: 9 short hair, spotted pattern; 3 long hair, spotted pattern; 3 short hair, self-colored; 1 long hair, self-colored.

Have members diagram with a punnet square.

The normal fur gene (N) is dominant over the satin fur gene (n). In rabbits, the gene for spotted pattern (S) is dominant over the gene for self-colored (s). The gene for short hair (F) is dominant over the gene for long hair (f) (Angora)

Problem 1:

What are the possibilities for the offspring if a pure breeding, spotted, patterned short-hair rabbit is mated to a self-colored angora rabbit?

Problem 2:

What are the possibilities for the offspring if two FfSs rabbits are mated?

| | FS | Fs | fS | fs |
|----|------|------|------|------|
| FS | FFSS | FFSs | FfSS | FfSs |
| Fs | FFSs | FFss | FfSs | Ffss |
| fS | FfSS | FfSs | ffSS | ffSs |
| fs | FfSs | Ffss | ffSs | ffss |

Note that 75 percent of the rabbits have short hair, 75 percent have the spotted pattern, 25 percent have long hair and 25 percent have the self-colored coat.

Problem 3:

A Californian-marked Satin rabbit is mated to an albino normal fur rabbit. What will their offspring look like? Assuming that the Californian Satin is c'c'nn and the normal fur, white rabbit is ccNN, all offspring would have the genotype c'cNn. Therefore, they would all have the Californian markings and have normal fur.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What do you like the most or least about working with a punnet square?
2. What fur pigmentation did you like the best? Why?

Process:

3. Why do you think it is important to understand the genetic quality of your rabbit's fur?
4. What is the significance of being able to predict the probability of various fur types?

Generalize:

5. How important is genetic probability in other animals?
6. What is the significance of being able to predict the probability of various fur types?

Apply:

7. How can you use probabilities in making future decisions?

GOING FURTHER:

- Have a speaker come in and discuss the “regression” effect as it applies to human genetics.

REFERENCES:

Cooperative Extension Service, The Ohio State University
Genetics, 3rd Edition, Monroe W. Strickberger, Macmillan Publishing Company
Understanding Genetics, 4th Edition, Norman V. Rothwell, Oxford University Press

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

Rabbit Design Team



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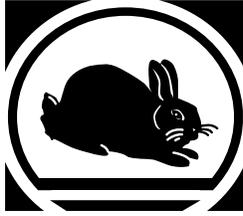
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Think back:

What is the significance of genetics?

How valuable is the heritability of various genetic traits? Give examples and explain.

Why is probability important or useful?



Judging Rabbit Carcasses

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- What to look for when judging a rabbit carcass

ABOUT THEMSELVES:

- Understanding standards in their lives

Materials Needed:

- Rabbit carcasses
- Freezer wrap or pans
- Member Handout 8, Rabbit Carcass Scorecard

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

It is important for the member to know what type of product he or she is producing. By judging rabbit carcasses, the member will learn what to strive for in producing rabbit fryers.

Dress-out percentage= Carcass weight / Live weight \times 100
A good fryer will have a dressing percentage of 55 to 58 percent.

Appearance:

A rabbit carcass should be neat and clean. There should not be any bruised areas on the carcass. The ribs should be well covered with meat. The loin should be wide and deep. The hips and hind legs should be full and meaty. Muscle tissue should be dense, firm and pearl white in color. Internal fat should be at a minimum and there should be little external fat.

Now, discuss the correct placings and why the classes would be placed as they were by the official judge.

Leader Notes

Pass out Rabbit Carcass Scorecard and discuss each item to consider.

Point out what a good carcass should look like using one of the carcasses available.

Have the members judge the carcasses. The carcasses should be in classes of four specimens per class.

After the group has had a chance to judge the carcasses, ask for volunteers to give oral reasons on a class.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What do you like about judging?
2. What don't you like about judging?

Process:

3. Why is it important to have standards for judging rabbit carcasses?
4. What purpose does the scorecard serve when you are judging?

Generalize:

5. What standards do you set for other projects?
6. What are some basic standards that you use on a daily basis?

Apply:

7. How can you apply these standards in the future?

GOING FURTHER:

- Visit a rabbit processing plant.
- Plan a live meat pen show, then dress the fryers, judge the carcasses and compare results of live and carcass shows.

REFERENCES:

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University.

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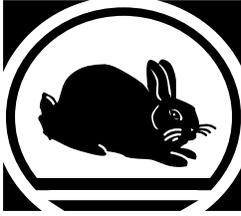
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JUDGING RABBIT CARCASSES
RABBITS, LEVEL IV
Member Handout 8, Rabbit Carcass Scorecard

Single fryers—not over 10 weeks of age, weight limit not over 5 pounds.

| | |
|----------------------------|------------|
| Dress-out percentage | 40 |
| Appearance | 60 |
| Shape (type) | 20 |
| Color | 15 |
| Texture | 10 |
| Fat | 10 |
| Organs | 5 |
| Total Points | <u>100</u> |





Preparing Rabbit for the Table

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- The nutritional value of rabbit meat
- How to prepare a rabbit dish

ABOUT THEMSELVES:

- How to make decisions and support their position

Materials Needed:

- Freshly dressed rabbit
- Cooked rabbit
- 1 can mushrooms
- 1 can water chestnuts
- ½ cup blanched whole almonds
- 1 medium onion
- Paprika
- Rabbit broth
- 2-quart casserole
- Rabbit cookbooks
- Cooked rice
- Can opener
- Spoon
- Paper plates and plastic forks

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Leader Notes

Rabbit meat is high in protein and, thus, is an excellent source of protein for ending worldwide malnutrition. The breeder needs to understand how easy it is to prepare rabbit if they are to be good promoters for rabbit meat.

Rabbit meat is higher in protein but lower in fat, uric acid, cholesterol, sodium and calories than any other meat available today.

Rabbit meat is easily digested and recommended by many physicians for diets where red meat is restricted.

Rabbit meat should be cooked well done.

Rabbit meat can be used fresh, cured, smoked, sweetpickled, soured, roasted, barbecued or substituted for any veal or poultry recipe. According to the U.S. Department of Agriculture rabbit meat has 20.9 percent protein, 10.2 percent fat, 67.9 percent moisture and 795 calories per pound.

Leader Notes

Now, have the group prepare a rabbit dish. This time we will prepare Rabbit Almond Casserole.

(Any rabbit recipe could be substituted for the Rabbit Almond Casserole.)

Rabbit Almond Casserole

Ingredients are:

4 cups cooked rabbit 1 can mushrooms, drained
1 can water chestnuts ½ cup blanched whole almonds
1 medium onion Paprika
Rabbit broth

1. Take the rabbit meat off the bone.
2. Cube four cups of rabbit meat.
3. Spread ½ the rabbit in the casserole dish.
4. Top with almonds, chopped onion, water chestnuts, and mushrooms.
5. Cover with rabbit broth.
6. Sprinkle with paprika.
7. Bake for 30 minutes in a 350°F oven.

(Official Guide to Raising Better Rabbits has a diagram showing how to cut up a rabbit.)

While waiting for the casserole to bake, we will cut up a rabbit for frying.

After the casserole is done, serve over rice.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What are several advantages of eating rabbit meat?
2. What is your favorite recipe? Why?

Process:

3. For all the work that you've done concerning rabbits, why is it important to be able to prepare a good rabbit recipe?
4. What is the protein, fat, moisture, and calories content of 1 pound of rabbit meat?

Generalize:

5. How does the nutritional content of rabbit meat compare with the nutritional content of beef, sheep or chicken meat?
6. How should nutritional content of the food you eat affect your food choices?

Apply:

7. What will you do differently in the future as a result of this lesson?

GOING FURTHER:

- Have the members prepare rabbit dishes for others.
- Develop your own rabbit recipes.
- Begin keeping your own set of rabbit recipes.

REFERENCES:

Official Guide To Raising Better Rabbits, American Rabbit Breeders Association
Domestic Rabbit Cookbook, American Rabbit Breeders Association
Rabbit is Just Good Eating, Kaw Valley Rabbit Club

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed By:

Rabbit Design Team

Think back: (Record these questions and answers on a separate sheet for your record book.)

What is the significance of food safety when preparing rabbit?

How important is rabbit as a food source in various countries?

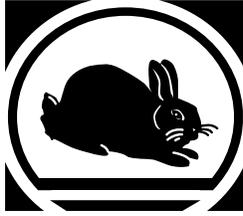
How important will rabbit be as a food source in the future? Why?



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Analyzing for Causes of Death (Necropsy)

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to conduct a necropsy
- To recognize healthy versus unhealthy animal tissue

ABOUT THEMSELVES:

- To improve observation skills

Materials Needed:

- Scissors
- Sharp knife or scalpel
- Rubber gloves
- Specimen bottles filled with 10 percent formalin or alcohol
- Rabbit to be examined
- Newspapers
- Disinfectant
- Chalkboard and chalk or flip chart and markers

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Since there are very few diagnostic laboratories for rabbits in the United States, it is important that one becomes efficient in home necropsy so that one can forward information found to a specialist who will be able to analyze disease problems.

When a rabbit dies without an obvious cause, it should be examined.

When you do a necropsy at home, you will want to find a place that has good lighting and where you will not be disturbed during the necropsy. Cover the area with plastic (Garbage bags will work fine), and lay several layers of newspaper on top of the plastic. Now, if you have scissors, sharp knife, rubber gloves and specimen bottles handy you are ready to proceed.

1. Put on the rubber gloves and go over the animal very carefully to notice any abnormalities or external parasites. Be sure to note any abnormalities.
2. Lay the animal on its back with the neck and legs extended. Note the size and condition of the animal. Is the animal the correct size for its breed and age?
3. The first incision should be made just in front of the genitals through the skin and muscular wall. The incision should continue along the

Leader Notes

The leader of this lesson must have experience and knowledge of normal, healthy organs so they can help members detect abnormalities.

Since it isn't very likely that a rabbit will die just when this lesson is planned, a fryer could be used to demonstrate this procedure.

Have someone list the steps or items checked and findings on a chalkboard or flip chart after each is examined. This will serve as a summary to determine what might have caused death.

Leader Notes

mid-line (center) to the chin. Be sure not to damage any of the internal organs during this procedure.

4. Carefully expose the abdominal viscera. You may wish to make lateral incisions at the hind legs and just behind the rib cage.
5. Note if there is any excessive fluid within the abdominal cavity.
6. Carefully examine the abdominal viscera.
7. Remove the liver. Examine it for any abnormalities on the surface. Now carefully cut the liver to examine the internal structure.
8. Remove the kidneys and examine them externally and internally.
9. Remove the spleen and examine it externally and internally.
10. Examine the stomach; note size, color and condition.
11. Examine the small intestines, noting size, color and condition.
12. Examine the cecum; note size, color and condition.
13. Examine the large intestines, noting color, size and condition.
14. After the exterior of the gastrointestinal tract has been examined, carefully open up the tract and check the lining for abnormalities.
15. Clean up the debris from the examination of the gastrointestinal tract.
16. Open the chest cavity. Examine the lungs and heart for abnormalities.
17. Examine the windpipe for abnormalities.
18. Remember, any time an abnormality is found it should be preserved so it can be examined by a professional.
19. Carefully dispose of the carcass and debris.
20. Disinfect the gloves and clean up all the instruments used.

If rabbits or fryers are available, let every member do a necropsy while you are demonstrating.

Your first necropsy may be rather crude, but with practice one can recognize abnormalities readily.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What did you enjoy/dislike about this activity?
2. When performing the necropsy, what were some things you observed?

Process:

3. Why is it important to know the cause of your rabbit's death?
4. Why is it important to take careful notes when doing this activity?

Generalize:

5. How do you use note taking and observation skills in other activities that you participate?

Apply:

6. When and where do you think you will use observation skills in the future?

GOING FURTHER:

- Visit a veterinarian doing a rabbit necropsy.
- Study the diseases common to rabbits.

REFERENCES:

Official Guide to Raising Better Rabbits, American Rabbit Breeders Association

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

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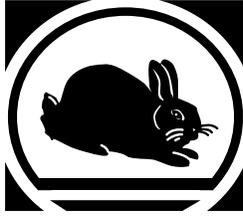
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Making Fur Toys and Other Items

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to block a rabbit skin
- How to mark and cut a pattern on the rabbit skin

ABOUT THEMSELVES:

- The value of using all resources

Materials Needed:

- Rabbit pelts which have been blocked
- Rabbit pelt which needs to be blocked
- Pattern for a toy
- Fine point ballpoint pen
- Exacto knife
- Toy made of rabbit skin
- Chalkboard and chalk
- A piece of plywood
- Small hammer
- Pliers
- Sponge
- Long tacks or push pins
- Lukewarm water

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY

The members can establish an extra income for the sale of items made from rabbit pelts. The members need to know the correct way to work with the rabbit pelt.

The steps one should follow when making an item out of a rabbit skin are:

1. A pattern should be selected.
2. All skins should be blocked before marking and cutting a pattern. In order to block a rabbit skin you should:
 - a. Dampen the leather side of the skin, fold and let set a minute or two for the water to soak in and make the skin more pliable.
 - b. Tack the bottom end in three to four places.
 - c. Work the skin with your fingertips pushing upward and outward, be sure to tack in place as you work. (Care should be given not to stretch too tightly as the skin might tear.)
 - d. Allow two to three hours for the skin to dry.

Leader Notes

Demonstrate this procedure and all steps as you proceed through the activity.

Leader Notes

- | | |
|--|--|
| Demonstrate how to mark the pattern on a pelt. | 3. Check the fur side for any bald or damaged areas. |
| | 4. Draw on the leather side of the pelt to show all the bald and damaged areas. |
| Demonstrate how to cut out the pattern. | 5. Using a fine tipped ballpoint pin, mark the pattern on the leather side of the pelt. |
| | 6. Using an Exacto knife gently cut out the pattern. Be sure to just cut through the leather portion of the skin. Always elevate the skin with your hand as you cut out the pattern. |
| Show the finished product. | Your article can now be sewn together. You can hand sew but machine sewing is best. |

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What did you make? Why?
2. Is fur an easy or difficult item to work with? Why or why not?

Process:

3. Why is it important to wet the fur before blocking it?
4. Why is it important to block the fur before cutting it?

Generalize:

5. How will the promotion and use of by-products enhance the rabbit industry?
6. What is the importance of by-products in other industries?

Apply:

7. What is the significance of the impact of byproducts on the total value of an industry?

GOING FURTHER:

- Make your own rabbit skin project.
- Design a pattern of your own.

REFERENCES:

A Progressive Program For Raising Better Rabbits and Cavies, American Rabbit Breeders Association.

Author:

Clarence W. Linsey, Kansas State Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

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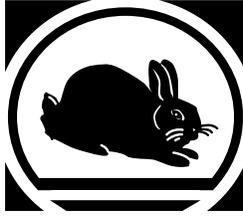
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Exploring Rabbit Careers

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- Various related careers available

ABOUT THEMSELVES:

- Their feelings about pursuing a rabbit related career

Materials Needed:

- Pencils and paper
- Member Handout 9, Rabbit References

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

It is important for the members to learn about rabbit related careers. This lesson involves library research on rabbit related careers that each member is responsible for reporting on at the following meeting.

Examples of some rabbit related careers are: veterinarian, laboratory technician, tannery worker, commercial rabbitry operator, processing plant manager and animal nutritionist.

Leader Notes

A week or so before the meeting have each member select a career to research.

Hand out "Rabbit References" for members to use as a beginning to researching a career.

Members take turns reporting.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What career did you like the best? Why?
2. What career do you feel would be the most difficult to prepare for? Why?

Process:

3. What problems did you have in reviewing rabbit careers?
4. What career in the rabbit industry do you think is the most significant?

Generalize:

5. What factors do you need to consider when pursuing a rabbit career?
6. What capabilities or skills would you use in the rabbit careers that you explored?

Apply:

7. How will various capabilities or skills help you pursue your first career choice?

GOING FURTHER:

- Have guest speakers from a couple of the rabbit related career fields come speak to the group.
- Tour a commercial rabbitry, processing plant, feed company, veterinary laboratory or a tannery.
- Research the amount and kind of education you'll need to be employed in the rabbit related career of your choice.

REFERENCES:

Pacific Northwest Cooperative Extension Service
Domestic Rabbits, American Rabbit Breeders Association

Author:

Clarence W. Linsey, American Rabbit Breeders Association; James P. Adams, Extension Specialist, 4-H Youth Programs, Kansas State University

Reviewed by:

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EXPLORING RABBIT CAREERS
RABBITS, LEVEL IV
Member Handout 9, Rabbit References

PRINTED MATERIAL

Domestic Rabbit Cookbook
American Rabbit Breeders Association
P.O. Box 426, Bloomington, IL 61701

Rabbits for Food and Profit
Farmer's Digest, Inc.
Box 363, Brookfield, WI 53005

Domestic Rabbits: Diseases and Parasites
U.S. Department of Agriculture
Agriculture Handbook No. 490

A Progressive Program for Raising Better Rabbits & Cavies
American Rabbit Breeders Association, Inc.
P.O. Box 426, Bloomington, IL 61701

Standard of Perfection
American Rabbit Breeders Association
P.O. Box 426, Bloomington, IL 61701

The Rabbit—A Dissection Manual
T.A.G. Wells, 1968, Dover Publications,
180 Varick Street, New York, NY 10014

Bass Equipment Company, P.O. Box 352, Monett, MO 65708,
has the following books for sale:

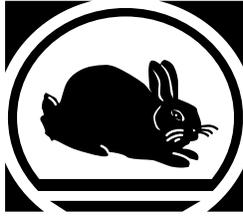
Raising Earthworms for Profit
Earthworm Feed and Feeding
Raising the African Nightcrawlers
Modern Angora Wool Farming
Raising Rabbits the Modern Way
How to Tan & Sew Your Rabbit Furs

RABBIT ASSOCIATIONS

Kansas State Rabbit Breeders Association
Clarence W. Linsey, Secretary
316 South Mahaffie
Olathe, KS 66061

American Rabbit Breeders Association
Glen Carr, Secretary
Box 426
Bloomington, IL 61701





The Rabbit Project's Impact on Personal Development

Rabbits, Level IV

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to develop life skills through the rabbit project

ABOUT THEMSELVES:

- The importance of setting long-term goals
- The importance of personal development

Materials Needed:

- Rabbit Member Guide and Annual Report (MG-16)
- Activity Sheet 3, Personal Skills Identification

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY

Leader Notes

As you conclude Level IV of the rabbit project, it is important to think about the things you've learned and the accomplishments you've made.

Over the four levels of the rabbit curriculum, you have gained many skills that will help you in the future. It is important to identify and reflect on these skills. This process is called personal development. Evaluating how you've done in a project or activity gives you insight into how you might improve on the activity in the future.

Personal development is not easy. It requires honesty, creativity, and planning.

Pass out Activity Sheet 3, Personal Skills Identification.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. What are several of the skills you've gained while working on your rabbit project?
2. Which skills do you plan to improve? Why?

Process:

3. Why is it important to know your skills?
4. Why is it important to self-evaluate your skills?

Generalize:

5. In what other circumstances will you be able to use these skills?
6. In what other circumstances will you use some type of self-evaluation technique?

Apply:

7. How will you use these skills in the future?

GOING FURTHER:

- Visit a job placement service about developing a resumé.
- Have a business recruiter visit your group.
- Practice by conducting mock interviews.

REFERENCES:

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THE RABBIT PROJECT'S IMPACT ON PERSONAL DEVELOPMENT
RABBITS, LEVEL IV
Activity Sheet 3, Personal Skills Identification

Here are some of the skills that you have developed during your rabbit project. Check the skills that you feel you have mastered.

- Uses time wisely
- Estimates how much things will cost and follows a budget
- Gathers, buys, stores and distributes supplies for a project
- Gives clear instructions, explains to others how to do a task and helps others correct their mistakes
- Works well with people
- Is a team member
- Uses leadership skills of identifying main issue, persuading others, negotiating, working with diverse groups
- Gathers, organizes, communicates, and uses information
- Uses computers and technology
- Understands and can work with people, ideas and things
- Reads, writes, listens, and speaks with others
- Thinks creatively by making decisions, solving problems and using imagination
- Is responsible, has high self-esteem, gets along with others and shows honesty

Reflect on the skill that is your greatest asset?

Reflect on the skill that you need to improve on?

The information that you've collected from this personal skills identification activity might be included on your resume. Your resume might be used to obtain a scholarship, to acquire more education or to get a job.

How would you summarize your personal development skills so that it could be included on your resume?

How will this process of personal development help you in the future in setting long-term goals?

