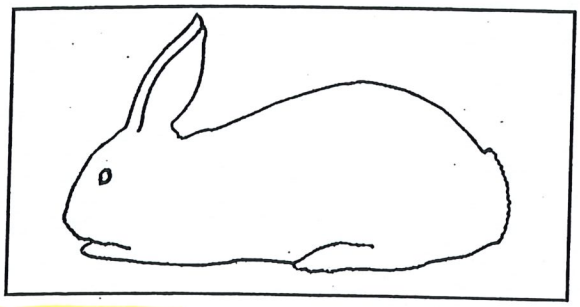
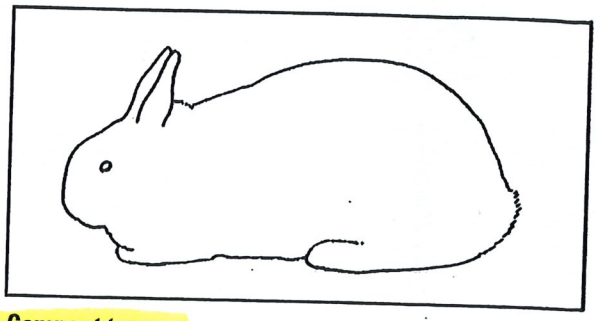
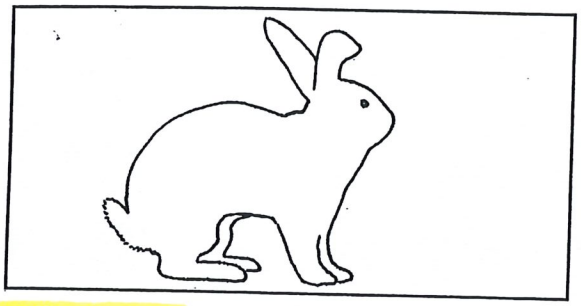
8-11 YEAR OLDS INFORMATION



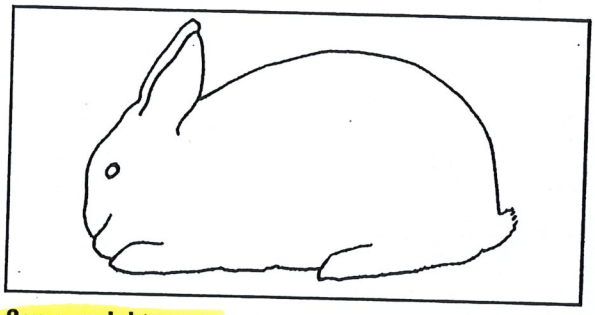
Semi-arch type



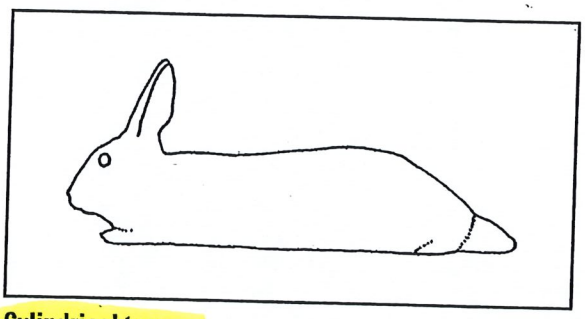
Compact type



Full arch type



Commercial type



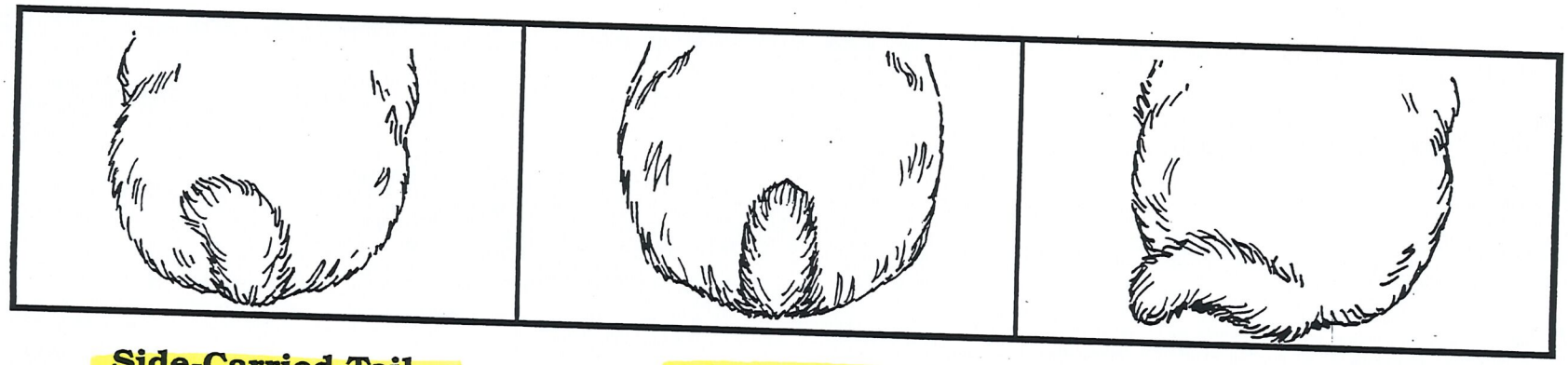
Cylindrical type

Body Types of Rabbits:

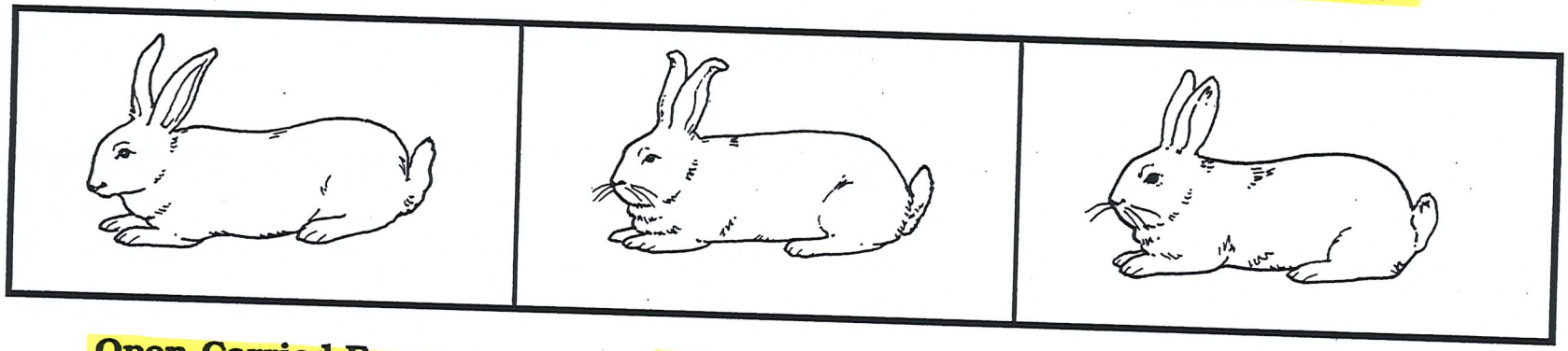
8-11 year olds

8-11 year olds

Rabbit Conformation
(Tails/Ears)



Side-Carried Tail | **Ideal Tail** | **Screw Tail**



Open-Carried Ears | **Belled Ears** | **Ideal Ears**

RABBIT LEARNING LABORATORY KIT

Exploratory Learning: Educational Program

This component adapted from materials used by Judy Conrad, Extension Agent, Ohio State University Extension - Pickaway County.
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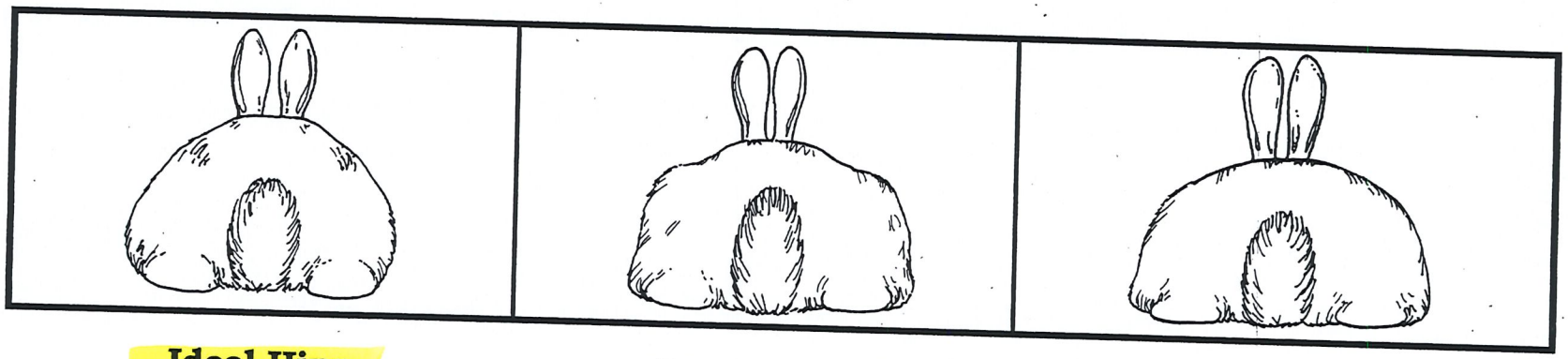
Use this poster in conjunction with **Conformation - Match the conformation description to the correct diagram** *situation/task statement and/or* **Conformation (Tails/Ears)** *identification tags.*

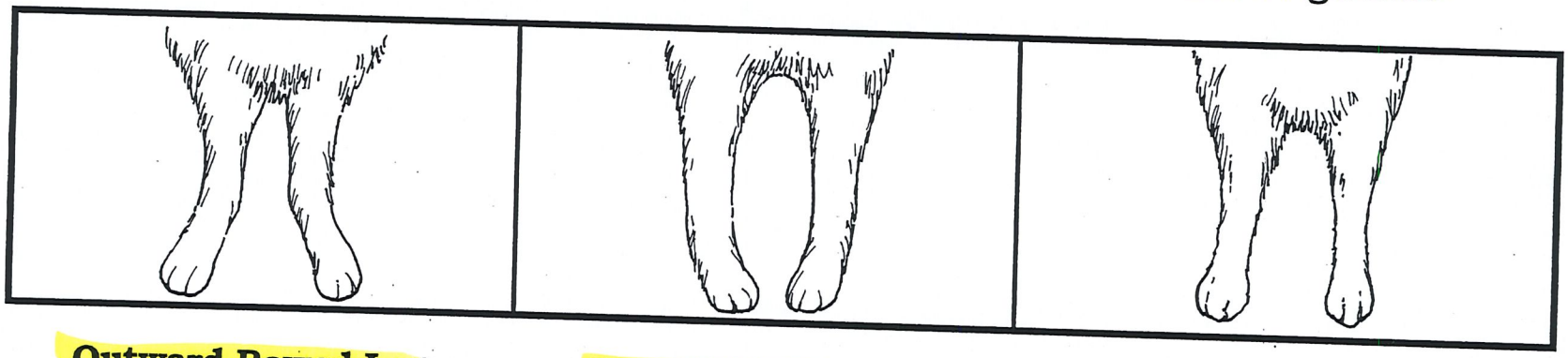
Conformation & Struct

8-11 year olds

Rabbit Conformation
(Hips/Legs)



Ideal Hips | Rough Hips | Not Enough Rise



Outward-Bowed Legs | Inward-Bowed Legs | Ideal Legs

RABBIT
LEARNING LABORATORY KIT

Exploratory Learning: Educational Program

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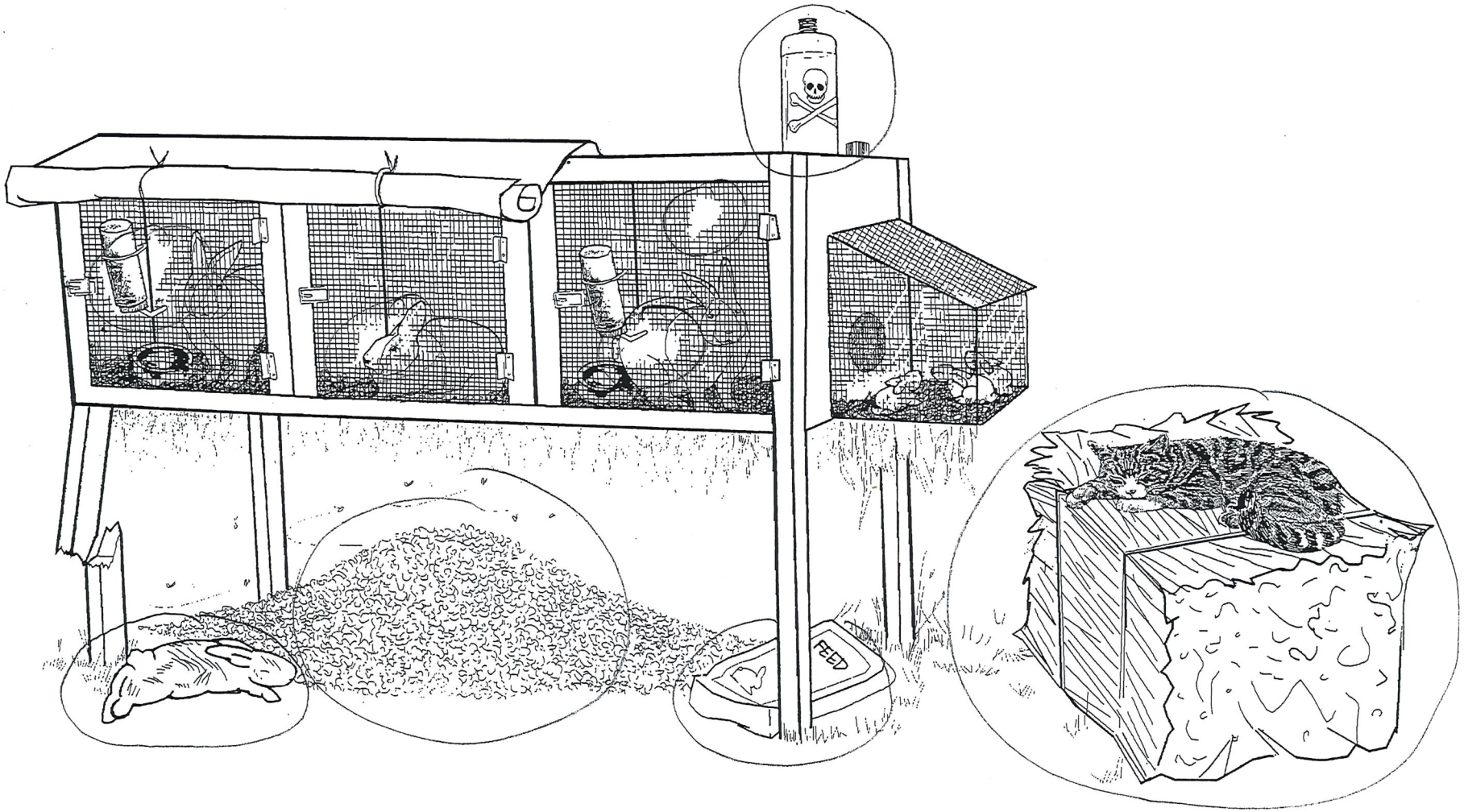
Cards, Charts, Diagrams, Posters, and Prints

Conformation (Hips/Legs) identification tags.

8-11 year olds

Rabbitry Sanitation Is Critical



RABBIT LEARNING LABORATORY KIT

Exploratory Learning: Educational Program

This component developed through the creative skills and abilities of Amy Boye, Graphic Designer, Curriculum Materials Service at The Ohio State University and Donna Maruschak, Program Assistant, 4-H Youth Development, Ohio State University Extension.

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Cards, Charts, Diagrams, Posters, and

Gender Identification

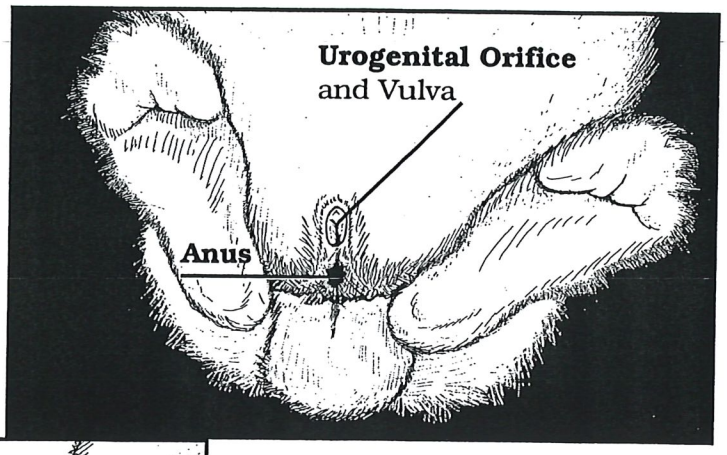
8-11 year olds

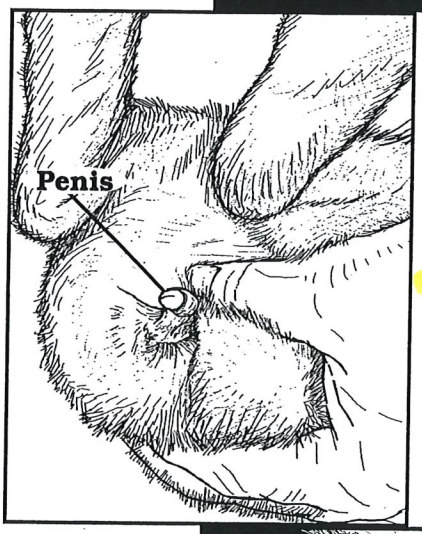
ith **Reproduction - Determine the gender** *situation/task statement,*
prints, and/or **Gender Determination** *identification tags.*

Gender Determination in Rabbits

Female:

Female rabbits have a slit-like genital opening.



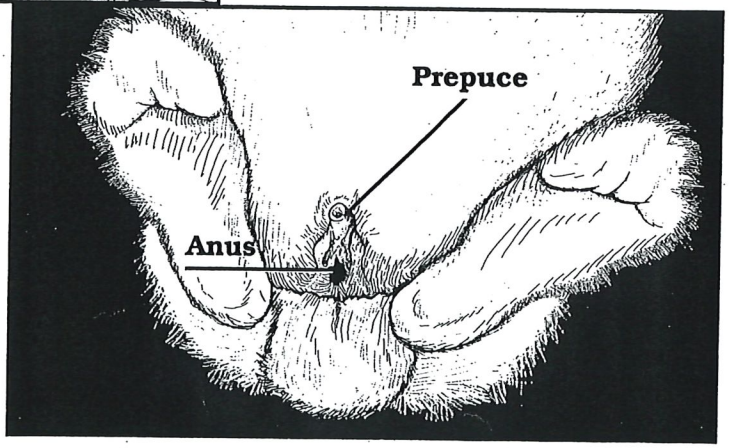


Male:

Gentle pressure around the genital opening will extrude the penis.

Male:

Male rabbits have a round genital opening.



RABBIT
LEARNING LABORATORY KIT

Exploratory Learning: Educational Program
This component adapted from information found in the *Small Pet Handbook*
(© HarperCollins*Publishers* Ltd - 1996).
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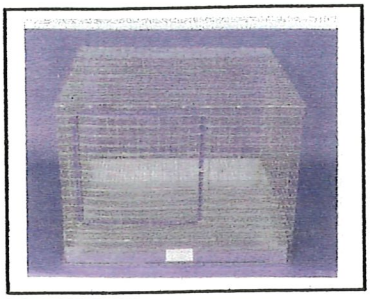
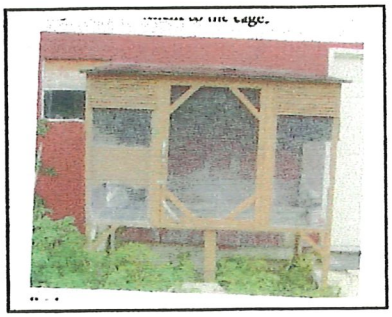
*8-11 Year olds Equipment Used (Answer Key)

Identify six equipment pieces

Wire Cage



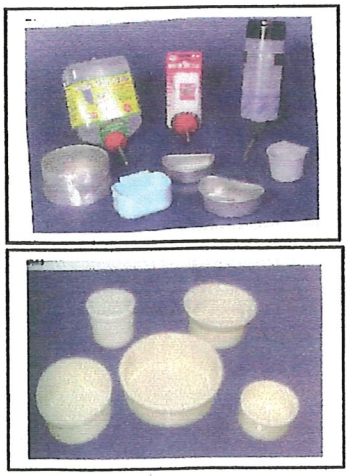
Hutch



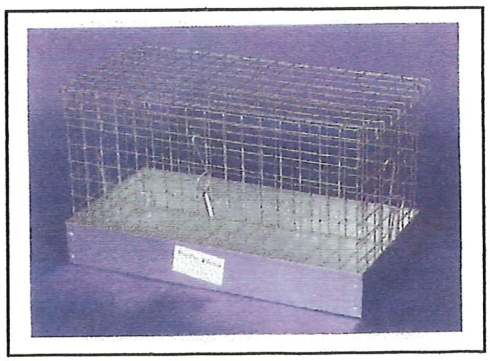
Tiered Cages

Feeders

Waterers/Crocks



Carrying Cage



12-14

YEAR OLDS

INFORMATION

Fur Types: 12-14 year olds

This fur is a very short dense coat that feels very soft to the touch.

answer: Rex

This fur is a very long, thick hair found originally on the four Angora breeds. It also has been bred into some newer breeds of rabbits.

Answer: Angora or Wool

Fur Types:

12-14 year olds

This fur type is a very shiny coat of hair that is said to have sheen. Each hair shaft is hollow, causing an iridescent effect.

Answer: Satin

This fur is the most common fur found on rabbit breeds. It exists as rollback, flyback, or standing as called for in the breed standards.

Answer: Normal

Aliments & Disorders:

12-14 year olds

Ailments and Disorders

Sore Hocks (*Ulcerative Pododermatitis*)

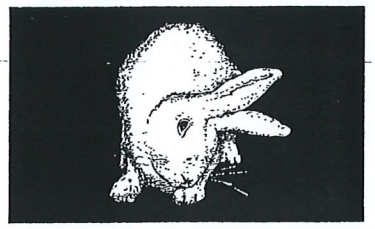
Cause: Damage initially to the pad of the foot, usually followed by a bacterial infection

Prevention:
- ★ House rabbits in clean cages on soft, clean, dry bedding
- ★ Eliminate environmentally stressful conditions
- ★ Use resting boards
- ★ Cull affected animals and do not use for breeding

Common treatment:

Preparation H
- ➤ Clean sores/lesions, trim toenails, and apply topical antiseptic or protective covering
- ➤ Healing is often prolonged/complicated by secondary bacterial infections

Wry Neck (*Torticollis*)



Cause: Bacterial infection --- An otitis interna caused by *Pasteurella multocida* - frequently no specific inner ear lesions are detected, with the cause remaining unknown

Prevention:
- ★ Cull affected individuals immediately
- ★ Quarantine new arrivals prior to herd/colony entry
- ★ Do not allow affected animals to reproduce

Common treatment:

Treatment is NOT effective
- ➤ There is NO satisfactory treatment for this condition

Snuffles (*Infectious Respiratory Disease*)

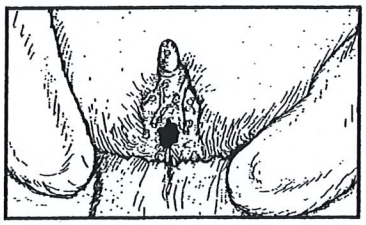
Cause: Bacterial infection --- *Pasteurella multocida* - transmitted by direct contact between cagemates, doe and litter, and/or breeding pair - untreated may result in pneumonia

Prevention:
- ★ Adher to strict sanitation and husbandry standards
- ★ Insure good ventilation
- ★ Follow strict culling procedures

Common treatment:

Terramycin, Bunni-mycin, -or- Baytril
- ➤ Treat at first symptom of ailment
- ➤ Treat with antibiotics via drinking water or injection

Vent Disease (*Venereal Spirochetosis* or *Treponematosis*)



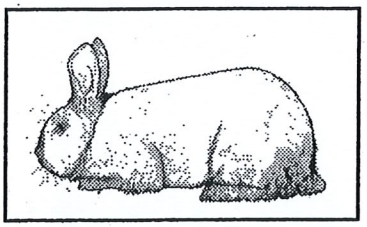
Cause: Bacterial infection --- *Treponema cuniculi* - transmitted by direct contact, especially during mating

Prevention:
- ★ Examine breeding bucks and does routinely for lesions - treat affected individuals at once
- ★ Cull carriers
- ★ Maintain a closed breeding herd
- ★ Treat and quarantine new stock

Common treatment:

Penicillin G
- ➤ Treat with injectable antibiotic
- ➤ Increased possibility of enterotoxemia from penicillin exposure must be considered

Enterotoxemia (*Clostridial Enterotoxemia*)



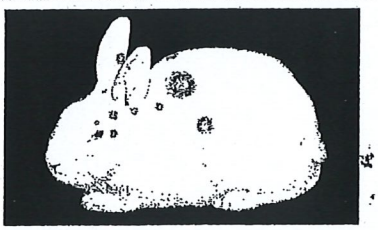
Cause: Bacterial infection --- *Clostridium spiroforme* and/or *C. perfringens* - transmission is primarily fecal-oral route

Prevention:
- ★ Implement rigid sanitation and husbandry standards
- ★ Use copper sulfate or *Lactobacillus* preparations
- ★ Change diet slowly
- ★ Feed sufficient fiber

Common treatment:

Biosol
- ➤ Change the diet: increase fiber and decrease protein
- ➤ Maintain hydration
- ➤ Maintain body temperature
- ➤ Neomycin treatments have uncertain benefits

Ringworm (*Dermatophytosis*)



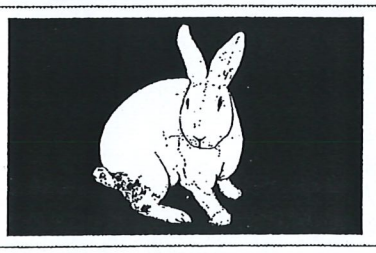
Cause: Fungal infection --- *Trichophyton mentagrophytes* and/or *Microsporum canis* - transmitted easily by direct contact with spores on hair coat, in bedding, and/or soil

Prevention:
- ★ Maintain high standards of animal husbandry
- ★ Examine animals routinely
- ★ Cull carriers
- ★ Sterilize contaminated facilities and equipment

Common treatment:

Iodine
- ➤ Individual outbreaks - apply medication to skin: ordinary iodine or an ointment containing hexetidine
- ➤ Herd outbreaks - use griseofulvin as a feed additive or in water-soluble form

Coccidiosis (*Intestinal Coccidiosis*)



Cause: Protozoa --- *Eimeria* spp. - transmitted by ingestion of sporulated oocysts passed in feces and found viable in soil, feed, on personnel, caging, and utensils for several months

Prevention:
- ★ Employ strict sanitation and husbandry standards
- ★ Cull infected animals
- ★ Prevent contact with infected feces or contaminated food and water containers

Common treatment:

Sulfa Q
- ➤ Best prevented and/or controlled through rigid sanitation practices
- ➤ Treat infected animals with medication containing sulfaquinoxaline or monensin as a feed additive or in water-soluble form

Ear Canker (*Acariasis*)

Cause: Ear mites --- *Psoroptes cuniculi* and/or *Chorioptes cuniculi* - transmitted from infected animals or environment to noninfected rabbits

Prevention:
- ★ Carefully examine the ears of all stock every 14 days
- ★ Quarantine all new arrivals and treat twice before placing in clean herd/colony

Common treatment:

Mineral -or- Vegetable Oil
- ➤ Treat (smother) with oil-based insecticide preparation
- ➤ Clean off exudate and massage 1 to 2 ml of liquid into each ear canal with a cotton swab
- ➤ Repeat treatment in 7 days to eliminate newly hatched mites
- ➤ -or- Treat with injectable Ivermectin

Weepy Eye (*Staphylococcosis*)

Cause: Bacterial infection --- *Staphylococcus aureu* and/or *Pasteurella multocida* - spread by humans and contaminated food, feces, cages, and/or bedding

Prevention:
- ★ Apply rigid sanitation methods
- ★ Eliminate sharp or abrasive surfaces
- ★ Use clean feed and bedding
- ★ Reduce animal stress
- ★ Monitor animals

Common treatment:

Tetracycline
- ➤ Clean, drain, and excise lesion
- ➤ Detected early, treat with ophthalmic antibiotic ointment
- ➤ Advanced cases have been treated with antibiotics via injection or drinking water

Mange (*Sarcoptic Mange* or *Acariasis*)

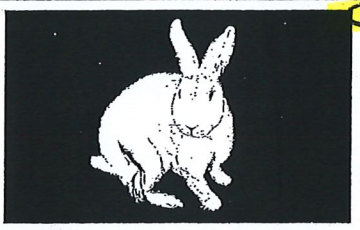
Cause: Mites --- Common fur mites *Cheyletiella parasitivorax*, and/or *Listrophorus gibbus* or burrowing mites *Sarcoptes scabiei* and/or *Notoedres cati* - spread by direct contact with infected host

Prevention:
- ★ Introduce only clean stock into clean premises
- ★ Separate, quarantine, and treat infected animals until free of infestation

Common treatment:

Ectiban -or- Sevin
- ➤ Minor infestations, dust animals with insecticide
- ➤ Major infestations, dip all animals in the colony in a malathion dip
- ➤ ***Caution:*** *perform dipping where animals may dry in a warm and noninfected environment*

Wound (*Lacerations* and/or *Abrasions*)



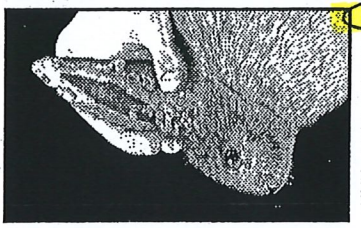
Cause: Injuries, bites, and scratches --- Bites and scratches from other animals, and/or injuries from poor housing and environmental conditions

Prevention:
- ★ Maintain rabbitry equipment and facilities
- ★ Adher to strict sanitation and husbandry standards to prevent risk of infection

Common treatment:

Blood-Stop
- ➤ Minor injury - use styptic powder to stop bleeding
- ➤ Major injury - clean, disinfect, dress, and apply pressure to laceration or abrasion to help stop bleeding

Myxomatosis



Cause: Virus --- *Myxoma virus*, a DNA virus of the pox virus family - transmitted by mosquitoes, mites, flies, fleas, birds (droppings), and/or plant materials

Prevention:
- ★ Control vectors (mosquitoes, flies, and fleas) by spraying and screening
- ★ Keep wild rabbits away from facilities
- ★ Adher to strict husbandry standards

Common treatment:

NO treatment exists
- ➤ There is NO treatment for this ailment/disorder
- ➤ Eliminate all biting insects from rabbitry
- ➤ Immediate removal of affected animals is crucial

VHD (*Viral Hemorrhagic Disease*)

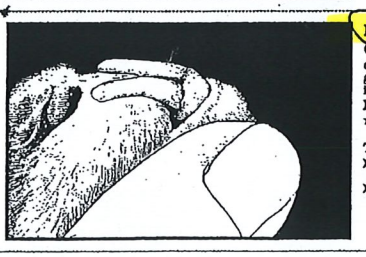
Cause: Virus --- Peracute infection of *Oryctolagus cuniculus* - transmitted by direct contact with secretions or excretions of infected rabbits, or indirectly via aerosol exposure to contaminated rabbit products

Prevention:
- ★ Select VHD-free stock
- ★ Adher to strict husbandry practices
- ★ Quarantine new arrivals prior to herd/colony entry
- ★ Conduct serologic screening

Common treatment:

NO satisfactory treatment exists
- ➤ Short-term protection is provided from a vaccine that lasts only 6 to 8 months
- ➤ Bi-yearly vaccination is recommended in epidemic areas

Malocclusion (*Mandibular Prognathism*)



Cause: Inherited abnormality --- Inherited condition in which the incisors fail to meet and thus, grow to extreme lengths; may also result from dietary, infectious (abscesses), or traumatic reasons

Prevention:
- ★ Do not allow animals affected with this ailment/disorder to reproduce

Treatment:
- ➤ Treatment of tooth overgrowth involves repeated filing or sawing with a sharp clipper or dental burr
- ➤ Removal of affected teeth

WARNING: Before any condition is treated, medications not approved (labeled) for use in rabbits or cavies must be prescribed by a licensed veterinarian familiar with the care and treatment of rabbits and cavies.

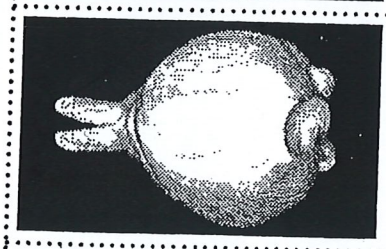
Disqualifications & Faults:
12-14 year olds

Faults and Disqualifications

Disqualification

Unmatched Toenails

Colored toenail on a white breed
- or -
White toenail on a dark-colored breed



Wry Tail

Abnomal tail - bent, carried, or twisted permanently to one side

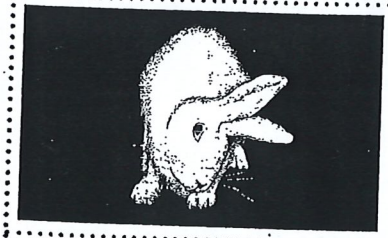
Corkscrew tail with one or more turns

Ear Canker

Inflamed, scabby condition deep inside the ear - caused by an infection of the ear canal by ear mites

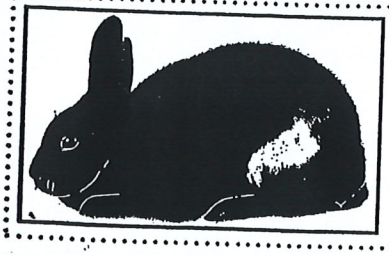
Malocclusion

Teeth with lower incisors extending in front of the upper incisors or meeting with no overlap



Wry Neck

Carriage of the head to one side at an angular plane, instead of a normal carriage in a vertical plane



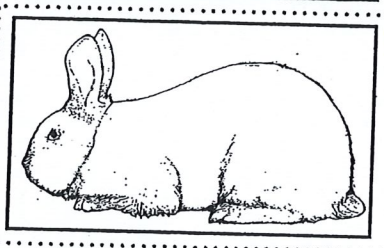
Foreign Color Patch

White spot in colored area of the fur coat
- or -
Colored spot in white area of the fur coat

Fault

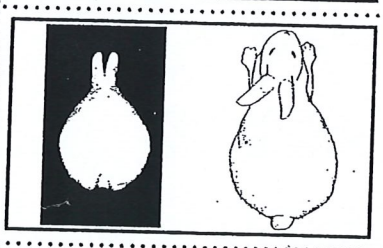
Stained Coat

Urine and/or manure stains on fur



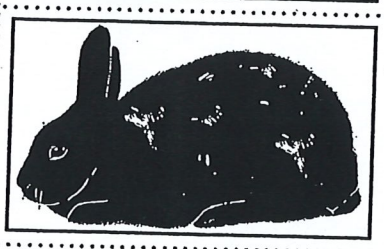
Low in Shoulders

Shoulder depth is lacking and fails to balance with the hindquarters



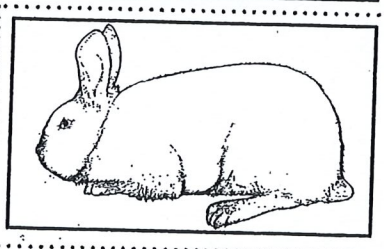
Narrow in Shoulders

Shoulder width is "pinched" and fails to balance with the hindquarters



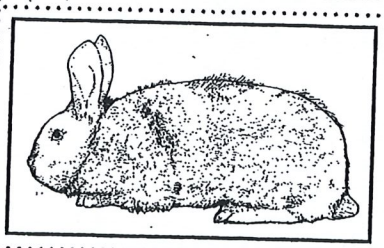
Stray Hairs

White hairs in colored fur



Cow-Hocked

Hind legs that turn inward at the hocks, causing the toes to turn outward from the body



Molt

Act of shedding or changing fur

Rabbit Identification Task:

12-14 year olds

Rabbit Tattooing Template

Directions: Copy this template and cut around the outline of this rabbit and remove completely from its page. Use this template in conjunction with the **Tattoo Set**, **Rabbit Tattooing Procedures and Techniques** poster, and the **Preparing to Tattoo and Demonstrating Tattooing Techniques** situation task card.

RABBIT LEARNING LABORATORY KIT

Exploratory Learning: Educational Program

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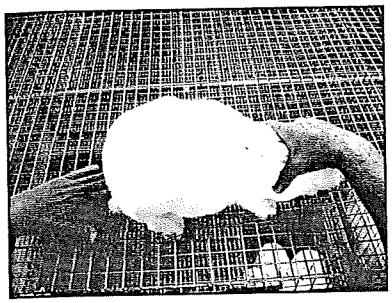
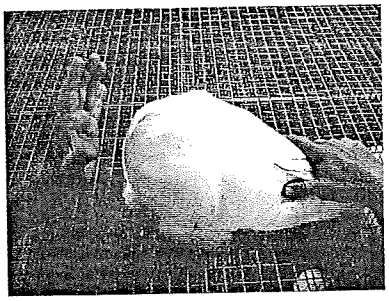
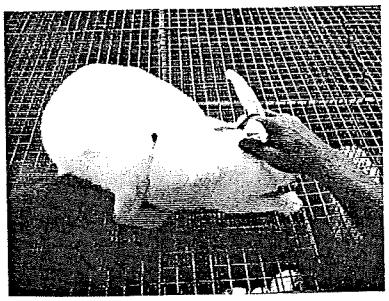
15-18 YEAR OLDS INFORMATION

To palpate your doe, start by placing the palm of your hand flat on the surface on which you place your rabbit. Slide your hand between the hind legs keeping your hand flat and palm down.

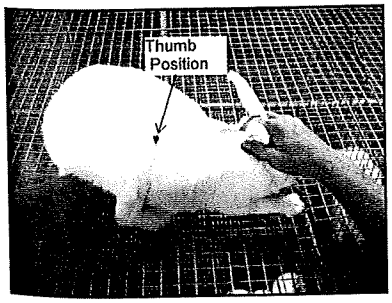


Once you have slid your hand between the hind legs and under the rabbit, flip your wrist back. This creates a saddle for the abdominal area of the rabbit.

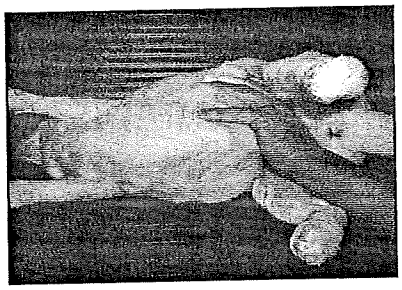




Next, flip your wrist back, with your thumb on one side and your four fingers on the opposite side of the abdomen.



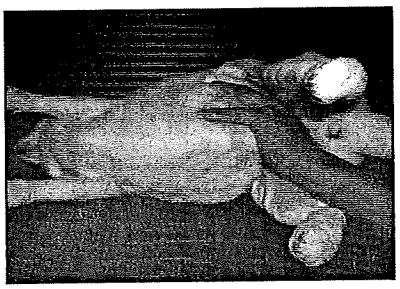
After you have created the saddle, you are ready to explore the abdomen with your fingertips. If your rabbit is relaxed, you should be able to feel your fingers on the opposite side of the rabbit with your thumb. If not, relax your rabbit by gently petting her around her eyes and talking to her.



A doe that may be pregnant for the first time will have a tighter abdomen and will be harder to palpate than a doe pregnant for the third or fourth time. The 10-day-old fetus will be high in the abdominal area close to the back, yet behind the ribcage. Some does do carry their young higher and some carry them lower than others.

In palpating 14- to 17-day-old fetuses, you will find them to be lower and generally in the middle of the abdomen. The increased weight of the fetus will cause the uterus to drop and fetuses easier to find.

While palpating and exploring the front of the abdomen, you may find the kidney. The kidney will be one large mass the size of a grape, only a little firmer than a fetus. There is no need to explore any further forward as the ovaries are located just behind the kidneys.



When palpating dwarf rabbits, you will find both the 10-day-old fetuses and the 14- to 17-day old fetuses very close to the outer abdominal wall. Extreme penetration to the abdomen should not be necessary when palpating dwarf rabbits.

When palpating at 10 days, if fetuses are not detected, you should immediately rebreed your doe. This will allow you to palpate 10 days after the second breeding and 20 days after the initial breeding. At 20 to 21 days after the first breeding you are still able to detect fetuses. Shortly thereafter the embryonic membranes will be undetectable until the skull of the fetus has hardened at a time closer to kindling. This hardening of the skull will vary depending upon the nutritional value of the feed and the number of fetuses in the uterus.

(Palpation pictures and information courtesy of Purina Mills.)

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BREEDING DEFINITIONS

*15-18 Year Olds=
Match the TERM with the correct DEFINITION.

TERM	DEFINITION
KIT	A young rabbit not yet weaned.
OUTCROSSING	The mating of unrelated rabbits of the same breed.
CROSSBREEDING	The mating of rabbits of different breeds.
VARIETY	A division within a breed or group determined by fur or wool color.
PUREBRED	A rabbit that belongs to a recognized breed and born of parents that are of the same breed.
HYBRID	The offspring of two rabbits of different breeds, varieties, species and genera.

KINDLE	When the doe gives birth to young rabbits.
LINEBREEDING	The mating of rabbits that are descendants of the same rabbit, but are related several generations back.

Show Classes

*15-18 Year Olds=
Match the Class Name to the Class Description

Class Name	Class Description
6 CLASS	Class in which breeds that have an ideal senior maturity weight of 9 lbs. and over.
SINGLE FRYER	Class in which a rabbit weighing a minimum of 3 lbs. and a maximum of 5 lbs. and not over 10 weeks of age on the day of show.
4 CLASS	Class in which breeds that have less than a 9 lb. ideal senior maturity weight.
MEAT PEN	Class in which three rabbits of the same breed and same variety weighing a minimum of

3 lbs. each and maximum of 5 lbs. each and not over 10 weeks of age on the day of show.

ROASTER — Class in which a rabbit weighing more than 5 lbs. with a maximum of weight of 8 lbs. and under six months of age on the day of show is entered.