

4-H Rabbit Leaders Guide

The 4-H Pledge

"I pledge:

My Head to clearer thinking

My Heart to greater loyalty

My Hands to larger service

My Health to better living

For my club, my community and my country."

The 4-H Motto

Learn to do by doing

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Introduction

Thank you for volunteering your time to be a 4-H Rabbit Project leader. The role of the rabbit project leader is to:

- Help 4-H members learn about raising and managing rabbits
- Introduce members to 4-H rabbit project materials and other rabbit resources
- Work with members to complete 4-H Achievement requirements
- Provide information on various rabbit project options
- Promote personal development opportunities in 4-H (communications, community projects, conferences, camps)

As a 4-H Rabbit Project leader, you will wish to know and help teach:

1. The overall objectives of the Ontario 4-H Program
2. The general objectives of the 4-H Rabbit Project

4-H Program Objectives

The 4-H program develops 4-H members in such a way that they become effective and responsible members of society. 4-H project work and programs are designed to help members:

- Increase their knowledge and develop skills in subject matter areas which are of interest and value to them.
- Acquire a positive attitude towards learning and develop the ability to make wise decisions.
- Learn how to work effectively in groups.
- Enlarge their horizons by participating in new experiences.
- Acquire a responsible attitude toward community service.
- Develop physically through healthful living and active recreation.
- Develop as responsible members of society. To provide an opportunity for young people to develop mentally, emotionally, and socially through association with others.

4-H Rabbit Project Objectives

- To develop pride and responsibility associated with owning animals.
- To acquire an understanding of rabbit breeding, production and management practices, and acquire skill in executing them by owning, caring for and keeping records of rabbits.
- To develop skill, patience and understanding in handling animals.
- To increase knowledge of safety precautions for man and animals.
- To acquire an understanding of the economics of the rabbit industry and develop decision-making skills.
- To be able to identify various rabbit products and acquire an understanding of marketing.
- To develop an understanding of science and scientific research and its value to the rabbit industry.
- To earn money and learn how to use it effectively.



As a club volunteer your responsibilities are to:

- Complete the volunteer screening process and attend a volunteer training session
- Notify the local Association of the club, arrange a meeting schedule and participate in club meetings, activities and the Achievement program
- Have membership lists completed and submitted to the local Membership Coordinator, along with fees collected (if applicable) by the end of the second meeting.
- Review project material to familiarize yourself with the information and adapt it to fit your group.
- Have members fill out a Health and Safety Form and identify any health concerns. Ensure that all members, leaders and parent helpers know the appropriate actions during an emergency.
- Organize the club so that members gain parliamentary procedure, judging and communication skills.

Club member responsibilities are to:

- Participate in at least 2/3 of his/her own club meeting time.
- Complete the project requirements to the satisfaction of the club leaders.
- Take part in the project Achievement Program.
- Use and complete a Record Book.

Achievement Program

Each 4-H project is completed with an Achievement Program. This is an opportunity for the club members to share what they have learned with the community and to improve the visibility of 4-H. Planning for the Achievement Program should involve all club members. Some ideas for your achievement follow:

- Have members prepare a rabbit for show and take part in a 4-H show or other local rabbit show
- Set up an informational display at a local fair or community event
- Organize and run a “Rabbit Information Night” for people in the community to attend and learn about rabbits

Possible Senior Projects include:

- a) Crossbreeding program
- b) Comparison of crossbred and purebred rabbits
- c) Designing and building a rabbitry
- d) Participating in an open show circuit with purebred rabbits
- e) Effects of genetics on coat color
- f) Rabbit skin tanning
- g) Compare the cost of rate of gain between high and low energy rations.
- h) A study of breeds and their characteristics.
- i) Carcass composition and retail value.
- j) Parasites, diseases, and other health problems.
- k) Any other topic of interest related to rabbits



How to Use This Manual/ Planning a Meeting

This project contains both a Leader's Guide and Member's Guide. It is the leaders responsibility to read through the information and activities provided, to create ones own meetings. There is a lot of material included within this project, and it is recommended to plan all meetings before the start of the club. This will ensure everything you want to go over is covered over the duration of the club.

Included on the following page is a Leader's Planning Chart to help with the planning of meetings. In addition to the chart, keep track of what went well and what should be changed next time, because each time this project is run, the content of the meetings can be different!

Before Each Meeting

- Read the topic information and activities thoroughly and note the most relevant pages within the Member's Guide. Make sure to point out these pages to the members during the meeting.
- Be familiar with the information provided. Think of imaginative ways to present the information to the members. Do not rely on just reading the information aloud.
- Gather any equipment and/or resources that need to be brought to the meeting.
- Review available resources, plan the meetings and choose activities and themes that compliment the ages and interests of your members.
- Each 4-H project must be held over a period of at least 4 separate meetings, totaling a minimum of 12 hours. Typically, 4-H meetings are approximately 120 minutes (2 hours) in length. Before each meeting, create a timeline to ensure that you are providing an adequate amount of instructional time for club completion.

When planning each meeting, a typical 4-H meeting agenda should include the following:

- | | | |
|-------------------------------|--|---|
| · Welcome | · New Business: local and provincial 4-H activities/ opportunities, upcoming club activities | · Clean-up |
| · 4-H pledge | · Meeting content and activities | · Social recreation and/or refreshments |
| · Roll Call | | · Adjournment |
| · Secretary's Report | | |
| · Treasurer's Report (if any) | | |
| · Press Report | | |

Judging and Communication Activities

Each meeting must include either a judging or communications activity.

- Judging activities give the members an opportunity to use judging techniques as part of the learning process. Through judging members learn to evaluate, make decisions and communicate with others. You don't even need to judge rabbits; as long as members are setting criteria, and critically thinking about where the items fit within that set of criteria, they are learning the basic skills of judging!
- Public speaking can be included in the Roll Call, hands-on activities, or social recreation time too. These activities do not need to involve the topic of rabbits as the outcome is more about understanding the concepts of effective communication.



Leader's Planning Chart

Mtg. #	Date/Place	Topics Covered	Activities	Materials Needed



Record Books

There are two record books provided with this project: Market and Breeding Stock.

These booklets are designed for members to record information throughout the club. Recording information not only regarding their project animal, but also their goals and accomplishments and what they have learned is important.

The Record Books should be given to each member at the beginning of the first meeting. Make sure to go through the Record Book with the members and explain the charts and forms. Encourage them to use their Record Books, and record as much information as possible.



**I pledge:
My Head to clearer thinking,
My Heart to greater loyalty,
My Hands to larger service, and
My Health to better living.
For my club, my community and
my country.**

**Bring this page to each meeting and post where all members can see.*



Teaching Techniques

To be a good 4-H leader you must first understand young people and have the ability to arouse their interest and enthusiasm. It is important that you yourself be interested and enthusiastic about the subject you are teaching.

When preparing to teach project skills to your 4-H club members consider the following tips.

1. Have clear learning goals in mind for each meeting.
2. Be prepared.
3. Be simple, clear and definite.
4. Be natural and have fun. A positive attitude is contagious.
5. Keep the members active, and they will stay interested.
6. Let the members try doing things for themselves. Be available to offer help if needed.
7. Be patient, especially with nervous members.
8. Encourage members by praising them for positive contributions.
9. Do not play favourites.
10. Set a good example.

How to use this Guide

This guide includes teaching suggestions and activities to help you educate 4-H members about raising, managing and exhibiting rabbits. This guide should be used in combination with the Rabbit Manual (Publication #1250) and other rabbit resources. You will notice the guide is organized with the same chapters as the Rabbit Manual; this will help you find teaching ideas for the topics you plan to teach. The suggestions and activities included in this manual are just a guide; feel free to use your creativity to come up with other teaching strategies. The key to good teaching is actively involving the learner. Make sure to offer 4-H members plenty of opportunities to “learn to do by doing”.

Project Teaching

WHO DOES THE TEACHING?

It is not required that you, the 4-H Rabbit Leader, know or teach all the aspects of rabbit ownership covered in the rabbit project. Try to identify as many people as possible in your club or community who have knowledge or skills in certain areas. You may be able to draw on people such as: veterinarians, feed store representatives, rabbit breeders, 4-H alumni, or even senior 4-H members. If you work with these people by providing specific learning goals you can invite them to lead a teaching session for your members.

WHAT DO YOU TEACH?

Review the objectives of the 4-H Rabbit program and use the 4-H Member's Rabbit Manual for specific ideas. These, combined with your own knowledge of the rabbit industry, will give you a base to start on. As you become acquainted with your members and visit their rabbitries you may find problem areas that you may wish to improve. It may also be logical and convenient to teach specific topics at the time of



year when they would normally take place; for example you may choose to teach about tattooing in the spring when baby rabbits are likely to be born and will need to be tattooed. A good teacher is objective. They may have special interests or biases, but they keep these out of their teaching. They keep up to date and base their teaching on facts.

WHEN AND WHERE DO YOU TEACH?

Depending on the type of 4-H club you are in, you may teach project information at general 4-H club meetings, or you may hold special project meetings dedicated exclusively to learning about rabbits. Project teaching may also take place at special events such as field days, husbandry check visits, fairs, or on Achievement Day.

HOW TO TEACH

Individuals learn in different ways so it is a good idea to include more than one teaching method in your lessons. Variety will not only promote learning but it will help keep the members' attention as well.

Did you know young people will retain different amounts of information depending on the method by which they learned it?

Learning Method	Percentage of Information Retained
Reading	10%
Hearing	20%
Seeing	30%
Hearing and Seeing	50%
Saying	70%
Saying and Doing	90%

Considering this information, it would be wise to use a variety of methods in the course of a year or even in a single meeting. This makes it more interesting to members and therefore, you will accomplish more with them.

Some suggested methods you could use to get your members involved:

- Discussions and debates.
- Demonstrations with you and/or a member presenting the material.
- Workshops on topics such as balancing rations, record keeping, grooming, or husbandry.
- Slide shows or movies.
- Talks by special resource people such as a nutritionist, a veterinarian, or a local rabbit breeder.
- Trips to farms, businesses, organizations, or special rabbit events.
- Games.

See pages 72-93 of the 4-H Leaders Handbook for more suggestions on teaching techniques and managing a 4-H project.



Project Selection

OBJECTIVES

To teach 4-H members about:

- The history of rabbits
- Breeds of rabbit common in North America
- Parts of the rabbit
- Characteristics that are desirable in rabbits
- Selecting rabbits based upon their general conformation and breed standards

Suggested Activities

FIELD TRIP

There are several different types of field trips and activities you can organize to teach your club about rabbit breeds and how to select the best rabbit for their 4-H project. Consider the following:

- Visit a rabbit show. Have members make a list of the different kinds of rabbits they see. Lead the group in a discussion about the breeds represented and which classes they fit into.
- Visit rabbit breeders in your area. Breeders can be a great source of information on raising and caring for rabbits, and can offer lots of advice on what to look for when you are buying rabbits.
- Invite members or breeders to bring breeds with different coat types to a club meeting. Compare how each coat type feels. Measure how long the fur/wool is. Look at the characteristics such as rollback and flyback, resiliency and the sheen.

BREED ON THE BACK

Tape the names and/or pictures of various breeds on the back of each member. Instruct them to try to find out which breed they are by asking questions of other members. Encourage only yes/no answers at first.

MATCHING

Divide the group into teams. Give each team a set of 10 breed pictures and 10 breed names. Have each team match the pictures with the name. When each group has completed its matching, have them switch with another to check their answers. This activity often stimulates excellent discussion about the breeds.

BREED REPORTS

Ask each 4-H member to draw a breed name from a hat and either prepare a short report using resource materials available or perhaps give an impromptu speech about the breed. If you have a small group perhaps they can choose a breed. This is a good way to help 4-H members develop communication skills and knowledge about rabbit breeds.

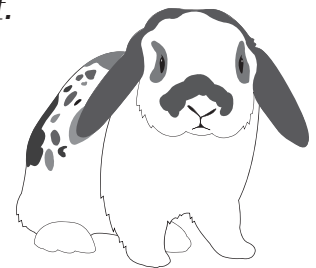


Who Am I ?

There are many common breeds of rabbits. Using the 10 breeds listed below answer the "Who Am I?" Put the correct breed in the space under the description.

- *Florida White*
- *Californian*
- *Satin*
- *Belgian Hare*
- *Holland Lop*
- *English Angora*
- *Jersey Woolly*
- *Mini Rex*
- *Netherland Dwarf*
- *English Lop*

1. *I am known for my extremely long ears.*
2. *I am a commercial rabbit but I am smaller than many of the other commercial breeds.*
3. *I am the smallest of the lops.*
4. *I have a unique fur coat that feels like velvet.*
5. *I am one of the smallest rabbits.*
6. *My fur is brilliant in color compared to normal furred rabbits.*
7. *I have heavy bangs, side trimmings and heavily tasseled ears.*
8. *I am a small rabbit and my short compact body covered in dense wool.*
9. *My name is deceiving, I am, really just a breed of domestic rabbit.*
10. *I have pink eyes, and dark points on my ears, feet and tail.*



Project Selection Questionnaire

A. Before acquiring your rabbit you should know how to:

B. When choosing your first rabbit you should: (Yes or No)

1. Have a good idea of what breed you want. (YES / NO)
2. Accept a free rabbit from a neighbor who doesn't want it any more, plus it's not healthy. (YES / NO)
3. Buy one from a pet store, although the owners aren't sure what breed it is. (YES / NO)
4. Buy from a rabbit club member who is known and reliable. (YES / NO)
5. Ask the help of your club leader or another reliable rabbit breeder to help you find what you want. (YES / NO)

C. What size rabbit is best for you?

D. Is your choice a Fancy, Commercial or Wool Rabbit?

E. Name some characteristics you will keep in mind when selecting your rabbits.

F. Name three Commercial breeds.

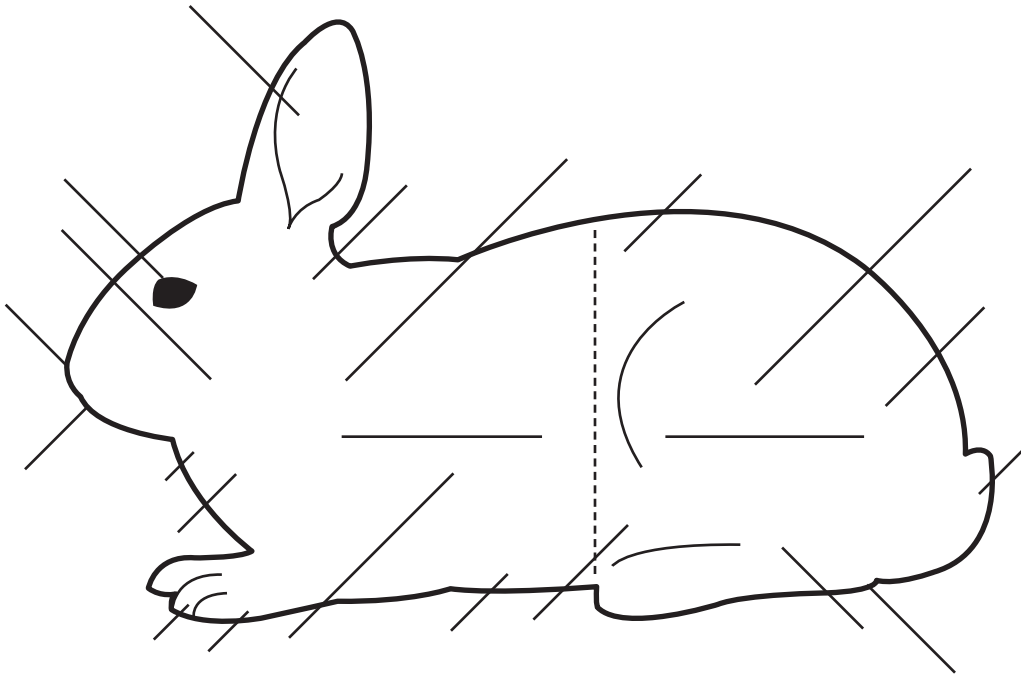
G. Name three Fancy breeds.

H. Name three Wool breeds.

Parts of the Rabbit

Place the following terms in the correct places on the rabbit diagram below.

- Neck
- Hock
- Ear
- Shoulder
- Loin
- Hip
- Belly
- Forequarter
- Mouth
- Flank
- Hindquarter
- Rump
- Tail
- Leg
- Rib
- Foot
- Toes
- Chest
- Eye
- Dewlap
- Nose
- Cheek

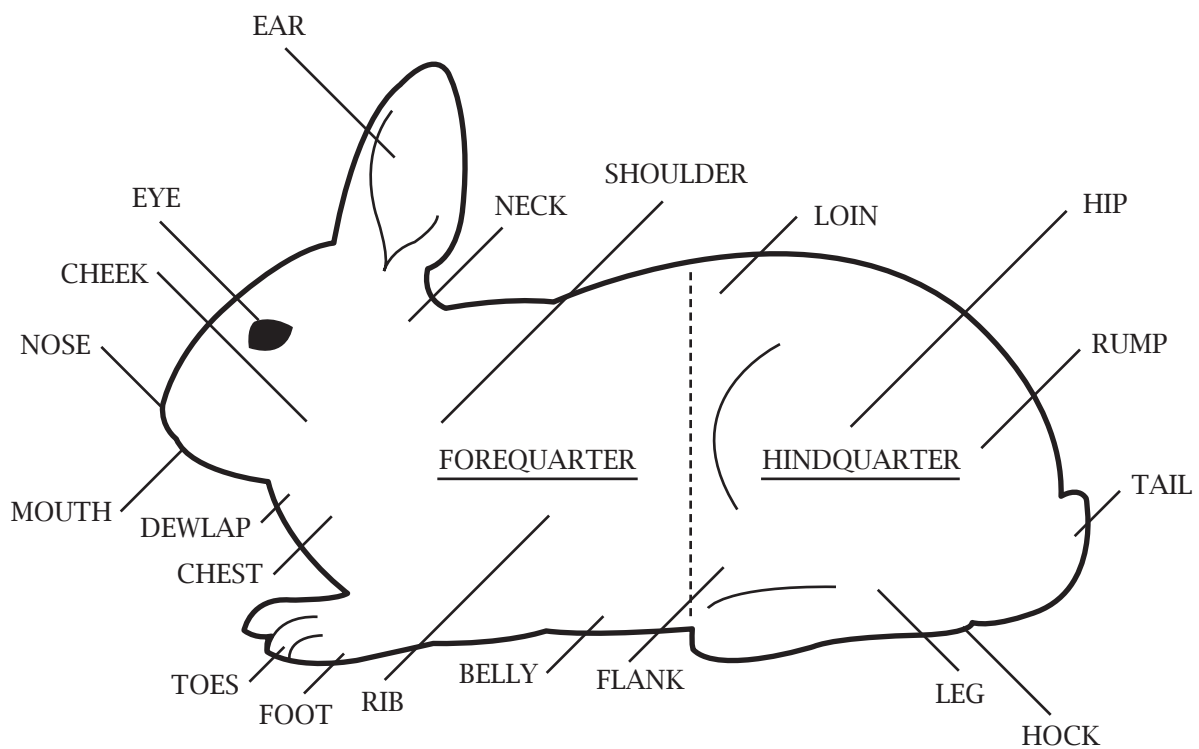


Answers

Who Am I?

1. English Lop
2. Florida White
3. Holland Lop
4. Mini Rex
5. Netherland Dwarf
6. Satin
7. English Angora
8. Jersey Wooley
9. Belgian Hare
10. Californian

Parts of the Rabbit



Feeding and Nutrition

Objectives

To teach members about:

- Basic nutrients
- Types of feed
- Digestion

To provide members with the skills necessary to:

- Distinguish between feeds
- Develop a feeding program for their 4-H projects

Suggested Activities

POSTER CHALLENGE

Challenge your club members to research one aspect of rabbit nutrition and or digestion and prepare a poster or model to show the rest of the group at the next meeting.

Suggested challenge topics:

- **Junior:** Challenge junior members to make a poster showing what they feed their rabbits. The poster or model could include a list or selection of things that should not be fed to rabbits.
- **Intermediate:** Challenge intermediate members to identify the purpose of all parts of the rabbit's digestive system. Their poster or model could identify differences between digestion in people and digestion in rabbits.
- **Senior:** Challenge senior members to find out as much as they can about coprophagy and the caecum. Their poster or model could identify possible nutritional deficiencies that could arise if the rabbit did not have a caecum.

FEED COMPARISON

Collect samples of rabbit feeds common in your area. Allow the members to handle the feed samples and look at the nutritional information on the label. Challenge members to select the best feed for various classes of rabbits (maintenance, fryers, pregnant, angora...etc.) Members could also be challenged to compare between various feeds for cost efficiency.

Nutrient Match Up

Use lines to connect the name of the nutrient to its role in the body.

<i>Protein</i>		<i>Reproduction and lactation</i>
<i>Vitamin E</i>		<i>Heat, energy and fattening</i>
<i>Carbohydrates</i>		<i>General health</i>
<i>Sodium (mineral)</i>		<i>Bone and teeth formation, milk production</i>
<i>Fats</i>		<i>Transport of nutrients and control of body temperature</i>
<i>Vitamin A</i>		<i>Bone development</i>
<i>Calcium (mineral)</i>		<i>Activity of the thyroid gland</i>
<i>Water</i>		<i>Heat, energy and fattening</i>
<i>Vitamin D</i>		<i>Growth, reproduction, and muscle development</i>
<i>Iodine (mineral)</i>		<i>Stimulates appetite</i>

Name that Vitamin

Use the chart below to find answers to the following questions about Vitamins.

1. *Which vitamin is the Sunshine vitamin?*
2. *If an animal bleeds heavily from a wound, which vitamin would you expect to be deficient?*
3. *Which vitamins work together with minerals to perform specific functions?*
4. *If an animal has rickets, a severe bone disease, which vitamin is likely to be deficient?*
5. *If you feed rabbits young, leafy, green plants, which vitamins would you be supplying?*
6. *Which vitamin can the rabbit body produce that the human body can not?*
7. *Which vitamin does the body need to use protein properly?*

VITAMIN	SOURCE	STORED IN THE BODY?	IMPORTANCE	OTHER
A	Carotenes found in green plants	Yes	Needed for healthy skin, digestion and reproduction	Commonly deficient vitamin
B Complex	Manufactured by bacteria in the intestinal tract of the rabbit	No	Needed for the body to utilize protein and energy	It is important to feed a proper diet so that the intestinal bacteria can make B vitamins
C	Manufactured by the body tissues	No	Needed for chemical reactions in the body	
D	Sunlight on the skin	Yes	Required for proper bone formation along with Ca and P	Supplement in winter or if rabbits are living indoors
E	Young, green forages and whole grains	Yes	Needed for reproductive function	Deficiency can lead to abortion or poor survival rate of kits
K	Green leaves. Also manufactured by bacteria in the rumen of adult sheep.	Yes	Required for blood clotting	Deficiencies are rare

* Adapted from 4-H Saskatchewan

Feed Trivia

1. *What one nutrient makes up more than 2/3 of our body material?*
2. *What is the name given to animals that only eat vegetation?*
3. *What is the name given to animals that eat only meat?*
4. *What nutrient is mainly responsible for cell growth in animals?*
5. *Animals require food for what three purposes?*
6. *What does the term nutrient apply to?*
7. *What four minerals are important to livestock development?*
8. *What does a proper diet help the body do?*
9. *What are some good sources of carbohydrates?*
10. *What three main groups can feeds be divided into?*
11. *Can rabbits be over fed?*
12. *To be healthy rabbits need what three things?*



Answers

Nutrient Match Up

<i>Protein</i>		<i>Reproduction and lactation</i>
<i>Vitamin E</i>		<i>Heat, energy and fattening</i>
<i>Carbohydrates</i>		<i>General health</i>
<i>Sodium (mineral)</i>		<i>Bone and teeth formation, milk production</i>
<i>Fats</i>		<i>Transport of nutrients and control of body temperature</i>
<i>Vitamin A</i>		<i>Bone development</i>
<i>Calcium (mineral)</i>		<i>Activity of the thyroid gland</i>
<i>Water</i>		<i>Heat, energy and fattening</i>
<i>Vitamin D</i>		<i>Growth, reproduction, and muscle development</i>
<i>Iodine (mineral)</i>		<i>Stimulates appetite</i>

Name that Vitamin

1. D
2. K
3. D and E
4. D
5. A, E and K
6. C
7. B

Feed Trivia

1. Water
2. Herbivores
3. Carnivores
4. Protein
5. To give heat and energy to the body. To provide essentials for building various body tissue to supply materials for bone building.
6. The term nutrient is applied to any chemical compound (natural or man-made) or a group of compounds of the same general chemical compositions that aids in the support of animal life.
7. Sodium, chlorine, calcium, phosphorus
8. Helps the body fight viruses and diseases
9. Oats, barley, wheat, corn, and molasses
10. Concentrates, dry roughages, and succulent feeds
11. Yes
12. Water, pellets and hay

Facilities

Objectives

To teach 4-H members about:

- Recommended cage sizes
- Cage styles and materials
- Sanitation

Suggested Activities

COST COMPARISON

Have members research the cost of rabbit cages and equipment by visiting a rabbit supply store or using the internet. Members should compare between the various options and complete a chart to show their findings.

Cages	Store Bought	Home Made
Estimated Cost		
Advantages		
Disadvantages		

Watering Systems	Bottle	Dish	Automatic
Estimated Cost			
Advantages			
Disadvantages			

Have members identify which items would be the better choice for them.

LOCATION, LOCATION, LOCATION

It is important for members to consider not only the type of cage they buy but where they place it.

Have the 4-H member draw a picture of their current rabbit caging. Have them include the following:

- The location of the cage in the barn, yard, garage, etc.
- The direction of that the air flows past or into the cage
- The location of the sun at the different times of the day (sunrise, mid day, sunset).
- Any significant items in the vicinity of the cage (water source, chemical storage...etc).

Ask the member to share their drawing and identify both positive and negative points. If there are problems such as too much direct sunlight or too much wind, ask them to brainstorm with the club how to resolve these problems.



Rabbit Facilities Scramble

Unscramble each of the words below. All the words are things to consider when preparing and caring for rabbit facilities and equipment.

Copy the letters in the numbered cells to other cells with the same number below to reveal a secret message about your rabbit's home.

GACE
14

TEWAR TEBTOL
7

NIATATSONI
6 20 5

CUHHT
15 8

SNTE XOB
16 12 2

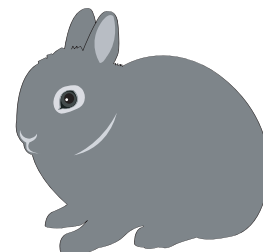
FODO HIDS
1

HOWS CEGA
21 13 17 4

TEETAMRUPER
3 10 19 18

NAVTINTEOLI
11

EMNURA
9

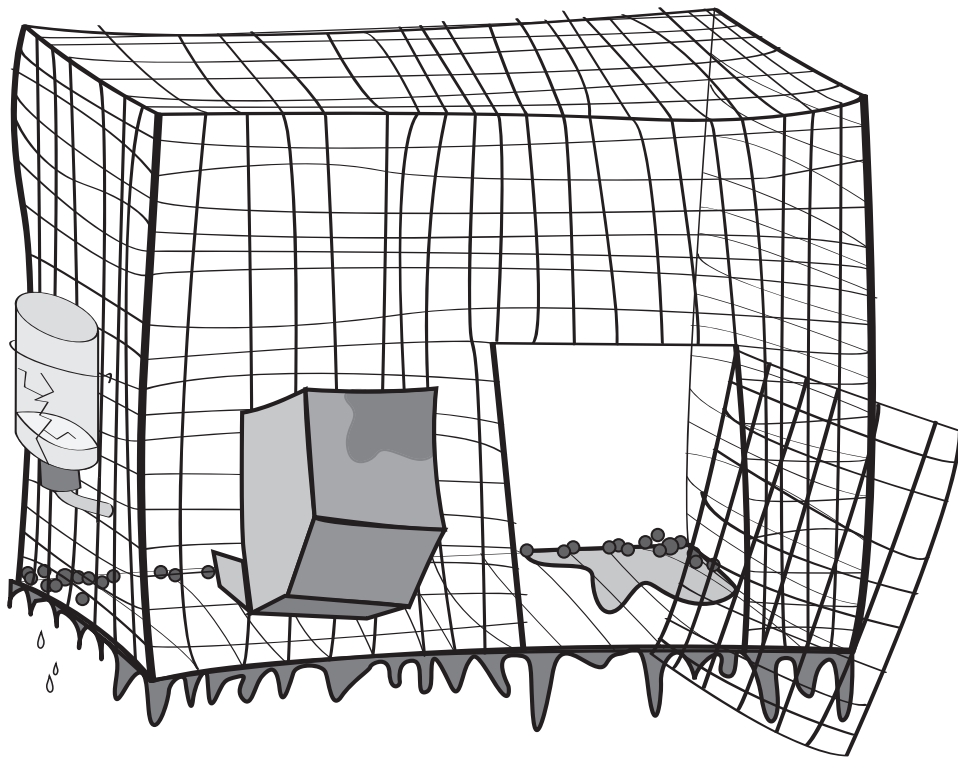


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

How Would You Do It?

You want to use this cage, but look at the shape it is in! How would you get it back into shape for rabbits? Write your answers in the order you would complete them.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____



Rabbits Housing - Group Activity

Divide members into 4 groups. Hand each group a housing scenario and a piece of graph paper. Using the graph paper, each group should design the best type of housing. To help them out, members might want to refer to the information in the Members' Manual. After an appropriate amount of time, each group should present their housing scenario and the type of housing they chose and why.

.....

#1 You live in the town of Potterville and you have a rabbit named Peter. In the summer the weather is hot and in the winter it is very cold. You are in Grade 8 at Beatrix Public School and have just completed a wood working course.

What type of housing would you design for this rabbit?

.....

#2 This is your lucky day! You have just won the lottery! You have decided to invest your money in a rabbit operation that will have 200 breeding does. You are living on 10 acres of land in a ranch-style house with a detached 2-car garage. The weather in this area has hot summers and cold winters.

What type of housing would you design for these rabbits?

.....

#3 You live on a 1/2 acre lot in the rural area of Squirrelville County. There are 5 children in your family and you all live in a 2 storey house with a car port. Your mother, who is a carpenter, has just given you 2 rabbits named Bertha and Ralph. The weather in Squirrelville County is hot in the summer and mild in the winter.

What type of housing would you design for these rabbits

.....

#4 You live at Punkeydoodles Corners on a 25 acre lot with an old house and shed. You and your parents have just renovated your house. In 2 years you will be entering university and need to earn some extra money for tuition. You have decided to raise rabbits starting with 25 breeding does. Summers are very hot and winters can be extremely cold in Punkeydoodles Corners.

What type of housing would you design for these rabbits?

Answers

Rabbit Facilities Scramble

Cage

Water Bottle

Sanitation

Hutch

Nest Box

Food Dish

Show Cage

Temperature

Ventilation

Manure

SECRET MESSAGE: Home is Where the Heart Is

How Would You Do It?

1. Remove waste from inside the cage.
2. Replace floor with 14 gauge rabbit wire spaced 12.5 x 25 mm to allow waste to fall through while protecting rabbits feet.
3. Sanitize entire cage.
4. Realign cage so that it is square.
5. Replace hinges on door.
6. Replace latch on door.
7. Replace broken water bottle.
8. Clean and reattach feeder.
9. If to be used indoors to mount a tray to the bottom of the cage to collect waste.
10. If it is to be used outdoors add a roof and at least 1 solid wall to protect rabbit from the elements.



Husbandry and Health

Objectives

To teach 4-H members about:

- Caring for their 4-H rabbit project
- Common diseases of rabbits
- Common rabbit parasites

To provide members with the skills necessary to:

- Trim hooves
- Identify project animals
- Administer medication

Suggested Activities

ROTATING FIELD DAY

4-H project leaders must ensure that 4-H members have all the skills necessary to care for their 4-H project animals. One way to teach members these skills is through a field day. On the field day, experienced individuals should demonstrate for the club members how to: trim nails, groom rabbits, tattoo, and how to give injections or oral medications.

On a rotating field day the whole club will rotate from home to home, visiting all the locations where 4-H project animals are housed. At each farm, one or two husbandry topics can be covered and then a fun activity or snack can be presented. This allows 4-H to learn important husbandry skills while having fun and getting to know their fellow club members better.

The rotating field day also provides an excellent opportunity for the project leaders to do a husbandry check on the 4-H project animals. Even if it is not possible to rotate between homes, a field day provides a great opportunity to invite qualified individuals to demonstrate correct husbandry procedures for your club members.

CREED OF THE 4-H STOCKKEEPER

Review the Creed of the 4-H Stockkeeper with your club. Divide the club into groups and using the attached activity sheet, have members brainstorm why it is important to complete all 11 activities included in the creed. After members have completed the activity sheet bring the group back together for a discussion on the value and impact of each item in the creed.



The Creed of the 4-H Stockkeeper

I will:

1. *Provide comfortable and sufficient quarters for my livestock*
2. *Strive to improve the breeding and quality of my livestock, and the livestock in my community from year to year*
3. *Keep my animal free from parasites*
4. *Strive to keep my livestock in good health*
5. *Feed my livestock on time each day*
6. *Learn as much as possible about the best methods of feeding and caring for my livestock*
7. *Be kind to all animals*
8. *Provide animals with clean water at all times*
9. *Always be a good sport in competition*
10. *Keep an accurate record of my projects*
11. *Complete my project and take part in all the activities of my 4-H club each year*



Health and Husbandry Jeopardy

Divide the club in to teams and using the questions below play a round of Jeopardy.

Start out with a question at the 100 level. The first team to correctly answer the question gets the point and may select the next category and question. The team with the most points at the end wins.

PARASITES

100: *Signs of this parasite include brown scabs in the ear.*

- Ear Mites

200: *This parasite is very long and has segmented body.*

- Tapeworm

300: *This is why it is a good idea to rotate between several different wormers.*

- Not all de-worming products control all types of worms

400: *An isolated lump around the shoulders could be a sign of this condition caused by the botfly.*

- Warbles

500: *This is a very serious condition that is caused by a one-celled parasite. It can occur when feed or feeding areas are contaminated with manure.*

- Coccidiosis

HUSBANDRY TECHNIQUES

100: *If this is not done regularly the rabbit may have difficulty walking.*

- Nail Trimming

200: *It is important to do this regularly especially if you have a long haired rabbit.*

- Brushing

300: *When tattooing rabbits, this can be used to disinfect equipment between tattoos.*

- Rubbing Alcohol

400: *It is important for rabbits to be tattooed for these 2 reasons*

- Identification and accurate record keeping

500: *This is the normal or healthy body temperature of rabbits.*

- 99.1 - 102.9°F (37.3°C - 39.4°C (rectal))

GENERAL CARE

100: *Don't hesitate to call this person when your rabbits are sick.*

- Veterinarian



200: *This is even better for the health of the rabbits than medicine.*

- Prevention

300: *This should be done to prevent new animals from spreading disease within the rabbitry.*

- Quarantine new animals

400: *It is important to do this especially if you have given medication to your rabbits.*

- Keep records

500: *Poor health and disease can often be attributed to this.*

- Faulty Husbandry

COMMON DISEASES

100: *This condition is usually inherited but occasionally can be caused by an accident.*

- Malocclusion

200: *This condition is common in rabbits with a thin fur covering on their feet.*

- Sore Hocks

300: *Bacteria in the mammary system can result in this dangerous condition.*

- Mastitis

400: *This disease has similar symptoms to and is often confused with hutch burn.*

- Vent Disease

500: *There is no specific treatment for this serious disease that can express itself in 3 forms.*

- Pasteurelosis

MEDICATION

100: *Medication for worms is often administered this way.*

- Orally

200: *This type of injection is given in the vein by a veterinarian.*

- Intravenous

300: *This type of injection is given under the skin.*

- Subcutaneous

400: *When giving an intramuscular injection what should be done to ensure the needle isn't inserted in a vein?*

- Pull back on the plunger slightly before injecting

500: *This type of medication can be used to treat bacterial infections but will have no effect of viruses or parasites.*

- Antibiotics



Symptom Match Up

Draw lines to match the symptoms to the disease

Diseases		Symptoms
<i>Ear Mites</i>		<i>Nasal discharge, sneezing, coughing, water eyes, rubs nose with front feet.</i>
<i>Snuffles (Pasteurellosis)</i>		<i>The rabbit turns its head to one side and has a loss of balance.</i>
<i>Mastitis</i>		<i>Shakes head and flops ears. Scaly crust starting at base of inner ear.</i>
<i>Sore Hocks</i>		<i>Loss of hair is usually in circumscribed patches, often starts on head but may involve other parts of the body.</i>
<i>Ringworm</i>		<i>Bruised areas under surface of the rabbits hocks. Often becomes infected or abscessed.</i>
<i>Wry Neck</i>		<i>Excessive discharge from the eye and matted fur under the eye. Rubs its eyes with its front feet.</i>
<i>Weepy Eye</i>		<i>Mammary glands become hot, reddened and swollen - later may appear blue in colour.</i>

Answers

Symptom Match Up

Diseases		Symptoms
<i>Ear Mites</i>		<i>Nasal discharge, sneezing, coughing, water eyes, rubs nose with front feet.</i>
<i>Snuffles (Pasteurellosis)</i>		<i>The rabbit turns its head to one side and has a loss of balance.</i>
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<i>Ringworm</i>		<i>Bruised areas under surface of the rabbits hocks. Often becomes infected or abscessed.</i>
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<i>Weepy Eye</i>		<i>Mammary glands become hot, reddened and swollen - later may appear blue in colour.</i>

Breeding Rabbits

Objectives

To teach 4-H members about:

- Breeding rabbits
- Selection and management of breeding animals
- Kindling
- Weaning

To provide members with the skills necessary to:

- Assist does or their litters if necessary

Suggested Activities

POSTER CHALLENGE

Challenge your club members to research one aspect of breeding or kindling and prepare a poster or model to show the rest of the group at the next meeting.

SUGGESTED CHALLENGE TOPICS:

- **Junior:** Challenge junior members to research what to look for when purchasing a breeding pair. Their poster could include a list of desirable characteristics as well as a diagram of an ideal pair.
- **Senior:** Challenge senior members to prepare a poster on rabbit genetics. Their poster could include diagrams that show how various characteristics such as colour are inherited.

DETERMINING SEX

Bring a buck, a doe and a litter of kits to a meeting. Using the buck and the doe demonstrate for the members how to determine sex. Challenge the members to correctly identify the sex of all the kits in the litter.

PEDIGREE DESIGN

Ask each member to design a blank pedigree for their rabbitry. Encourage members to be creative and add personal touches. Make sure that all pedigrees include the important standard information:

- Name
- Ear tag
- Registration number (if applicable)
- Colour
- Weight
- Breeders information
- Blank lines for purchaser information

The pedigree should include four generations (back to the great grand sire and dam).

Would You Cull This Doe?

One of the most difficult things to do when you have a rabbitry is culling? What is culling? What are some reasons that you might cull a doe?

Would you cull this doe?	YES or NO	WHY? or WHY NOT
<i>Your 2 year old doe just weaned a healthy litter of 6 kits.</i>		
<i>Your 6 year old doe just aborted. Her last kindling resulted in only a single kit that died several days after kindling.</i>		
<i>Your 2 year old doe has suddenly developed malocclusion.</i>		
<i>Your 1 year old has just delivered her second litter. She is refusing to nurse them.</i>		
<i>Your 8 month old doe has malocclusion.</i>		
<i>Your 10 month old doe just weaned a small but healthy litter of 3.</i>		
<i>Your best producing doe has just turned 6 years old.</i>		
<i>Your Netherland Dwarf doe just had 4 normal sized babies and two tiny babies that died soon after birth.</i>		

Breeding True or False

Here are 15 statements related to rabbit reproduction.
Beside each statement write true or false.

1. *Rabbits have a regular heat cycle, every 31 days*
2. *Some signs that can indicate a doe may be willing to breed including: restlessness, rubbing her chin on the cage or equipment, or slightly swollen and purplish coloured vulva (female sex organ).*
3. *Decreased light will result in reduced conception rates in rabbits.*
4. *Male rabbits reproduce more successfully during hot weather (33°C and above).*
5. *When you breed rabbits the doe should always be taken to the buck's cage.*
6. *The gestation period (pregnancy) of a rabbit is approximately 42 days.*
7. *A totally safe and accurate way to tell if your doe is pregnant is test breeding.*
8. *If the doe is pregnant you may be able to feel the embryos by palpating her abdomen after 12-14 days.*
9. *The doe should be left in the bucks cage for 72 hours for breeding.*
10. *A nest box should be placed in the doe's cage about 25 days after the doe was mated.*
11. *The doe will pull her fur from her dewlap, chest, and belly and along her sides just before she is to give birth.*
12. *If a doe kills and eats her babies it means she was malnourished during the pregnancy.*
13. *Mother rabbits may only go in the nest box once or twice a day to feed the kits.*
14. *Baby rabbits are born with their eyes open.*
15. *Baby rabbits can be weaned as early as 2 weeks.*

Answers

Would you Cull This Doe?

This activity is designed to make your members think about rabbitry management decisions they would have to make as a producer. Some of the answers are obvious. Some of them have no right answer. What is important in this activity is that the members have some thoughts or reasons for their decisions.

Have your members make their own decisions. Then have them get together to make group decisions on each of the does.

Breeding True or False

1. FALSE - Rabbits do not have a regular heat cycle. They are considered to be reflex ovulators and will release eggs 9-13 hours after they are mated.
2. TRUE
3. TRUE
4. FALSE - During hot weather (33°C and above) bucks may stop producing viable sperm and become temporarily sterile.
5. TRUE
6. FALSE - The gestation period (pregnancy) of a rabbit is approximately 31 days.
7. FALSE - Test breeding is not that accurate. Sometimes it can result in a dual-pregnancy which is dangerous and can result in malformed kits.
8. TRUE
9. FALSE - The doe can be removed from the buck's cage immediately after breeding or can be left overnight. The doe should not be left with the buck too long (36 hours or more) the initial breeding. This may disrupt the hormone cycle which could result in a miscarriage.
10. TRUE
11. TRUE
12. FALSE - If a doe kills and eats her babies it means she is nervous or has become frightened.
13. TRUE
14. FALSE - Baby rabbits open their eyes at 10 or 11 days.
15. FALSE - Baby rabbits can't be weaned until they are eating solid food, usually at about 4 weeks old.



Showing Rabbits

Objectives

To teach 4-H members about:

- Training and grooming techniques
- Showmanship procedure and criteria
- Show ring etiquette

To provide members with the skills necessary to:

- Train rabbits
- Groom rabbits
- Exhibit rabbits

Suggested Activities

SHOWMANSHIP YEAH'S AND NAY'S

As a club brainstorm a list of showmanship Yeah's and Nay's. Include points such as how to respond to the judge as well as show ring etiquette.

PRACTICE SHOW

A practice show provides an excellent opportunity for members, particularly those that are new, to become comfortable handling their animal in a show ring setting. It also allows the members to see how their animal will react to the other people and animals in the ring. Try to arrange for a practice show prior to the first time the members will exhibit their animals. You may act as the judge yourself or you may ask another qualified individual. Ask the members to complete the normal activities required in showmanship and ask them some common questions. Rather than evaluating the members, provide commentary throughout. Give them suggestions for improvement and be sure to praise them when they do things well.

RABBIT QUIZ BOWL

Rabbit knowledge is an important part of rabbit showmanship. To prepare your club, hold a Quiz Bowl competition. The Quiz Bowl should include a variety of questions on rabbit topics including:

- Nutrition
- Health
- Grooming
- Husbandry
- Sanitation
- History
- Breeding
- Training
- Breed Knowledge

Organize the members into teams and then ask the questions. The team with the most correct answers wins.

SHOWMANSHIP SKIT

Divide the group into two teams. Have one team do a skit on correct showmanship, and the other on incorrect showmanship. Teams then act out their skits for each other. Have the members compare and contrast the two skits and identify ways for the actors in the incorrect showmanship skit to improve.

Health Check

Judges will often ask members to do a general health or condition check on their rabbit during showmanship. Cut out the cards below and have members organize them into the order they think they should do the steps of a health check. Have members describe what they are looking for when they do each step, out loud or by filling in the blank spaces on each card.

<i>Colour</i>
<i>Tail</i>
<i>Toenails</i>
<i>Nose</i>
<i>Teeth</i>
<i>Hocks</i>
<i>Hind Legs</i>
<i>Flip the Rabbit Over</i>

<i>Front Legs</i>
<i>Sex</i>
<i>Eyes</i>
<i>Abdomen</i>
<i>Evaluation of Overall Balance</i>
<i>Fur</i>
<i>Ears</i>
<i>Turn the Rabbit Back Over</i>

Word Search

Answer the eight fill in the blank questions below.
Then find your answers in the word search.

QUESTIONS:

1. Never lift a rabbit using its _____ or front legs.
2. It is important to learn how to _____ your rabbit over so you can trim its toenails and check its teeth.
3. It is important to be _____ with rabbit training.
4. _____ and _____ are as important to the exhibitor as to the animal.
5. Be polite and _____ to the judge and others at all times.
6. Don't _____ your animal in the show ring.
7. Always _____ the rabbit correctly on the show mat.
8. When doing and overall health check, ___ and _____ points to the judge.

N	I	A	L	P	X	E	P	F	R	C	E	S	E	N
T	Y	O	U	R	R	A	L	B	B	L	I	T	A	N
D	Y	O	U	R	S	I	E	L	F	E	T	O	Y	O
U	R	B	E	S	P	P	T	A	D	A	V	A	N	T
E	A	G	E	F	H	W	E	B	Z	N	J	W	P	Z
N	S	Y	W	T	Y	V	Y	T	T	L	R	V	W	P
J	A	O	H	H	T	W	E	C	Q	I	U	N	Z	S
E	R	Y	P	Y	Z	N	O	Y	Q	N	C	T	Q	H
V	B	L	Z	O	O	U	D	W	M	E	L	Q	Y	O
L	D	K	K	E	R	A	V	G	P	S	F	B	J	W
S	S	E	N	T	A	E	N	A	Q	S	W	T	R	I
X	S	T	E	S	F	O	E	S	T	S	Q	D	M	N
G	S	O	R	A	L	U	G	E	R	V	R	G	L	S
B	U	N	S	W	U	Y	X	A	B	G	P	Y	E	L
S	Z	I	S	D	W	X	E	T	M	T	Y	F	G	Y

Answers

Word Search Questions

1. Never lift a rabbit using its ears or front legs.
2. It is important to learn how to flip your rabbit over so you can trim its toenails and check its teeth.
3. It is important to be regular with rabbit training.
4. Neatness and cleanliness are as important to the exhibitor as to the animal.
5. Be polite and courteous to the judge and others at all times.
6. Don't pet your animal in the show ring.
7. Always pose the rabbit correctly on the show mat.
8. When doing an overall health check, show and explain points to the judge.



Marketing

Objectives

To teach 4-H members about:

- Products derived from rabbits
- Marketing rabbit products
- Food safety and traceability

Suggested Activities

ADVERTISING CAMPAIGN

Divide your club members into groups. Assign each group a rabbit product (meat, angora wool, pets, manure...etc.) Challenge each group to develop an advertising campaign that would increase the consumption of these products. Give members a specified period of time to develop their campaign and then have them present it back to the rest of the group. The campaign could be open to their creativity or you could specify the type of campaign they are to create. Some possibilities are radio ads, television commercials, jingles, posters, and articles.

MEAT MATTERS – TRUE OF FALSE

Quiz your club verbally with the following True or False questions about rabbit meat.

1. Cholesterol level in rabbit meat is much lower than chicken, turkey, beef, pork.
2. Rabbit is lower in % of fat than chicken, turkey, beef, and pork.
3. Rabbit meat is the meat highest in protein %.
4. Rabbit meat has less calories per pound than chicken, veal, turkey, lamb, beef, and pork.
5. Rabbits will produce 6 pounds of meat on the same feed and water as a cow will produce 1 pound of meat on the same feed and water.
6. Baby rabbits can double their weight in 6 days.
7. It was decreed by law in the Roman Empire that all young maidens be fed rabbit meat because it would make them more beautiful.
8. A breeding doe that weighs 10 pounds can produce 320 pounds of meat in a year.
9. France is the world's largest producer and consumer of rabbit meat.
10. Rabbit meat is all white meat.

ANGORA ACTIVITY

Host a workshop to teach club members all about angora rabbit wool. If possible invite a guest to attend and demonstrate for members things such as angora combing or plucking, dyeing and spinning.

The workshop content should be designed to create awareness and interest in the angora wool industry. Members should be made aware of the time and effort required to raise angora rabbits.

Pet Pamphlet

If your members sell their rabbits for pets encourage them to design an information pamphlet or booklet to go with the animals to their new homes. Many people purchase rabbits as pets without much information. 4-H members should help ensure that rabbits they sell are going to good homes and well-informed owners.

Sample pamphlet outline:

<i>Rabbit's Name:</i>	<i>Recommended Rabbit Pellet:</i>
<i>Identification #:</i>
<i>Date of Birth:</i>	<i>Preferred Treats:</i>
<i>Breed:</i>	<i>Food Not Recommended for Rabbits:</i>
<i>Probable Adult Weight:</i>	<i>Recommended Rabbit Vet:</i>
<i>Housing Requirements:</i>	If you have any further questions about raising your pet rabbit please feel free to contact me at:
.....	If you are interested in entering your rabbit in the 4-H program contact the local 4-H leader:

Answers

Meat Matters – True or False

1. TRUE - Cholesterol level in rabbit meat is much lower than chicken, turkey, beef, pork. (Alabama A & M University 1989)
2. TRUE - Rabbit is lower in % of fat than chicken, turkey, beef, and pork. (USDA circular # 549)
3. TRUE - Rabbit meat is the meat highest in protein%. (USDA circular # 549)
4. TRUE - Rabbit meat has less calories per pound than chicken, veal, turkey, lamb, beef, and pork. (Rabbit 795 calories, Chicken 810, Veal 840, Turkey 1190, Lamb 1420, Beef 1440, Pork 2050). (USDA circular # 549)
5. TRUE - Rabbits will produce 6 pounds of meat on the same feed and water as a cow will produce 1 pound of meat on the same feed and water.
6. TRUE - Baby rabbits feed of mothers milk so rich that they can double their weight in 6 short days as compared to a pig at 14 days, calves 47 days, and humans 160 days.
7. TRUE - It was decreed by law in the Roman Empire that all young maidens be fed rabbit meat because it would make them more beautiful.
8. TRUE - A doe rabbit that weighs 10 pounds can produce 320 pounds of meat in a year. !!! WOW !!! This is more than a cow and it takes 2 acres of land to raise a cow.
9. TRUE - France is the world's largest producer and consumer of rabbit meat.
10. TRUE - Rabbit meat is all white meat.

* Information Source: Ardeng Rabbit Meat <http://www.ardengrabbit.com/facts.html>



Glossary

Objective

To teach members to use correct rabbit terminology

Suggested Activities

ALPHABET CHALLENGE

Write the alphabet on a piece of poster paper. Brainstorm with your club rabbit words that start with each letter. Try to come up with at least one word for each letter of the alphabet.

EXAMPLE:

A - Angora

B - Buck

C - Carrot

An alternative way to use this activity is to have your club members sit in a circle. Have the first member come up with a rabbit word that starts with A, the second a rabbit word that starts with B and so on. Continue around the circle until the end of the alphabet.

HANGMAN

Hangman is an excellent way to learn new vocabulary. Bring a poster paper and coloured pens. Ask each member to come up with a word or phrase related to raising rabbits. Give each member a piece of paper and a pen and have them draw their hangman out. Have the members take turns leading the club in a round of the game.

WORD OF THE DAY

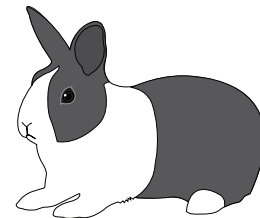
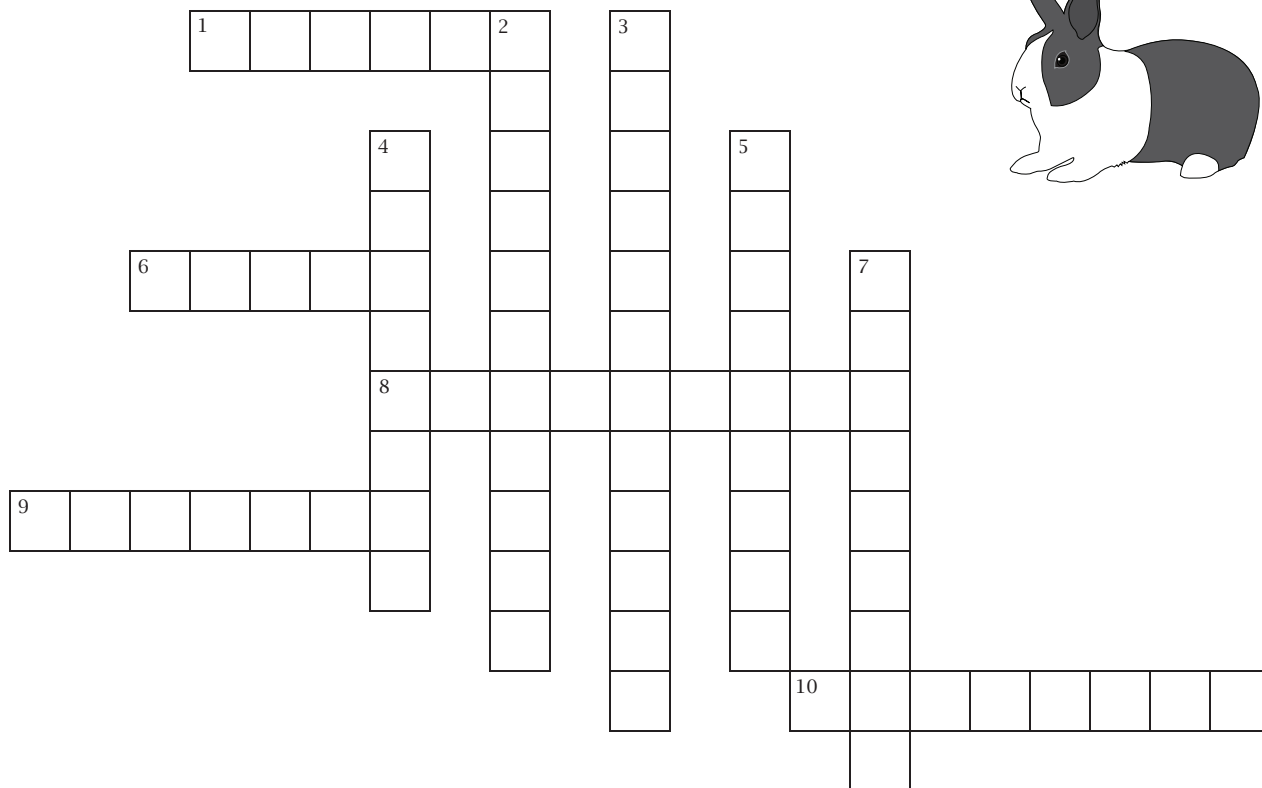
At the beginning of the club meeting announce the word of the day (a rabbit term relative to the current topic) and what it means. Challenge the members to use that word in context as much as possible throughout the meeting. Provide a prize for the member that used the term correctly the most times.

MATCH UP THE DEFINITION

Write rabbit terms and their definitions on index cards or pieces of paper. Put all the words and definitions into a hat. Have each member pick a piece of paper from the hat. Challenge the member to find the person with their corresponding word or definition. Once everyone has located their partner have them tell the rest of the group their word and what it means.

Do You Speak Rabbit?

Use the clues below to complete the crossword puzzle using common rabbit terminology.



ACROSS

1. *A code punched in the ear as a permanent method of identification*
6. *A race or special class of domestic rabbits*
8. *The period of time that a doe carries young in its uterus*
9. *A term meaning insufficient markings for the breed*
10. *The process of giving birth to kits*

DOWN

2. *A breeding program involving the mating of unrelated rabbits of the same breed*
3. *The after-portion or posterior section of the body, made up of loins, hips, hind legs, and rump*
4. *A written chart showing the ancestry of a rabbit*
5. *A rabbit-raising enterprise or a place where domestic rabbits are kept*
7. *The physical state of a rabbit in reference to health, cleanliness, texture and molt of fur, and grooming*

Answers

Do you Speak Rabbit?

ACROSS

1. Tattoo
6. Breed
8. Gestation
9. Charlie
10. Kindling

DOWN

2. Outcrossing
3. Hindquarters
4. Pedigree
5. Rabbitry
7. Condition

Resource List

Books

Official Guidebook to Raising Better Rabbits and Cavies. American Rabbit Breeders Association.
M & D Printing Co. Henry, Ill.

Standard of Perfection: Standard Bred Rabbits and Cavies. American Rabbit Breeders Association.
M & D Printing Co. Henry, Ill.

Websites

4-H Rabbit Project - 4-H Cooperative Curriculum System (USA)
<http://www.4hccsprojects.com/rabbit/>

4-H Rabbit Project Reference Manual - Texas Agricultural Extension Service
<http://texas4-h.tamu.edu/publications/as2010.pdf>

American Rabbit Breeders Association
<http://www.arba.net/>

British Columbia Meat Inspection Regulation (under the Food safety Act) 2004
http://www.qp.gov.bc.ca/statreg/reg/F/349_2004.htm

Codes of Recommendations for the Welfare of Rabbits - DEFRA
<http://www.defra.gov.uk/animalh/welfare/farmed/othersps/rabbits/pb0080/rabcode.htm>

Debmark Rabbit Education Resource
<http://www.debmark.com/rabbits>

InfoBasket - BC Ministry of Agriculture and Lands
www.infobasket.gov.bc.ca

My Bunny - From Conception to Weaning
<http://www.debmark.com/rabbits/bunnies.htm>

North Dakota State University - Rabbit
<http://www.ag.ndsu.edu/pubs/alt-ag/rabbit.htm>

Nova Scotia 4-H - Project Central - Rabbits
<http://www.gov.ns.ca/nsaf/4h/projects/livestock.shtml#rabbit>

Nutrient Requirements of Rabbits, Second Revised Edition, 1977 (1977). Board on Agriculture and Natural Resources http://dels.nas.edu/banr/nut_req.shtml

Rabbits, Rabbits, Rabbits, Rabbits, Rabbits, Rabbits - University of Florida
<http://edis.ifas.ufl.edu/pdf/4H/4H04300.pdf>



Rabbits, Rabbits, Rabbits

<http://jan.ucc.nau.edu/~julie/buns/bun.html>

Raising Rabbits - Kansas State University

<http://www.oznet.ksu.edu/library/LVSTK2/C547.PDF>

Reproductive Tract of the Female Rabbit

http://www.medirabbit.com/EN/Uro_gen_diseases/generalities/female_organ.PDF

Selling and buying BC meat- What you need to know: A guide to BC's Meat Inspection Regulatory System”

http://www.bcfpa.ca/guideBook/guide_Introduction.html

Spinning those Angora Bunnies

http://www.tanagersongfarm.com/fiber_arts/spinning_angora.html

The Almost Perfect Guide to Feeding Your House Rabbit - Carrot Café

<http://www.carrotcafe.com/>