

Welcome to the Manatee County Fair rabbit showmanship guide.

This information is provided as a study guide in order to better prepare you for the 2021 Manatee County Fair Showmanship events.

Curriculum in this packet was developed by the Extension Service and by the Florida State Fair. All juniors, intermediates, and seniors should familiarize themselves with this packet.

The topic for this year's Florida State Fair Skillathon is Products and Marketing. The Extension Service material will help to increase your general knowledge on your rabbit project with information on rabbit breeds by use and classification, body types, anatomy, conformation, diseases & ailments, poisonous plants, digestive anatomy, and disqualifications & faults.

Seniors will be responsible for learning an additional packet of material from the Florida State Fair Skillathon that will include the following topics: Standards of perfection, standard and guide for judging meat classes, types of fur, meat facts and cookery, and rabbit carcass info.

If you have any questions, please contact Sue McGonegal, rabbit barn supervisor, or Karen Ciemniecki, rabbit program organizer.

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Juniors, Intermediates, and seniors. You are responsible for material in this packet.

Products and Marketing***

Youth livestock projects focus on the selection, raising, showing and often selling of animals. By virtue of their participation in livestock projects, youth become part of an industry that provides food and fiber for the world. The steps involved in the movement of animals and animal products from producer to consumer are known as *processing and marketing*. Tremendous changes have occurred in recent years in the ways animal products are harvested and marketed but the fundamentals remain the same. Price is dependent on *supply and demand*. We can impact supply through increased breeding but demand is more difficult to affect. In order to maintain a stable market for animal products, consumers must have confidence in the ***wholesomeness and quality*** of what they are buying. That means the products must be safe, nutritious and tasty. Many livestock organizations have implemented promotion programs to increase market share, improve prices and increase export markets.

Marketing may be as simple as receiving a set price per pound or may involve a pricing system known as 'Value Based Marketing'. ***Value based pricing systems*** account for quality and apply deductions or bonuses as products deviate from an accepted *baseline*. This should ultimately improve the quality of products offered to consumers, therefore boosting consumer confidence. Animal products may be marketed at auctions, by direct sales, contracts or electronically with the use of computers and satellite technology. Regardless of the marketing method, the seller is trying to receive the highest *price* while the buyer is trying to receive the greatest *value* (high quality and reasonable price).

Rabbit Products and Marketing***

In the United States rabbit industry rabbits are produced for meat, Angora wool, pets, laboratory use, and show rabbits. According to the USDA 2017 Census of Agriculture (<https://www.nal.usda.gov/afsic/rabbits>) more than 4,000 US farms market over 500,000 rabbits annually, and nationwide there are approximately an estimated 10 million rabbits. Though many people consider rabbits as pets and raise them as a hobby, rabbits truly can constitute a livestock enterprise. Rabbits are extremely efficient meat producers due to their high reproductive rate (25 - 50 offspring per year) and excellent conversion of feed to muscle (4# feed/ 1# of gain for fryers). They produce a carcass with white meat, high protein and low fat. Rabbits are a significant source of meat worldwide, led by China in which produced 995,000 metric tons of rabbit meat in 2017. In 2017, world-wide rabbit meat consumption was up 12% and amounted to 6.4 billion dollars (<https://www.newfoodmagazine.com/news/85045/global-rabbit-meat-market-grow/>). In the U.S. where rabbits are considered more of a pet, commercial rabbitries produce about 6 million pounds of rabbit meat each year (2700 metric tons). Since Americans consume 9 to 11 million pounds of rabbit meat annually, we must import rabbit meat in order to meet demands. This would indicate room for expanded production. Global rabbit consumption is projected to continue to increase each year through 2025.

A by-product of meat processing is pelts. Skins may be used for fur garments, slippers, glove linings, toy making and felt. Since colored pelts bring lower prices, white breeds are preferred as meat animals. There are some breeds with particularly fine pelts that are raised specifically for fur and others that produce wool or hair that can be harvested and spun into yarn. With the increase of synthetic fibers and artificial furs, markets for rabbit skins and pelts are diminishing.

One of the most significant contributions that rabbits bring to mankind is their usefulness in laboratory research and diagnostics. Over 200,000 rabbits per year are used in medical schools, laboratories and hospitals to aid in areas like cardiac surgery, hypertension, virology,

infectious diseases, toxins and antitoxins, and immunology. These institutions must adhere to strict government guidelines in the care and use of these animals and they in turn place stringent guidelines on their suppliers.



1. The rabbit was the first animal model of cancer caused by a virus.
2. Rabbits are used to produce antibodies, used for research into infectious diseases and immunology.
3. Rabbits are used as models for cystic fibrosis and cholera.
4. Louis Pasteur used rabbits to develop his rabies vaccine.
5. Rabbits are important in the study of cardiovascular disease, particularly hypertension and arteriosclerosis.
6. Rabbits are key for studies on cancer, glaucoma, ear infections, eye infections, diabetes, and emphysema.
7. Surgical lasers were developed using rabbits.
8. Rabbits are used to research the influence of high cholesterol.
9. Rabbits love liquorice root.
10. Rabbits can use a litter box.

Source: <https://www.understandinganimalresearch.org.uk/animals/10-facts/rabbit/>

Animal By-Products

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Animal by-products are anything of economic value other than the carcass that comes from animals during harvest and processing. They are classified as edible or inedible for humans. There may be some disagreement about what is edible but we can all agree that there are many uses for what is left after the carcass is placed into the cooler. In developing countries by-products may become jewelry, religious implements, tools, fuel, construction material, fly swatters, or musical instruments. In developed countries, advances in technology have created many products from non-animal sources (synthetics) which compete with animal by-products, thus reducing their value. Still, by-products represent multibillion dollar industries in the United States and other developed countries. An added benefit of changing inedible parts of carcasses into useful products is that the decaying materials don't pile up and cause environmental problems. **Rendering** is the term for reducing or melting down animal tissues by heat and the rendering industry refers to itself as the "original recyclers". The creativity of meat processors in finding uses for by-products has led to the saying "the packer uses everything but the squeal".

Edible by-products

Raw Material

Brains, Kidneys, Heart, Liver, Testicles
Cheek and head trimmings
Blood
Fats
Intestines
Bones

Principal Use

Variety Meats
Sausage ingredient
Sausage component
Shortening (candies, chewing gum)
Sausage casings
Gelatin for confectioneries (marshmallows), ice cream and jellied food products

Inedible by-products

Raw Material

Hides

Processed by-product

Leather
Glue
Hair

Principal Use

various leather goods
paper boxes, sandpaper, plywood, sizing
Felts, plaster binder, upholstery, brushes, insulation

Pelts

Wool
Skin
Lanolin

Textiles
Leather goods
Ointments

Fats

Inedible tallow

Industrial oils, lubricants, soap, glycerin
Insecticides, weed killers, rubber, cosmetics, antifreeze, nitroglycerine, plastics, cellophane, floor wax, waterproofing agents, cement, crayons, chalk, matches, putty, linoleum

Bones

Tankage
Dry bone

Livestock and poultry feeds
Glue, hardening steel, refining sugar, buttons, bone china
Animal feed, fertilizer, porcelain enamel, water filters

Bone meal

Glands

Pharmaceuticals

Lungs

Blood

Blood meal
Blood albumen
Meat meal

Medicines
Pet foods
Livestock and fish feeds
Leather preparations, textile sizing
Livestock, pet and poultry feeds

Viscera and meat scraps

Rabbit Breeds by Use and Classification

A descendant of the European wild rabbit, the domestic rabbit is used for many purposes in the United States. In terms of numbers of owners, the pet segment of the industry is the largest (over 6 million rabbits). There are roughly 24,000 members of the American Rabbit Breeders Association and the majority of them raise rabbits as a hobby or to exhibit at shows. In 2012, over 800,000 rabbits were marketed for meat purposes and those producers typically raise hundreds to thousands of rabbits each year (<https://www.agmrc.org/commodities-products/livestock/rabbits>). Schools and universities use rabbits for teaching and research purposes. Other uses might include "feeder rabbits" for carnivorous pet reptiles, or for endangered or injured animals like eagles, condors, alligators and wolves. There are also seed stock producers who provide high quality breeding animals for new producers. With all of the potential uses for rabbits, it is no surprise that there are 49 breeds of rabbits described by the American Rabbit Breeders Association (ARBA) in their Standard of Perfection. They are classified by **color, type, shape, weight, fur, wool and hair**. <https://arba.net/recognized-breeds/>.

Large breeds - 14 to 16 pounds mature weight
 Medium breeds - 9 to 12 pounds mature weight
 Small - 2 to 4 pounds mature weight.

Some examples of rabbit breeds and their uses are:

Californian - is considered a good **commercial** breed due to their good growth characteristics and white (normal) fur. They are often raised for show. (Medium)

Checkered Giant – A popular show breed, the Checkered Giant is one of 11 breeds with **defined markings**. It may also be used as a meat and a fur breed (Medium to Large)

Dutch - is a popular show breed and are most noted for their **distinctive markings**. Their small size also makes them a good lab animal. (Small)

Holland Lop - is one of the breeds recognized by the ARBA as a **pet breed** and are popular at shows. (Small)

English and French Angora - breeds which produce high quality **wool**. Because the wool is harvested by shearing or plucking, the animal does not need to be slaughtered to harvest the product. (Medium)

Florida White – The Florida White was developed for laboratory use, third best **commercial** breed due to their good growth characteristics, also used for show. (Small)

Flemish Giant – Originally a **commercial** breed, this breed is a popular show breed, and as the name implies, is of impressive **size**. (Large)

New Zealand - is considered an outstanding **commercial** breed due excellent growth characteristics and meaty carcass. They are used as a show animal and the white variety is very popular for laboratory use. (Medium)

Rex – their plush, velvety **fur** used by the garment industry makes them a pelt breed but they are also good **commercial** rabbits and are a popular pet and show breed. (Medium)

Satin – is named for its silky **fur** but is also a good **commercial** breed. (Medium).

Breeds

Identifying Breeds



RABBIT LEARNING LABORATORY KIT

Rex

Variety: Castor

This medium breed, with a commercial type profile, originated in France. Varieties include black, black otter, blue, broken group, Californian, castor, chinchilla, chocolate, lilac, lynx, opal, red, sable, seal, and white. Head is broad and set close to the shoulders. Eyes are bright and bold. Ears are moderately thick and carried erect. Body is medium length with well-rounded hips and well-filled loin, rib, and shoulders. Feet and legs are medium-boned, straight, and rather short. Fur is extremely dense, straight, upright, extremely smooth to the touch, and between $\frac{1}{2}$ and $\frac{3}{8}$ inches long. Mature weight ranges from $7\frac{1}{2}$ to $10\frac{1}{2}$ pounds. This breed is all-purpose and popular for its distinctive coat qualities.

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Florida White

This small breed has a compact type profile. Coat color is pure white. Head is round, full, and set close to the body. Eyes are pink. Ears are stocky, well furred, and carried erect. Body is rather short and close-coupled with a gradually curving top line. Fur is flyback. Mature weight ranges from 4 to 6 pounds. This breed has good fur and meat qualities.

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Mini Lop

Group: Agouti
Variety: Chestnut Agouti

This small breed, with a compact type profile, originated in Germany as a sub-breed of the English Lop. Classified in seven groups: Agouti, Broken, Pointed White, Self, Shaded, Ticked, and Wide Band. Head is strong, sturdy, and set close to the shoulders. Ears are rounded, well furred, set on top of the head rising from a strong basal ridge, and lopped vertically with the opening toward the head. Body is massive, thick set, heavily muscled, compact, and balanced. Legs are thick, short, and straight. Fur is glossy, uniform, medium length, very thick, and dense. Mature weight ranges from $4\frac{1}{2}$ to $6\frac{1}{2}$ pounds. This breed has good meat and fur qualities and is popular for exhibition.

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New Zealand

Variety: White

This large breed, with a commercial type profile, originated in the United States. Varieties include black, red, and white. Head is full and set close to the shoulders. Eyes are dark brown, brown, or pink. Ears are medium thick, well rounded at the tip, set high on the head, and carried erect. Body is medium length and well rounded with a gradually curving top line. Leg bones are medium heavy, straight, and medium length. Fur is flyback. Mature weight ranges from 10 to 11 pounds. This breed exemplifies the meat production qualities.



Standard Chinchilla

This medium breed has a compact type profile. Color is a dark slate blue at the base with an intermediate portion of pearl (light as possible), with the top edge being a very narrow black band. Head sets on a short neck and is medium full from the base of the ears to the muzzle with a well-filled face and jaw. Ears, with distinctive black lacing, are carried erect and match the body color. Eyes are bright and bold, with an alert expression. Body is compact with well-developed shoulders and hindquarters. Feet and legs are medium fine-boned and straight. Fur is very dense and fine-textured with a rollback. Ideal fur length is $1\frac{1}{4}$ inches.



Silver

Variety: Black

This small breed, with a compact type profile, originated in France. Varieties include black, brown, and fawn. Head is in proportion to the body, medium size, well set on the shoulders, and carried erect. Ears are well set on the head with a strong base, and carried in a straight, upright position. Body is medium length with a slight taper from the hindquarters to the shoulders. Feet and legs are medium in bone and length. Tail is evenly silvered. Fur is flyback and short, has a broad shaft with a wide tip, and lies flat and close to the body. Guard hairs are white (silver). Mature weight ranges from 4 to 7 pounds.



American Sable

This medium breed, with a commercial type profile, originated in the United States. Coat color is rich sepia brown on the ears, face, back, legs, and upper side of the tail. The saddle color fades to a paler shade. Head is well shaped and moderately full. Eyes are bright and bold. Ears are carried erect. Body is medium length, deep, and wide with a smooth, continuously curving top line. Feet and legs are medium in bone and length. Fur is fine and soft with a dense undercoat thickly interspersed with thicker guard hair. Mature weight ranges from 7 to 10 pounds. This breed has good meat qualities.



Californian

This large breed, with a commercial type profile, originated in the United States. Coat color is white with colored ears, feet, tail, and nose. Point color is chocolate or black. Head is well shaped, fairly full, carried erect on a short neck, and set close to the body. Eyes are bright, bold, and pink. Ears are well set, strong at the base, and carried upright. Body is medium length, plump, and firm with a curved top line. Legs are medium-boned and rather short. Tail is straight and carried erect. Fur is flyback. Mature weight ranges from 8 to $10\frac{1}{2}$ pounds. This breed has good fur qualities, is popular for show, and bred for meat production.



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Giant Angora

Variety: Ruby-Eyed White

This large wool fancy breed has a commercial type profile. The one variety for this breed is ruby-eyed white. Head is oval and set close to the body. Eyes are ruby red, bright, and bold. Ears are proportioned to the head and the body, set on top of the head, and carried in a close V-shape. Body has good width and depth, tapers slightly from hindquarters to shoulders, and is well balanced throughout. Legs are medium heavy-boned. Tail is straight and well covered with wool. Wool is dense and contains three wool types: underwool, awn fluff, and awn hair/guard hair. Color is white and even. Mature weight ranges from 8½ to 10 pounds.

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Britannia Petite

Variety: Ruby-Eyed White

This small breed has a full-arch profile. Varieties include black otter and ruby-eyed white. Head is wedge-shaped, and broad across the forehead and between the eyes. Eyes are bright and very bold. Ears are erect, well furred, set close together, and touch all the way to the top. Body is fine-boned, sprightly, diminutive, slender, and carried well off the ground with a well-tucked belly and smoothly curving top line. Forelegs are fine-boned. Fur is fine, silky, short, dense, and close to the body. Mature weight is no more than 2½ pounds.

RABBIT LEARNING LABORATORY KIT

Giant Chinchilla

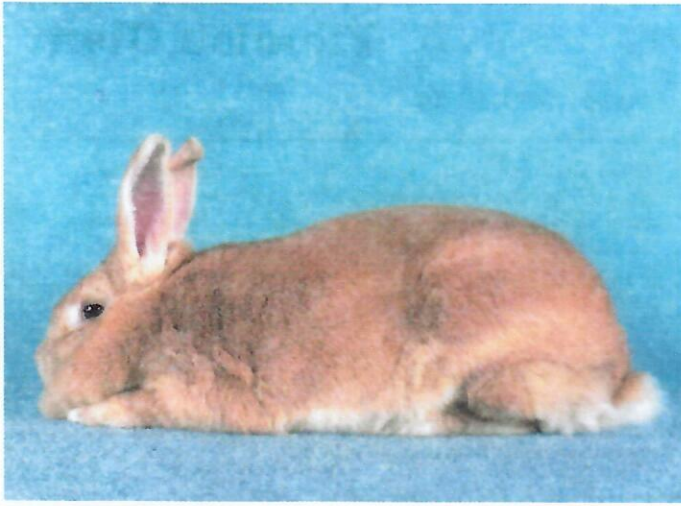
This giant breed, with a semi-arch type profile, originated in France. Coat color should resemble a real chinchilla: dark slate blue at the base, light pearl in the middle, and a narrow black band at the top edge. Head is large, shapely, and set firmly on the shoulders. Eyes are bold. Strong, thick, erect ears are set high on the head and have a distinctive jet black lacing. Body is moderately long, massive, and powerful with full, broad fore and hindquarters. Feet and legs are strong, straight, medium length, and fairly heavy-boned. Fur is flyback. Mature weight ranges from 12 to 16 pounds. This breed is ideal for meat and fur production.

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Jersey Wooly

*Group: AOV
Variety: Pointed White (Black)*

This small breed has a compact type profile. Classified in five groups: Agouti, AOV, Self, Shaded, and Tan Pattern. Head is bold, well rounded, and set close to the shoulders with a short, dense wool cap. Eyes are bold and bright. Ears are short, well furred, and carried erect. Body is short and compact with a gradually curving top line. Legs are sturdy and straight. Wool lays gently over the body and is dense, coarse, dominated by guard hairs, and about 2 to 3 inches long. Mature weight is not to exceed 3½ pounds. This breed is known for its fur qualities.



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Flemish Giant

Variety: Sandy

This large breed, with a semi-arch type profile, originated in England for meat production. Varieties include black, blue, fawn, light gray, sandy, steel gray, and white. Head is large and broad. Eyes have a reposeful expression. Ears are carried erect with a heavy base. Body is long and powerful with full, broad forequarters, hindquarters, and chest. Feet and legs are straight, large, long, strong, and powerful. Fur is glossy, dense, and full of life and brightness. Mature weight is 13 pounds and over. This breed is popular for pets and exhibition, and has good fur and meat qualities.



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Tan

Variety: Black

This small breed has a full-arch type profile. Varieties include black, blue, chocolate, and lilac. Eyes are encircled with an even tan color. Ears are well furred, carried upright, and laced at the inside edge with rich tan. Body is balanced and has a graceful and moderately arching topline. Body type is different from any other breed. Fur is flyback, medium fine, and short with enough texture and springiness for a snappy flyback. Markings: tan color is uniform and unbroken from the chin, over the chest and belly, and to the tail. Mature weight ranges from 4 to 6 pounds.



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Hotot

This large breed has a commercial type profile. Coat color is frosty white with exception given for the eyebands. Head is strong and broad. Eyes are dark brown and bold. Ears are well furred and carried in a V-shape. Body is well rounded and thick set with a well-balanced distribution of muscle. Front feet and legs are medium length and straight. Hind feet and legs are very strong and bold. The fur is very dense, lustrous, and fine in texture. Markings: eye bands are thin and lustrous; there are deep black bands around each eye. Mature weight ranges from 8 to 11 pounds.



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English Lop

Group: Broken

Variety: Broken Orange

This large breed, with a semi-arch type profile, originated in England. Classified into six groups: Agouti, Broken, Self, Shaded, Ticked, and Wide Band. Body has well-developed shoulders, midsection, and hindquarters. Head is well shaped and wide, has full cheeks, and tapers to a slightly wide muzzle. Ears are to be carried low on the head with no noticeable crown. Ears are at least 21 inches from tip to tip. Feet and legs are medium heavy-boned, medium length, straight, and parallel to the body. Fur is medium length, fine, and silky to the touch. Mature weight is 9 pounds and over.



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Polish

Variety: Black

This small breed, with a compact type profile, has an unknown origin. Varieties include black, blue, chocolate, blue-eyed white, and ruby-eyed white. Head is medium full and short with full cheeks and muzzle. Eyes are large, bold, expressive, and bright. Ears are small, well formed, set close together and touch all the way up. Body is small, compact, and close-coupled with a gradually curving top line. Feet and legs are fine-boned, and short. Fur is flyback, short, fine, dense, and glossy. Mature weight is not to exceed 3½ pounds.



RABBIT LEARNING LABORATORY KIT

Checkered Giant

Variety: Black

This giant breed, with a full-arch type profile, originated in England. Varieties include black and blue. Head is well proportioned with the body. Ears are heavy set, carried erect, and close together. Body is long, well arched, and carried well off the ground. Legs are medium heavy-boned, long, and straight with hind legs being carried parallel with the body. Fur is short, dense, flyback, and glossy. Markings consist of two medium spots on each side, a dorsal stripe extending from the ears to the tail, solid-color ears, a butterfly on the nose and muzzle, a spot on each cheek, and circles around the eyes. Mature weight is a minimum of 11 pounds.



RABBIT LEARNING LABORATORY KIT

Silver Marten

Variety: Black

This medium breed has a commercial type profile. Varieties include black, blue, chocolate, and sable. Head is medium length and set close to the body. Eyes are large, bright, and bold. Ears are carried erect and proportioned with the body. Body is medium length, deep, and plump with a gradually curving top line. Feet and legs are medium-boned and straight. Markings consist of silver circles around the eyes, silver-tipped guard hairs on the sides, silver triangle and collar at the nape of the neck, silver white inner ears, white nostrils, and a silver-white belly. Mature weight ranges from 6 to 9½ pounds.



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Cinnamon

This large breed has a commercial type profile. Coat color is rust or cinnamon with uniform gray ticking across the back. Head is medium length, carried erect, and set close to the body. Eyes are bright and clear with an alert expression. Ears are well set with a strong base and rounded tips. Body is medium length with well-developed shoulders and hindquarters. Feet and legs are medium-boned and short. Markings include two rust-colored lap spots inside the hind legs; a butterfly on the nose and muzzle; and small, distinctive, dark eye circles. Mature weight ranges from 8½ to 11 pounds. This breed has good meat qualities.

Body Types

Matching body types
with descriptions and
examples

(c) Raising-Rabbits.com



Commercial Rabbit Breeds

One of most common rabbit body types include the Commercial Rabbit Breeds. Like indicated by the name, the rabbits that make up this category tend to be used as production animals and meat rabbits. The rabbits that make up this “Commercial” category tend to grow fast and have large meaty loins.

Examples:

- Champagne D’Argent
- Californian
- Cinnamon



Compact Rabbit Breeds

Compact rabbits are small, yes, but plenty of medium-sized rabbits fall into this type of rabbit. They are tightly constructed and give a sense of roundness. Some are described as cobby (round with very small neck).

Examples:

- English Angora
- Standard Chinchilla
- Dutch



Semi-Arched Rabbit Breeds

Their head and shoulders hug the posing table, and then their loin rises gracefully to a peak at the hindquarters before the top line falls to the tail.

Examples:

- English Lop
- Flemish Giant
- Giant Chinchilla



Fully Arched Rabbit Breeds

A fully arched rabbit appears perky and ready to bolt. It stands at alert and on its toes, and you can see daylight under its abdomen.

Examples:

- Belgian Hare
- English Spot
- Rhinelander



Cylindrical Rabbit Breeds

It is round, long and slinky, some even say snake-like, with no obvious rise to the hindquarters.

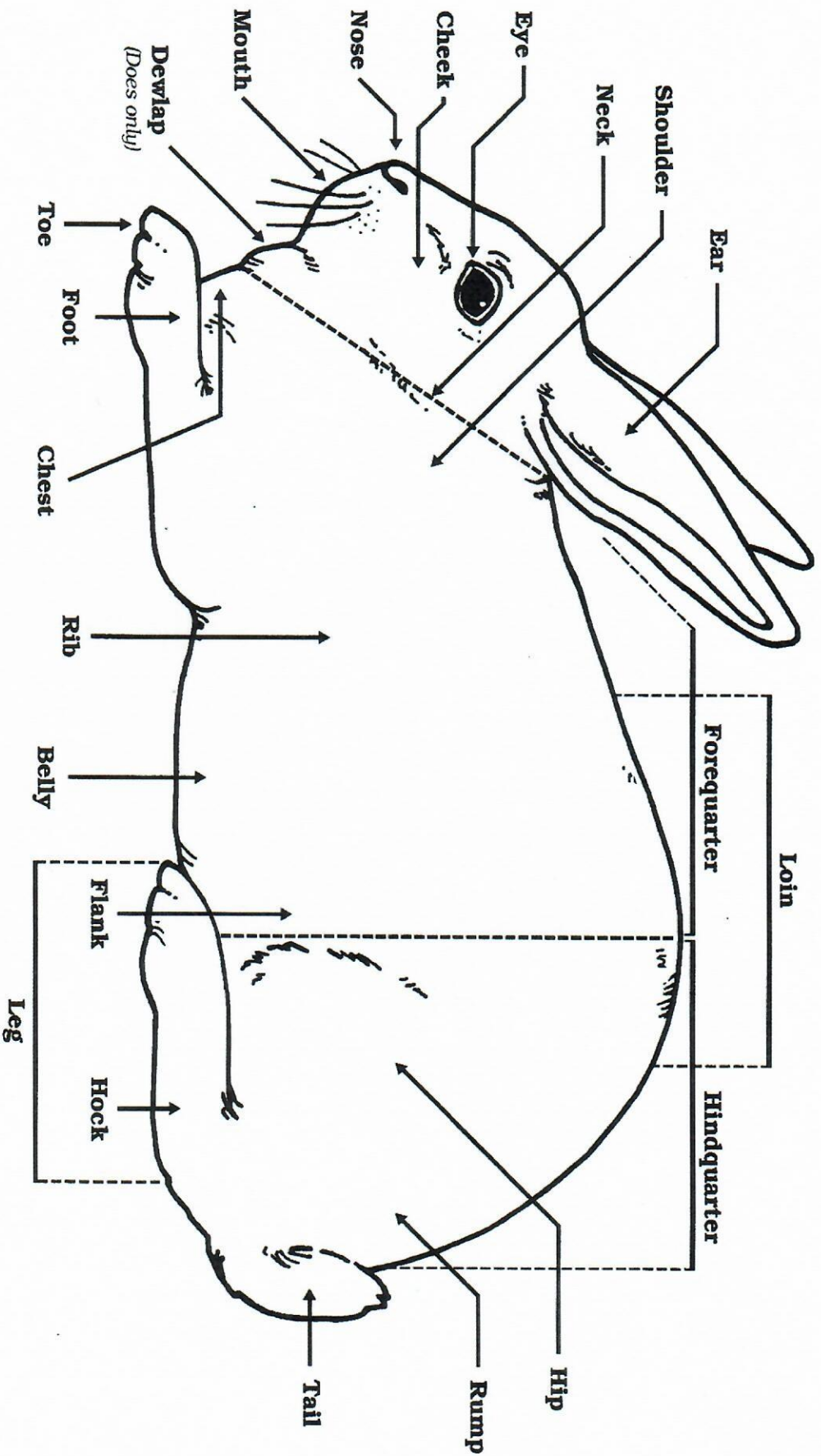
Example:

- Himalayan

Anatomy

Identify parts of a rabbit

Parts of a Rabbit



RABBIT

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Exploratory Learning: Educational Program

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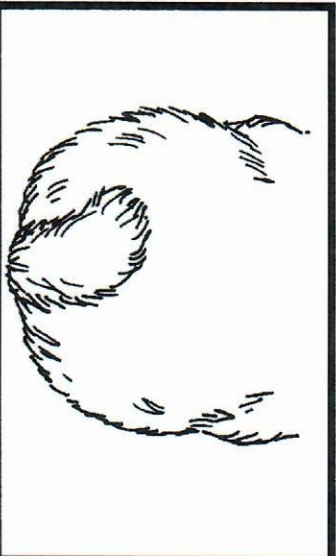
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Conformation

Know proper
conformation of Ears/Tail
and Hips/Legs

Rabbit Conformation

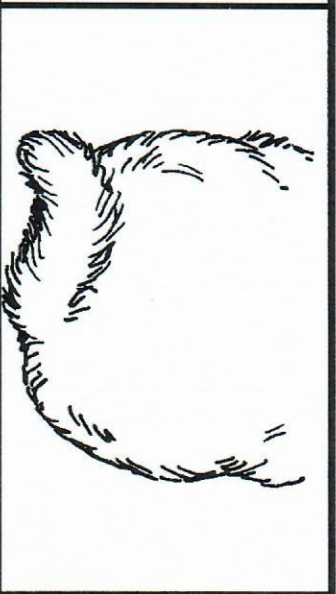
(Tails/Ears)



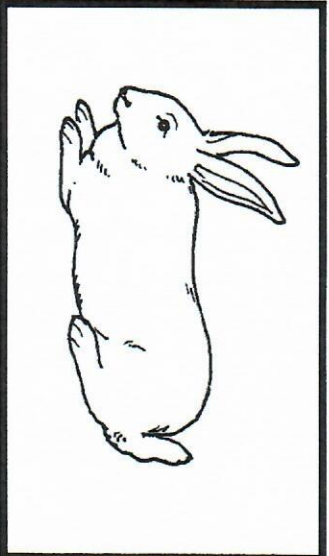
Side-Carried Tail



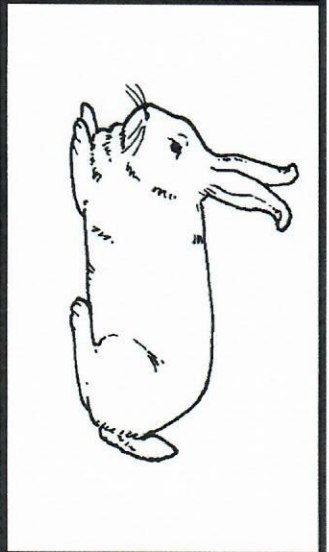
Ideal Tail



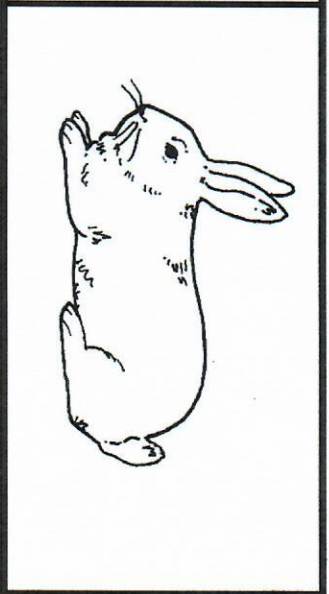
Screw Tail



Open-Carried Ears



Belled Ears



Ideal Ears



RABBIT

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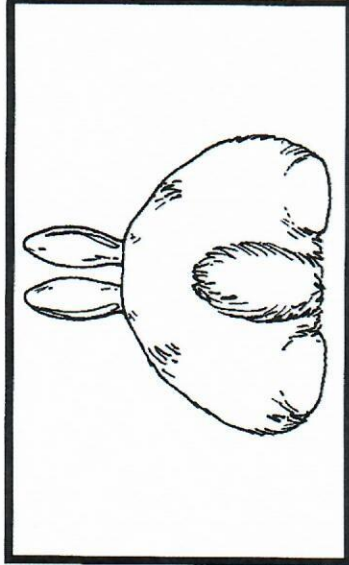
Exploratory Learning: Educational Program

This component adapted from materials used by Judy Conrad, Extension Agent, Ohio State University Extension - Pickaway County.
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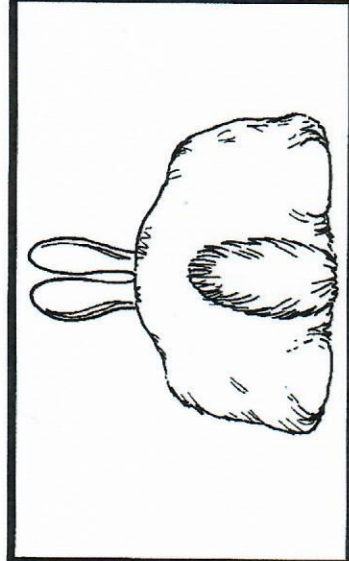
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Rabbit Conformation

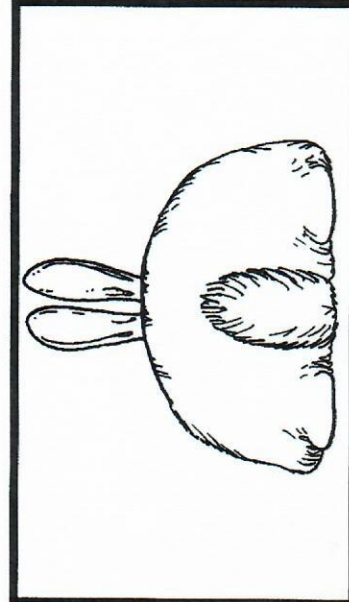
(Hips/Legs)



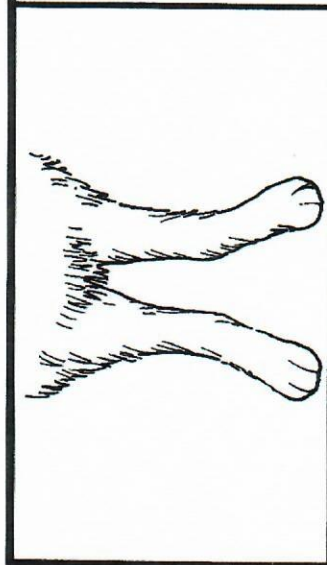
Ideal Hips



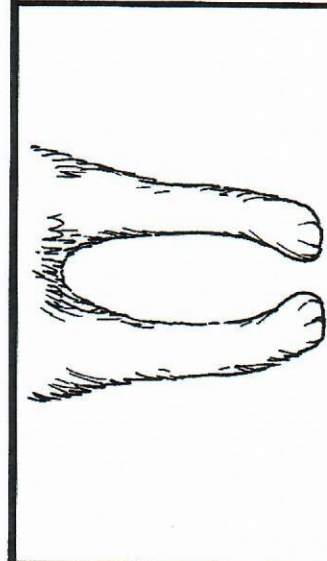
Rough Hips



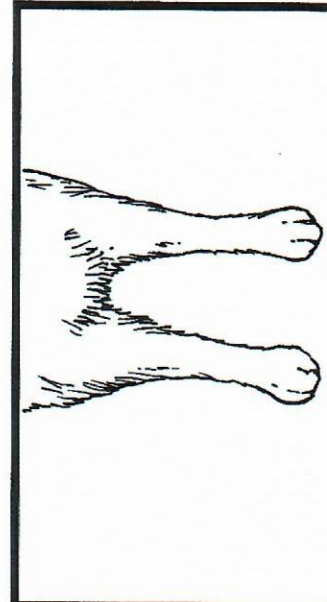
Not Enough Rise



Outward-Bowed Legs



Inward-Bowed Legs



Ideal Legs

Diseases & Ailments

Know the names and
causes of different
diseases and ailments

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



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Sore Hocks
(Ulcerative Pododermatitis)

Ailments and Disorders
Exploratory Learning: Education Program
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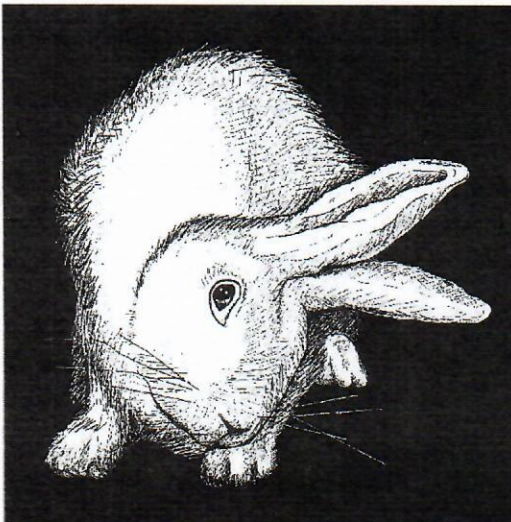
Cause: Ear mites -- *Psoroptes cuniculi* and/or *Chorioptes cuniculi* – transmitted from infected animals or environment to noninfected rabbits



RABBIT
LEARNING LABORATORY KIT

Ear Canker
(Acariasis)

Ailments and Disorders
Exploratory Learning: Education Program
Product distribution through the Curriculum Materials Service

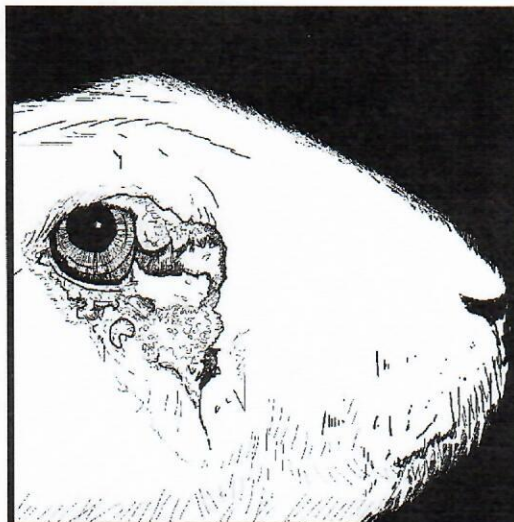


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Wry Neck
(Torticollis)

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



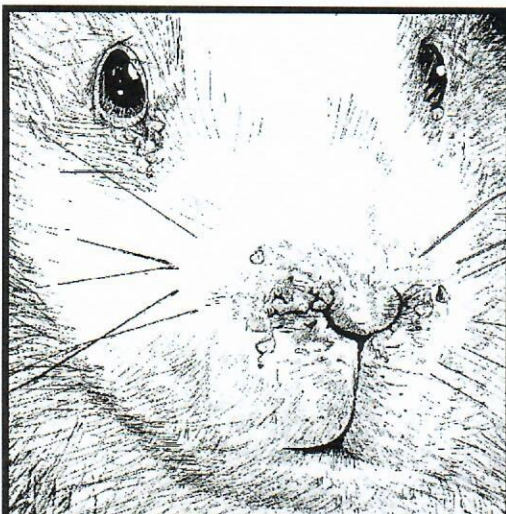
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Weepy Eye
(Staphylococcosis)

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Cause: Bacterial infection – *Staphylococcus aureus* and/or *Pasteurella multocida* – spread by humans and contaminated food, fees, cages, cages, and/or bedding

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

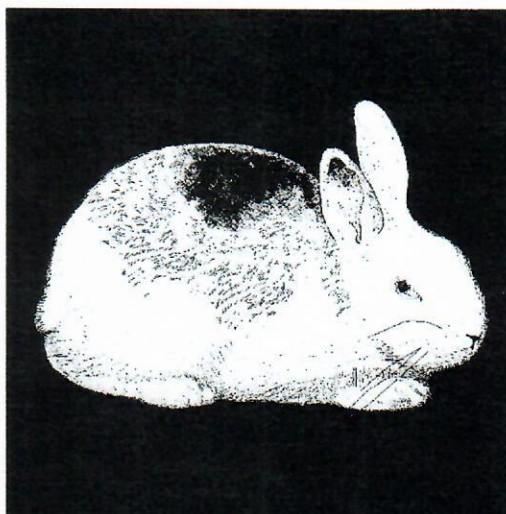


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Snuffles
(Infectious Respiratory Disease)

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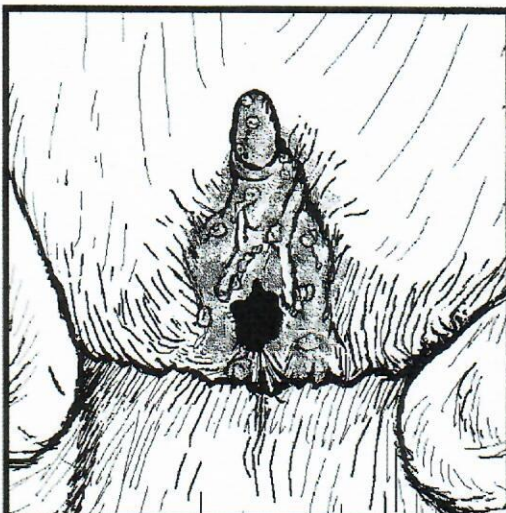
Cause: Mites – Common fur mites *Cheyletiella parasitivorax* and/or *Listrophorus gibbus* or burrowing mites *Sarcoptes scabiei* and/or *Notoedres cati* – spread by direct contact with infected host



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Mange
(Sarcoptic Mange or Acariasis)

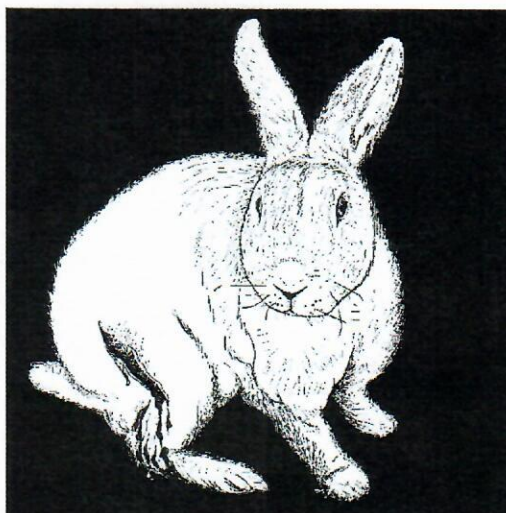
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Vent Disease
(Venereal Spirochetosis or Treponematosis)

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Wound
(Lacerations and/or Abrasions)

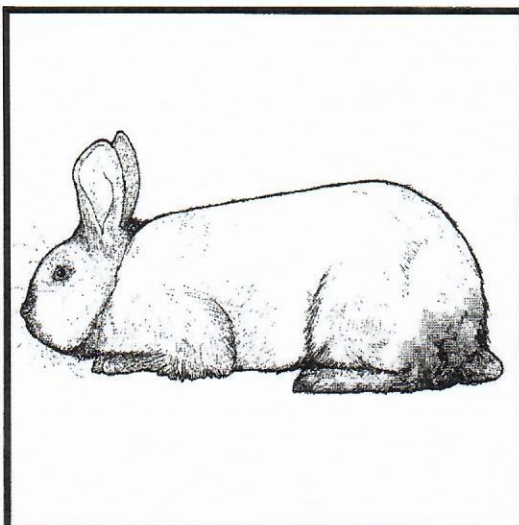
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Cause: Bacterial infection – *Treponema cuniculi* – transmitted by direct contact, especially during mating

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

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

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



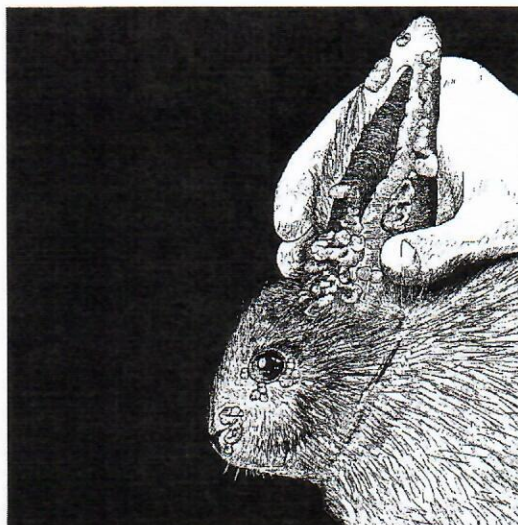
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Enterotoxemia
(Clostridial Enterotoxemia)

Ailments and Disorders

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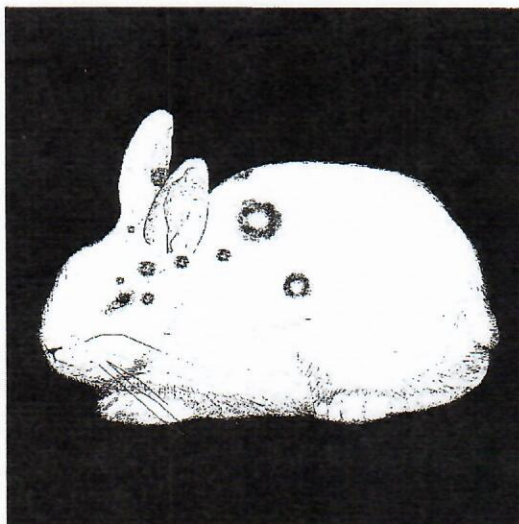
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Myxomatosis

Ailments and Disorders

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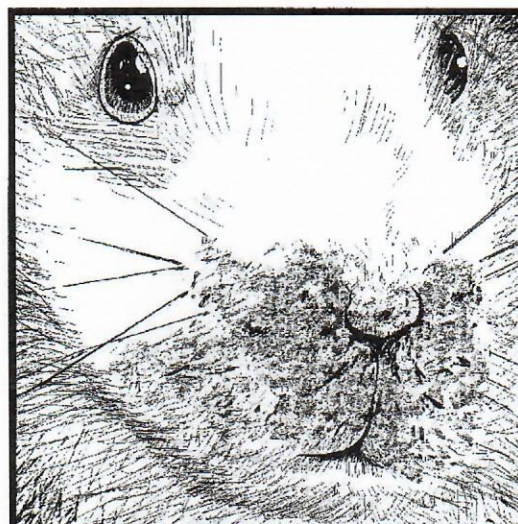
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Ringworm
(Dermatophytosis)

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VHD
(Viral Hemorrhagic Disease)

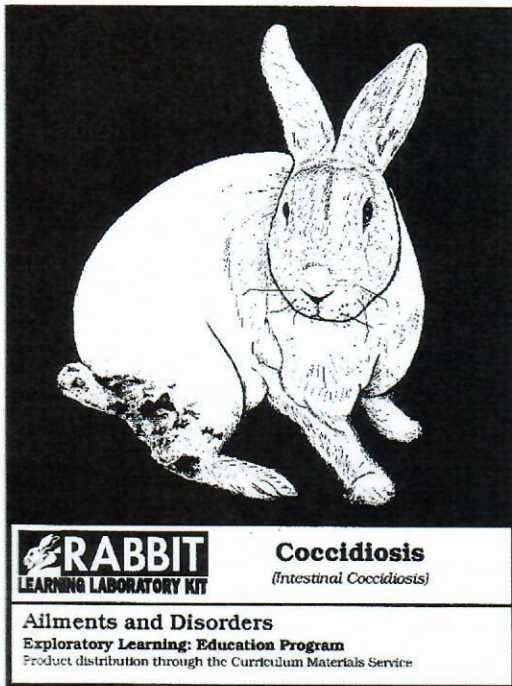
Ailments and Disorders

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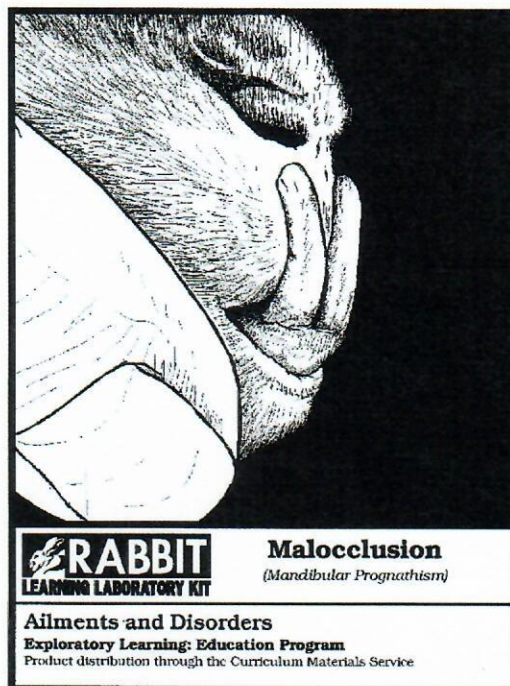
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Cause: Fungal Infection – *Trichophyton mentagrophytes* and/or *Microsporum canis* – transmitted easily by direct contact with spores on hair coat, in bedding and/or soil

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



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



Cause: 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

Poisonous Plants

Know what each plant is
called and what it looks
like



Arrowgrass



Foxglove



Larkspur



Bracken Fern



Fireweed



Johnson Grass



Burdock



Goldenrod



Milkweed



Castor Beans



Hemlock



Poppy



Chinaberry



Jimson Weed

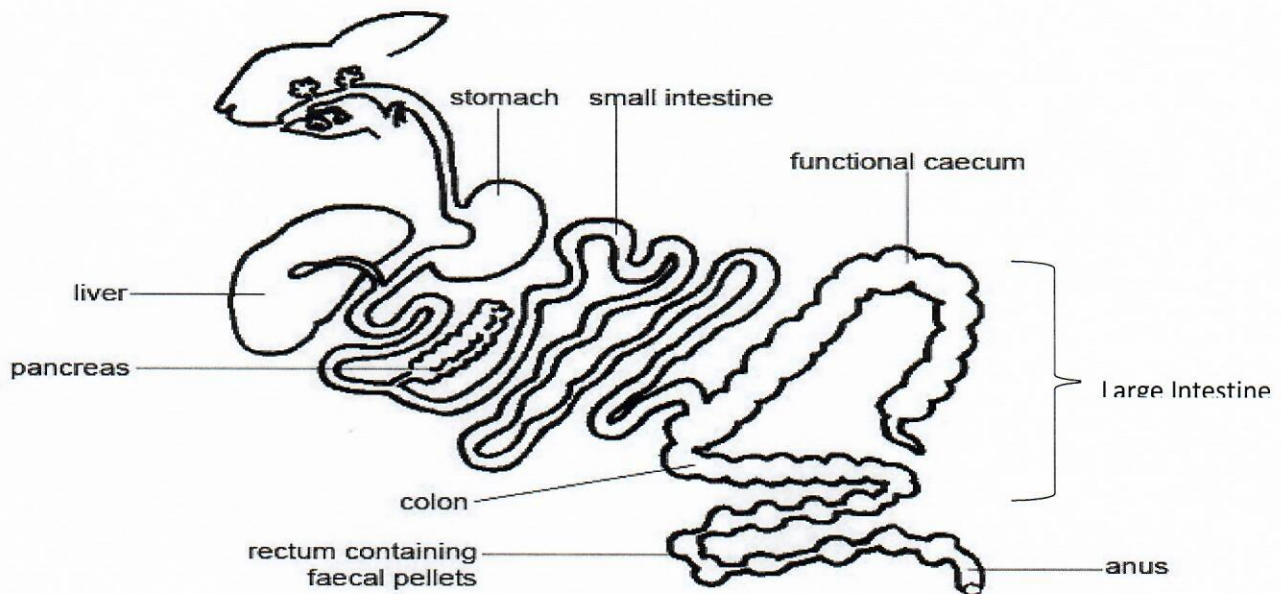


Oak

Digestive Anatomy

Identify parts and functions
of the digestive track

Farm animals are grouped by what they eat, which is based on the type of digestive system they possess. *Herbivores* are vegetarians (cattle, sheep, goats, rabbits). *Carnivores* are flesh eaters (dogs). *Omnivores* eat both flesh and plants (pigs, chickens, humans). Based on the digestive system, animals are grouped as *monogastric* or *simple stomach* (pig), *polygastric* or *ruminant* (cattle, sheep, goats), *avian* (chickens), or *pseudo-ruminants* with a functional cecum (rabbits). Understanding the digestive system is fundamental to selecting the proper feeds and feeding system for your animal.



The rabbit digestive system is well adapted for forages and other plants type feeds. The stomach and cecum of the rabbit hold about 80% of the ingested material. Food remains in the rabbits digestive tract for about 18 hours. The rabbit makes two types of feces: hard pellets and soft. The soft fecal material is eaten by the rabbit allowing the rabbit to benefit from microbial digestion in the cecum. This digestive trait is called *cecotrophy*.

Mouth – Prehension, mastication, and salivation of herbivorous diet

Esophagus –Hollow muscular tube that transports ingesta from the mouth to the stomach. Rabbits cannot vomit due to a strong sphincter into the stomach

Stomach - Highly acidic secretions with a pH of 1 to 2.

Small Intestine – Pancreatic and intestinal juices break down proteins and carbohydrates while bile from the liver breaks down fat. The first section (duodenum) is involved in digestion, and the next two sections (jejunum & ileum) are actively involved in nutrient absorption.

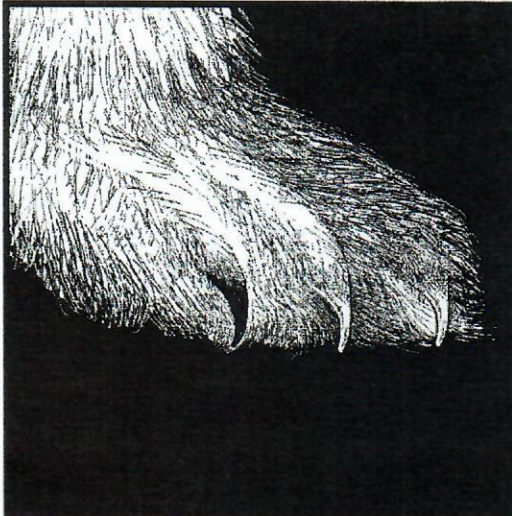
Large Intestine – Extensive colon and cecum function in fermentative digestion. Produce two types of feces, one pelleted, one soft. Soft feces is eaten and products of cecal fermentations (microbial protein and B vitamins) are digested and absorbed

Disqualifications & Faults

Know the difference between
disqualifications and faults
and what is classified as each

Disqualification

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

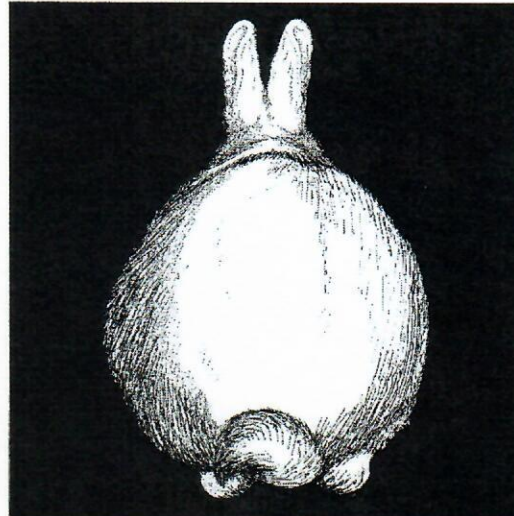


Unmatched Toenails

Faults and Disorders - Disqualification
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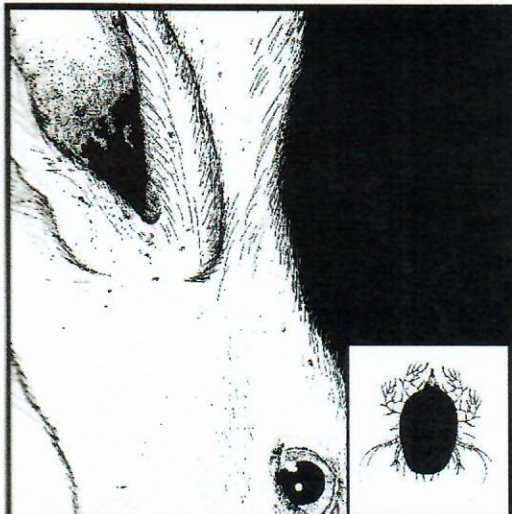
Disqualification

Abnormal tail – bent, carried, or
twisted permanently to one side.
Corkscrew tail with one or more turns



Wry Tail (Screw Tail)

Faults and Disorders - Disqualification
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Ear Canker (Ear Mite Infestation)

Faults and Disorders - Disqualification
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Malocclusion (Buck or Wolf Teeth)

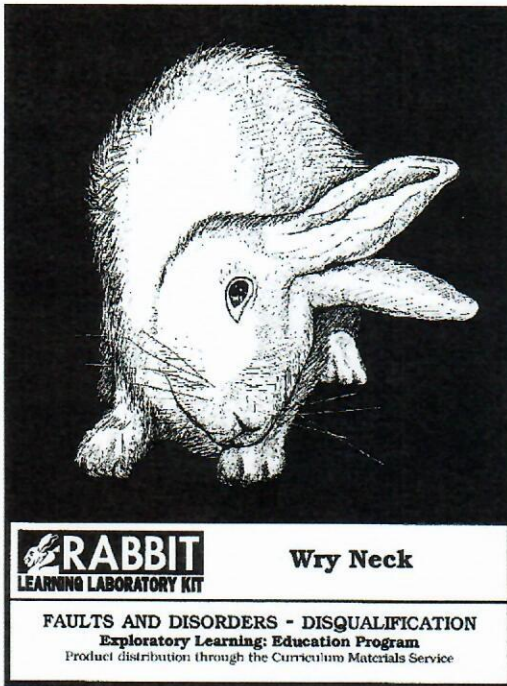
Faults and Disorders - Disqualification
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Disqualification

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

Disqualification

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



Disqualification

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

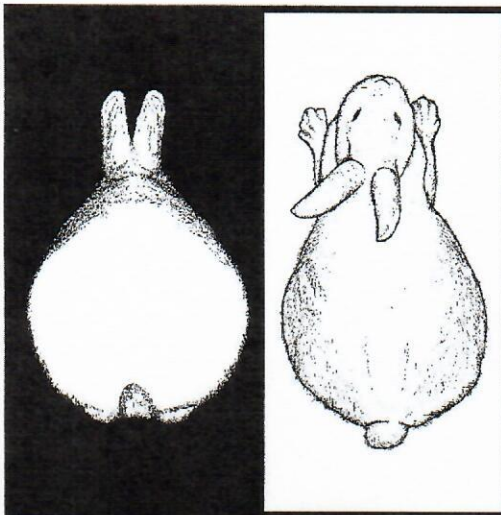


Disqualification

White spot in colored area of the fur coat **or** colored spot in white area of the fur

Fault

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



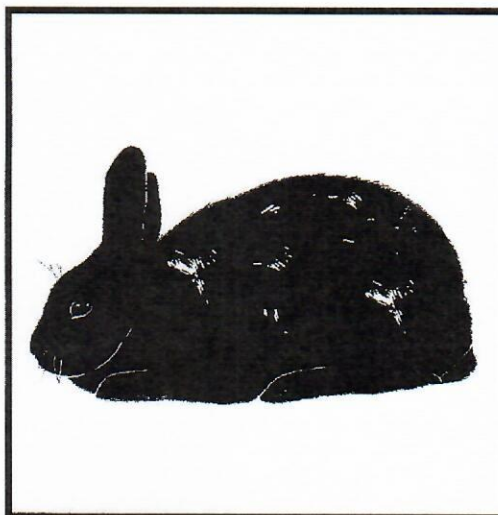
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Narrow in Shoulders

Faults and Disorders - Fault
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Fault

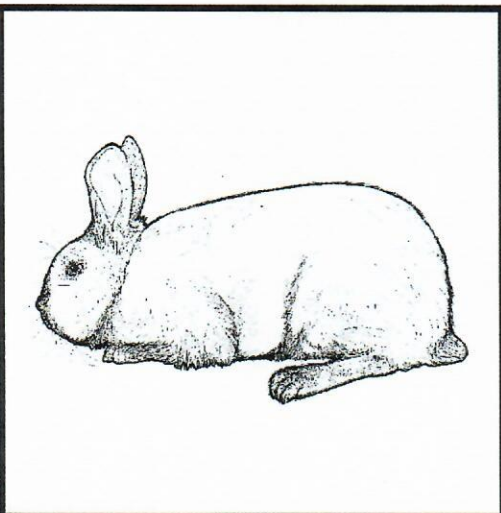
White hairs in colored fur



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Stray Hairs

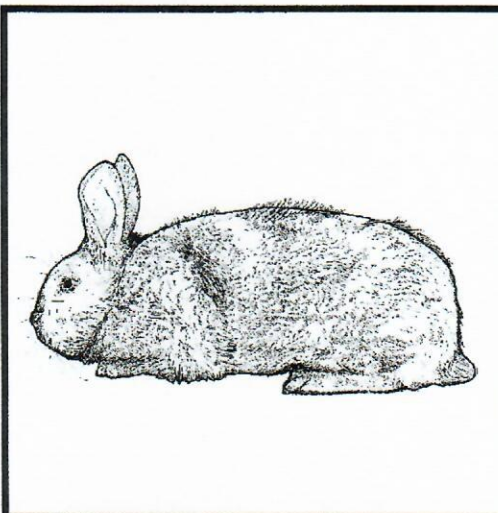
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Cow-Hocked

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Molt

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Fault

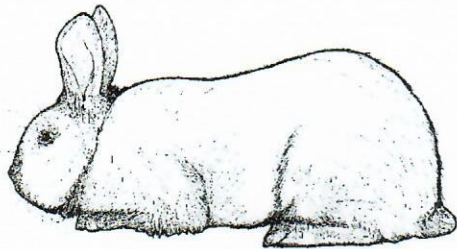
Hind legs that turn inward at the hocks, causing the toes to turn outward from the body

Fault

Act of shedding or changing fur

Fault

Low or lacking depth over mid-section



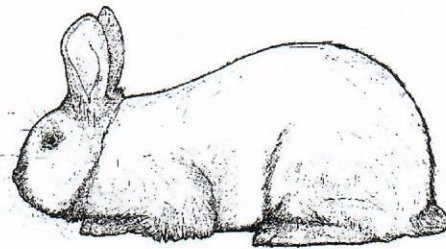
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Sway-Back

Faults and Disorders - Fault
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Fault

Shoulder depth is lacking and fails to balance with the hindquarters



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**Low in
Shoulders**

Faults and Disorders - Fault
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Stained Coat
(Hutch Stain)

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Fault

Urine and/or manure stains on fur