

RABBIT SKILL-A-THON 2010

INTRODUCTION

This manual has been developed as a study guide for the Southeastern Youth Fair Skill-a-thon, and is adapted from the Florida State Fair study guide.

The topic for this year's skill-a-thon is:
Health Care Management

The Southeastern Youth Fair recognizes that agricultural education instructors, 4H agents, parents, and leaders provide the traditional and logical instructional link between youth, their livestock projects and current trends in the animal agriculture industry.

PLEASE NOTE: This manual is provided as a *study guide* for the skill-a-thon competition and should be used as an additional aid to ongoing educational programs. Sections are labeled **Junior, Intermediate & Senior; Intermediate & Senior; or Senior** to help exhibitors and educators identify which materials are required for their age level.

Juniors (age 8-11 as of September 1, 2009)

Body Parts

Restraint

Intermediates (age 12-15 as of September 1, 2009)

All of the above plus...

Health Supplies

Animal Identification

How to give an Injection, Injection Sites

Seniors (age 16 and over as of September 1, 2009)

All of the above plus....

Medication Label Identification

Withdrawal Times & Medical Calculations

JUNIORS, INTERMEDIATE and SENIOR TESTABLE KNOWLEDGE:

Animal Health

Assuring animal health is a primary responsibility of livestock managers. Failure results in animal suffering decreased productivity and potential threats to human health. Animal health is so important that the United States Department of Agriculture has a Health Inspection Service to work with the livestock industry in disease prevention. Concerns over bioterrorism and potential threats to human health have brought animal health concerns into the spotlight in recent years. Disease may be caused by infectious agents (bacterial, viral, fungal, prion, and parasitic) which might be passed around by biting insects, wild animals, fecal contamination, sexual contact, air borne, or contaminated feed and water. Health problems may also occur from noninfectious causes (malnutrition, trauma, cancer, genetic defects, and environmental hazards like toxins, poison or extreme weather conditions). Disease prevention practices include purchasing healthy animals, isolation, quarantine, testing, and immunization (vaccination) programs. In extreme cases animals are sometimes destroyed to prevent further spread

of disease. Treatment might involve the use of antibiotics, medications or anti-parasitic compounds. Excellent powers of observation, an understanding of normal behavior, good sanitation practices, and diligent vaccination and deworming schedules are key components of animal health maintenance. How do you know if an animal is healthy or not? One of the keys is to understand what is normal so that you can recognize what is abnormal. This is a skill that develops after working with and caring for livestock over time. The following are some of the characteristics that serve as the basis for assessing animal health. Deviations from normal are early indicators that something may be wrong and may allow early response.

Normal Eating Behavior

Normal Fecal Pattern and Consistency

Normal Stance, Movement, Posture and Activity Patterns

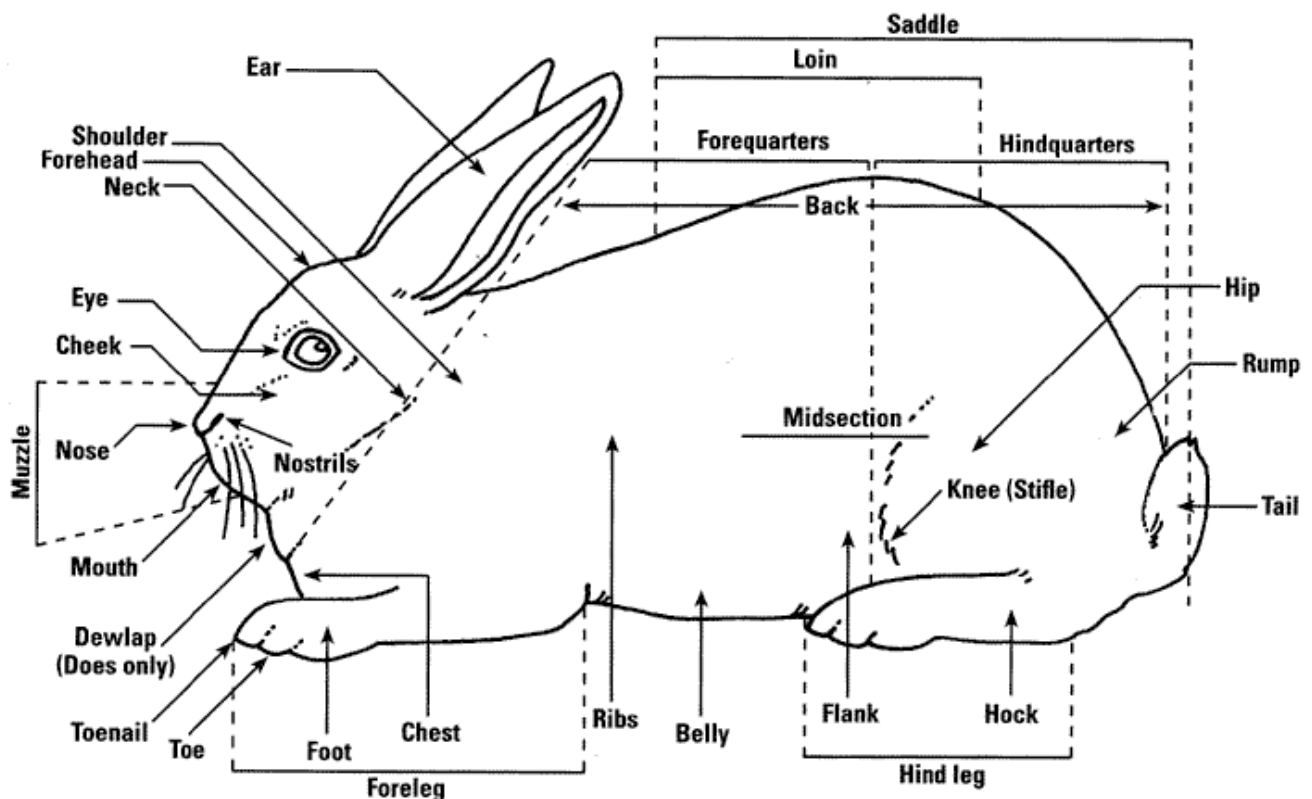
Group (Herd or Flock) Behavior

Sounds or Acoustical Communication

Normal Vital Signs

Rabbit Body Parts

It is important for livestock producers to share a common language. Using the correct names for various body parts is one way to be certain your message is understood. Study the pictures with the names of the body parts labeled so that you can communicate with other producers using correct terms. Juniors need to know the more basic body parts, ie- ear, eye, nose, nostrils, toe, toenail, foot, belly, hock, tail, rump, loin. Intermediates and Seniors are responsible for knowing all body parts.



Restraint

In order to carry out routine animal health care practices, animals must be prevented from moving about freely. Methods of restraint could be put into five categories.

1. Psychological – knowledge and anticipation of natural behaviors to accomplish task
2. Train or desensitize – repeat exposure to stimulus
3. Confinement – cages, crates, walls or barriers
4. Tools and physical force – leg hooks, light weight rope, holding
5. Chemical sedation or immobilization – potentially dangerous, should not be used without veterinary supervision.

Whichever method or methods are employed, it is important to use common sense, plan ahead, be safe and always use SELF CONTROL. Haste is the enemy. Ask the following questions: Will the method minimize the danger to the handler? Will the method minimize the danger to the animal? Will the method cause unnecessary pain or fright? Will the method allow the management technique to be completed as necessary? If any of the questions are answered negatively, other restraint methods should be used.

INTERMEDIATE AND SENIOR TESTABLE KNOWLEDGE:

Methods of Animal Identification

TATTOOING

Advantages - It is permanent and does not disfigure the animal.

Disadvantages – Animal must be restrained to read it.

Equipment Necessary -Tattooing Instrument Tattooing Ink or Paste, Tattooing Numbers &/or Letters Clean Cloth, Alcohol

Procedures -

1. Assemble the necessary equipment. It is important that the numbers and/or letters be placed into the tattooing instrument in the proper order. As you look at them in the tattooing instrument, they should appear backward. Always check the numbers and/or letters on a piece of paper or card board before you begin to make sure they are correctly placed.
2. Restrain the animal.
3. Locate the widest spot in the ear between the rib of cartilage nearest the bottom and the two ribs at the top
4. Clean the inside of the ear, where the tattoo will be placed, with a cloth soaked in alcohol. Infections or warts can result if a tattoo is placed in a dirty ear.
5. Position the tattoo instrument inside the ear so that the needlepoint dies are above the ribs as described in step three. Squeeze the handles of the tattooing instrument together completely and quickly; then release them fully.
6. Rub tattoo ink or paste into all of the needle marks. Work the ink or paste well into the marks.
7. The right ear is used for the registration number and the left for the individual number.
8. Clean the tattooing equipment with alcohol after each day of use.

Rabbit Health Supplies

Research the following items and practices to gain knowledge of their purpose in livestock production. Be prepared to identify these items and explain their use. Livestock equipment supply catalogs are a good study resource. Some have photographs on their web sites.

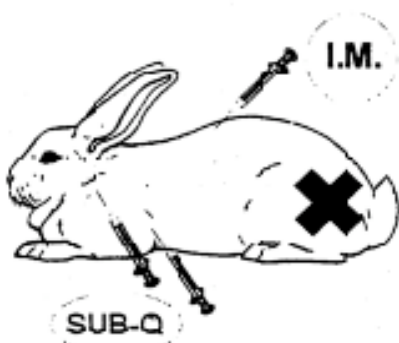
- Antiseptic/disinfectant
- Dewormer
- Needles
- Nesting boxes
- Penicillin
- Syringes
- Toe nail clippers
- Tattoo

Administering Medications and Vaccinations

As a routine part of herd health management, producers must administer medicines. In choosing how and where to give medications, consideration should be given to manufacturers instructions, ease of application and reduction of stress on the rabbit. The possible ways include: **intramuscular** (in the muscle), **subcutaneous** (under the skin) or **orally** (water or food supply).

How to Give an Injection

Vaccines and many medications must be given by injection. When learning to give an injection, some of you may find it easier to practice on an orange or banana because fruit cannot feel pain. The discomfort that an animal getting a shot feels is similar to the discomfort that you feel when you get shots from your doctor. When giving an injection to an orange or banana, we must remember that it is somewhat different than giving an injection to a live animal. The live animal may move around and the skin may be harder to get the needle through. There are two main types of injections - **subcutaneous** (Sub-Q) or **intramuscular** (I.M.). The subcutaneous injection is given just under the skin and the intramuscular injection is given within the muscle tissue. On your orange, the peel is comparable to the skin on an animal, the orange sections are comparable to the muscles and the area in between these two is the comparable to the subcutaneous space. To draw up an injection, wipe the vial top (rubber stopper) with an alcohol moistened cotton ball to disinfect it. Make certain the needle is securely attached to the syringe by inserting the plunger portion of the syringe into the open end of the syringe and twisting the needle onto the syringe tip. Remove the cap - do not touch the needle. Draw the plunger back to fill the syringe with an amount of air equal to the amount of vaccine you want to inject. Push the needle (with syringe) through the rubber stopper of vaccine and inject air - this prevents a vacuum from forming as you draw the vaccine out. Turn the vaccine vial (with needle/syringe still inserted) upside down, and draw out the desired amount of vaccine. Turn vial right-side up, remove needle/syringe, and cap needle until ready to use.



To give a subcutaneous injection:

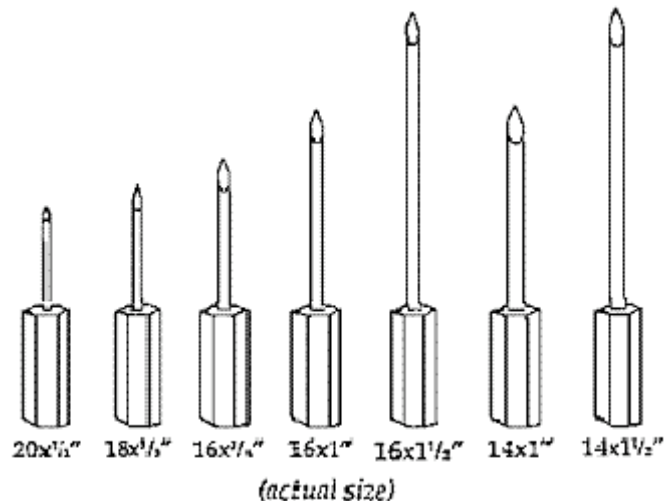
Place the needle just under the skin by picking up a fold of skin on the back of the neck or the leg fold between the thigh and abdomen. Insert the needle just under the fold of skin. Push the plunger to expel the injection into the animal.

To give an intramuscular injection:

The needle must penetrate the muscle. Draw up the material as before and insert the needle into the muscle. Push the material into the animal with the plunger. When the syringe is empty, remove the needle and syringe from the animal making sure that the needle is still attached and replace the cap to prevent injury. Intramuscular injections should be given in the breast or thigh. Injection site blemishes may include abscesses or scar tissue. Packers and processors may have to trim away product from this area. If given the option of subcutaneous or intramuscular, always choose subcutaneous. Always use sterile equipment as dirty equipment could cause infections at the injection site. Remember to dispose of all needles and biological wastes properly. It is important that you consult your veterinarian before giving any shots and always READ THE LABEL and FOLLOW INSTRUCTIONS. Proper animal identification and record keeping are vital components of your flock management program. Remember to always WRITE IT DOWN.

Needle Selection

Investigate needle gauges to find the correct size for your project animal. Gauge number increases as needle diameter decreases. Needle length will also vary.



SENIOR TESTABLE KNOWLEDGE:

Calculating Dosages

Proper dosing is critical in order for medications to be effective and to prevent problems from too much medication. Always read medication labels carefully when calculating doses.

Example: A sick 3 pound rabbit requires an injection of antibiotic at a dosage rate of 2,500 units/pound. The antibiotic to be used contains 5,000 units/ml. How much antibiotic should the producer give to the animal?

Step 1: Calculate how many units a 3 pound animal needs.

$$2,500 \text{ units/lb} \times 3 \text{ lbs} = 7,500 \text{ units}$$

Step 2: Calculate how many mls. of the antibiotic would deliver the needed units.

$$7,500 \text{ units} / 5,000 \text{ units/ml} = 1.5 \text{ mls.}$$

Medication Labels

Manufacturers of pharmaceutical products follow strict guidelines in labeling their products. Understanding what is on the label and how to use the information is a critical skill for livestock health care management.

Calculating Withdrawal Times

Drugs that are not completely eliminated from the rabbit can accumulate in muscles. Drugs and their by-products in food are called residues and can be harmful to humans if they are consumed. Withdrawal periods times on labels tell how many days must pass before the meat is safe to eat. Be prepared to read a medication label and calculate when to administer booster shots, withdrawal times, etc.

Month 1:

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------|--------------|----------------------------|----------|--------|----------|
| 1 | 2 | 3- Gave Shot | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18- Harvested Rabbit | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | | | | | |

Month 2:

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------|---------|-----------|----------|--------|----------|
| | | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | | |

QUESTIONS:

Looking at the two monthly calendars, if a medication that had a 32 day withdrawal time was administered on the 3rd of Month 1, is it proper protocol for the animal to be harvested on the 18th? Why?

Using the two calendars above, when could your animal be safely harvested if administered the antibiotic on the 3rd?

Rabbit Diseases

Name: Pasteurellosis
Cause: Bacteria, *Pasturella multocida*
Major Symptoms: Sneezing, coughing, discharge from nasal cavity, and going off feed are all symptoms with Pasteurellosis.
Prevention: Culling the infected rabbits to keep the bacteria from spreading. The rabbit's area needs to have good ventilation, low ammonia levels, as well as low humidity.

Name: Bordetellosis
Cause: Bacteria, *Bordetella Bronchiseptica*
Major Symptoms: The symptoms of snuffles are generally present when a bordetellosis infection is present. Along with signs of snuffles, an upper respiratory infection with nasal discharge and sneezing can be present.
Prevention: A decrease in stressful conditions as well as culling of infected animals, and vaccination will aide in preventing an out break.

Name: Coccidiosis
Cause: Protozoan
Major Symptoms: If the liver is the affected organ then the rabbit may stop eating and diarrhea will begin. The protozoan will cause lesions in the liver that can only be seen after death. If the intestinal tract is infected then the rabbit will exhibit weight loss, soft to watery feces, mucus or blood in the feces, soiled anal area, dehydration and an increase in thirst.
Prevention: Rabbits should be housed in a wire meshed floor enclosure, where the bottom of the cage does not come in contact with the rabbit or feeding area, and cleaned regularly.

RABBIT SHOWMANSHIP

Rabbit showmanship is quite different from that of other animal species. Rabbit showmanship involves thoroughly examining an animal as a judge would do in competition. Each step that a youth forgets to complete is counted against their overall score. Appearance of the exhibitor and their knowledge are two other areas important in this competition.

ATTIRE:

Required Dress Code: All exhibitors will be required to be clean and neat and dressed in white, green, dark blue or dark black jeans or slacks with a solid white shirt with a white collar. FFA and 4-H accessories are strongly recommended. No caps or hats. Closed-toed shoes or boots are required.

The following is a list of actions exhibitors must perform in the showmanship class:

Appearance and Actions of Showman 10 points

- a. Clean and neatly dressed
- b. Natural, graceful actions
- c. Good eye contact

d. Confidence

Appearance of Animal **5 points**

- a. Clean condition and healthy
- b. Free from major defects and deformities

Examination of Rabbit

a. With the rabbit in sitting position: **10 points**

1. Check ears for mites, tattoo, and tears
2. Examine fur for fur mites
3. Run hands over body & check for blemishes
4. Examine the fur quality and color

b. With the rabbit on its back: **35 points**

1. Properly and safely flip the rabbit over
2. Check the eyes for blindness, white spots, proper color and diseases
3. Check the nose for snuffles
4. Check teeth for broken, missing, malocclusion or simple malocclusion
5. Check the front 5 toes and toenails for broken, missing or mis-colored
6. Check the front legs for straightness and signs of broken bones
7. Check the back 4 toes and toenails for broken, missing or mis-colored
8. Check back legs for signs of broken bones
9. Check the vent area for disease & sex (examine bucks for missing testicles)
10. Check tail for straightness and signs of broken bone
11. Run hand down entire abdomen looking for blemishes

c. Completing the examination **10 points**

1. Properly post the rabbit for its specific breed
2. Smooth down the fur
3. Make sure the tail is carried properly

Knowledge of Animal/Project **30 points**

- a. Answer general knowledge questions
- b. Answer breed specific questions

TOTAL POINTS 100 POINTS

Preparation for this contest is like any other. Practicing with your rabbit ahead of time will earn you more points on the day of the contest. Use an animal that is familiar with the procedures described, not an unruly one. Also, read up on rabbit information in the American Rabbit Breeders Association's Book of Standards.

For Additional Study Information:

www.abra.net

www.barbibrownsbunnies.net

www.freewebs.com/rabbitresources

www.ansci.cornell.edu/4H/rabbits/index.html