

# Tips and Tricks to Prize Winning Pigs



Image courtesy of 4D Livestock [https://www.facebook.com/4d.livestock10/?ref=page\\_internal](https://www.facebook.com/4d.livestock10/?ref=page_internal)  
Image is cropped



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## Table of Contents

Purpose of Packet.....	3
Common Terminology.....	4
Cuts of Meat.....	5
Parts of a Pig.....	6
Swine Identification: Ear Notches.....	7
Common Diseases and Treatments.....	8-9
Breeds.....	9-15
Grooming and Clipping.....	16
Fast Facts.....	16
For Fair.....	17-18
Resources.....	19-20

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## **Purpose of this packet.**

The purpose of this packet is to provide basic information to 4-H members and other interested parties about swine. Many members, especially those just beginning, are unsure of where to start or what to learn in regards to a swine 4-H project. This packet discusses different breeds and types, diseases, and specific issues related to the project. While this packet is by no means all-inclusive of what is required to raise pigs, it is a good starting point.

This packet will encompass topics such as disease and treatment, types, and other related information that will work to better the reader's understanding of their project. The primary goal is to help facilitate a more confident and prepared member that will continue to develop skills and greater personal and project growth in their desired project area.

*Please Note: Market animals intended for auction must follow the rules and regulations of the Clackamas County Junior Livestock Auction (CCJLA). This is NOT a 4-H administered program but we do partner with them at the county fair to widen youth opportunities. The committee only allows youth in 4-H and FFA (in yearlong educational programs) to participate.*

*For CCJLA information and schedule, please visit: <https://ccjla.wordpress.com/>*

This packet was developed in 2020 for families beginning in the swine project area.

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## Common Terminology

1. Backfat: Fat layer between the skin and muscle found on the hog's back.
2. Barrow: Castrated male pig
3. Blind teat: Teat often removed due to its irregularity and uselessness as it cannot be nursed from
4. Boar: Uncastrated male pig
5. Colostrum: First milk consumed by piglet after birth
6. Cross-bred: An animal with two or more breeds present in its bloodline
7. Dressing percent: Meat that is usable after slaughter
8. Drove: Pig herd
9. Farrow: Birthing process of a sow
10. Finisher pig: Time between birth and when they are market ready
11. Gilt: Female hog not having farrowed before
12. In pig: Pregnant pig
13. Needle teeth: Two teeth resembling canine teeth. They are clipped to ensure they do not damage the teats of the sow.
14. Overlaying: When a sow lays on top of a piglet, killing it
15. Prolificacy: Number of live piglets farrowed to a sow
16. Purebred: An animal that only has one breed present in its bloodline
17. Scruf: Layer of skin holding oils, dirt, and skin cells
18. Sow: Female hog that has farrowed at least once
19. Weaning: Removing the piglets from the sow to keep them from nursing

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## Cuts of Meat

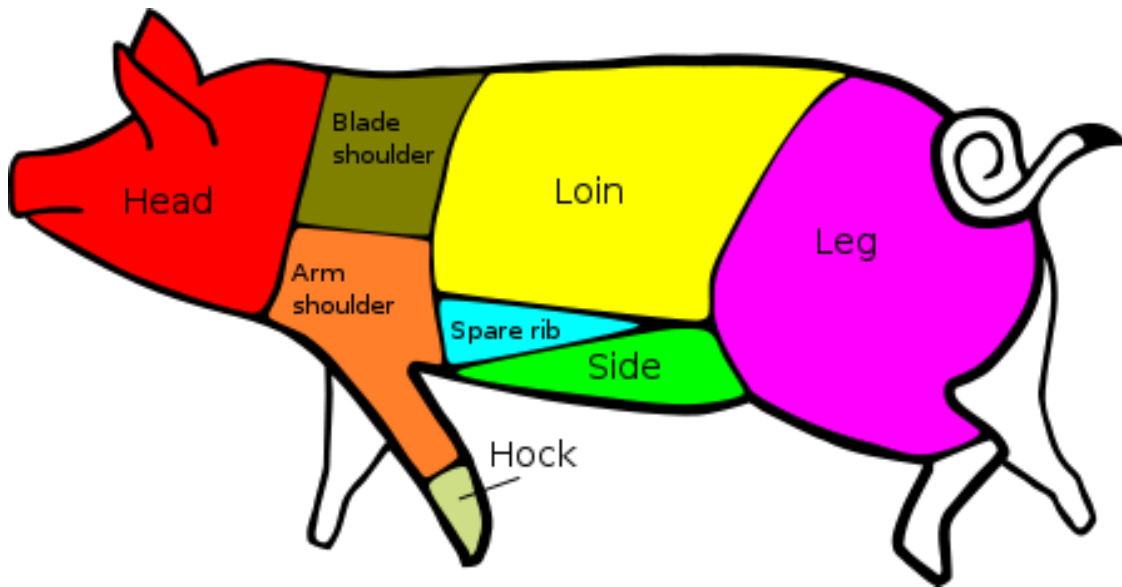


Photo courtesy of GameKeeper

- Bacon comes from the belly, which is marked as the side and spare rib on the diagram.
- Roasts come from the shoulder and loin.
- The blade shoulder is also referred to as the Boston shoulder and the arm shoulder is sometimes called the picnic shoulder.
- Unlike beef, pork does not receive a grade but they are still evaluated on quality by looking at the color, pH, marbling, and texture.
  - Color standard is on a scale of 1 to 6 with the marbling standard is on a scale of 1 to 10.
    - The “middle ground” of each scale is ideal; you don’t want to be on either extreme side of the scale.

## Parts of a Pig

Parts of the pig and cuts of meat are different. Parts of a pig refers to the physical parts of the hog, which is not generally the parts we consume while the cuts are the ones we do consume. There is some slight overlap of the two, however, which can be seen on both diagrams. These parts are often asked about in showmanship and are important to know.

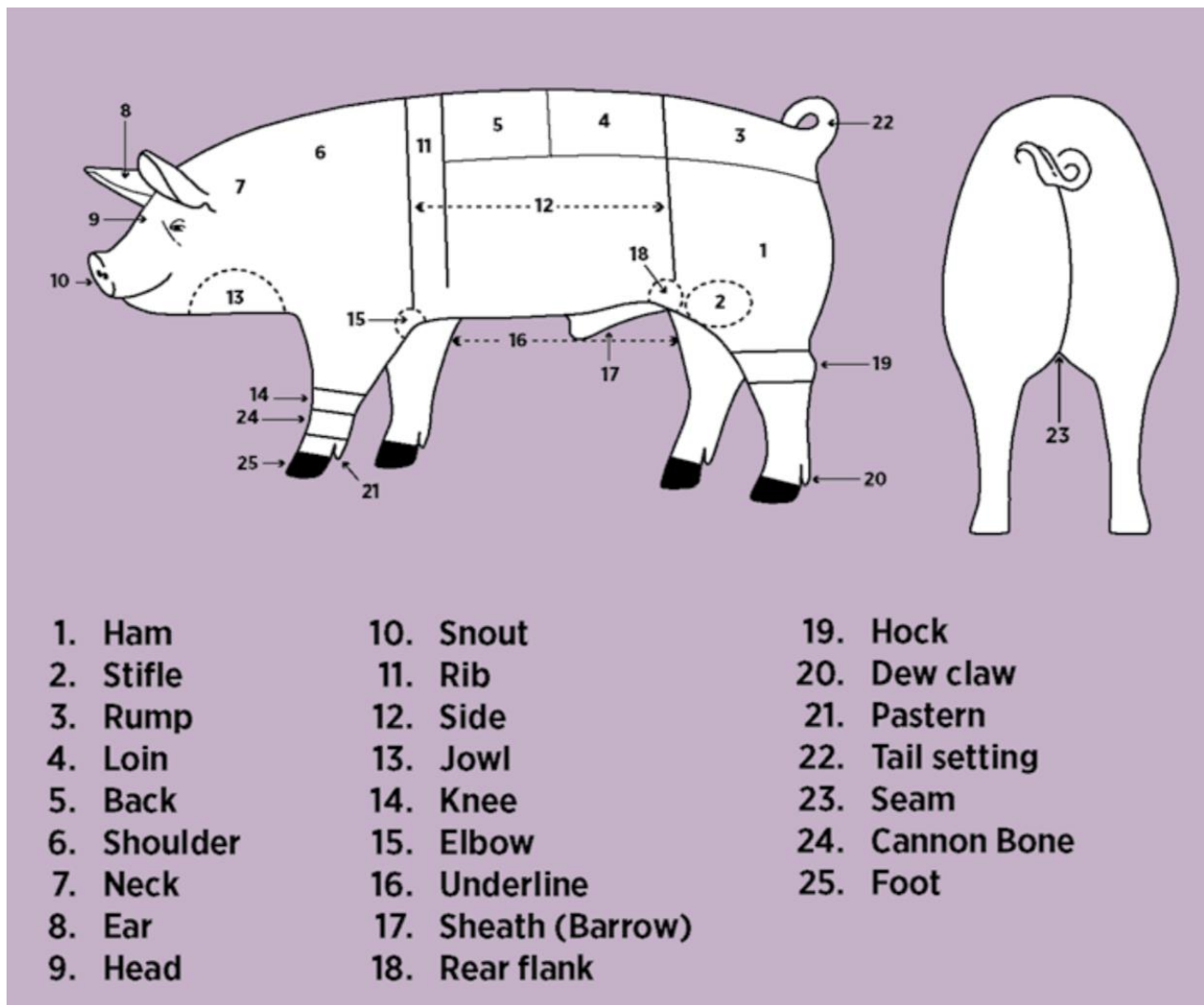


Image courtesy of Michigan State University Extension

## Swine Identification: Ear Notches

When pigs are days old they have notches put in their ear for identification purposes. The left ear is notched to indicate what number in the litter the piglet was. The right ear is notched to indicate the litter number. Notches in certain parts of the ear signify a specific number. As this can be a little confusing, an example has been attached below.

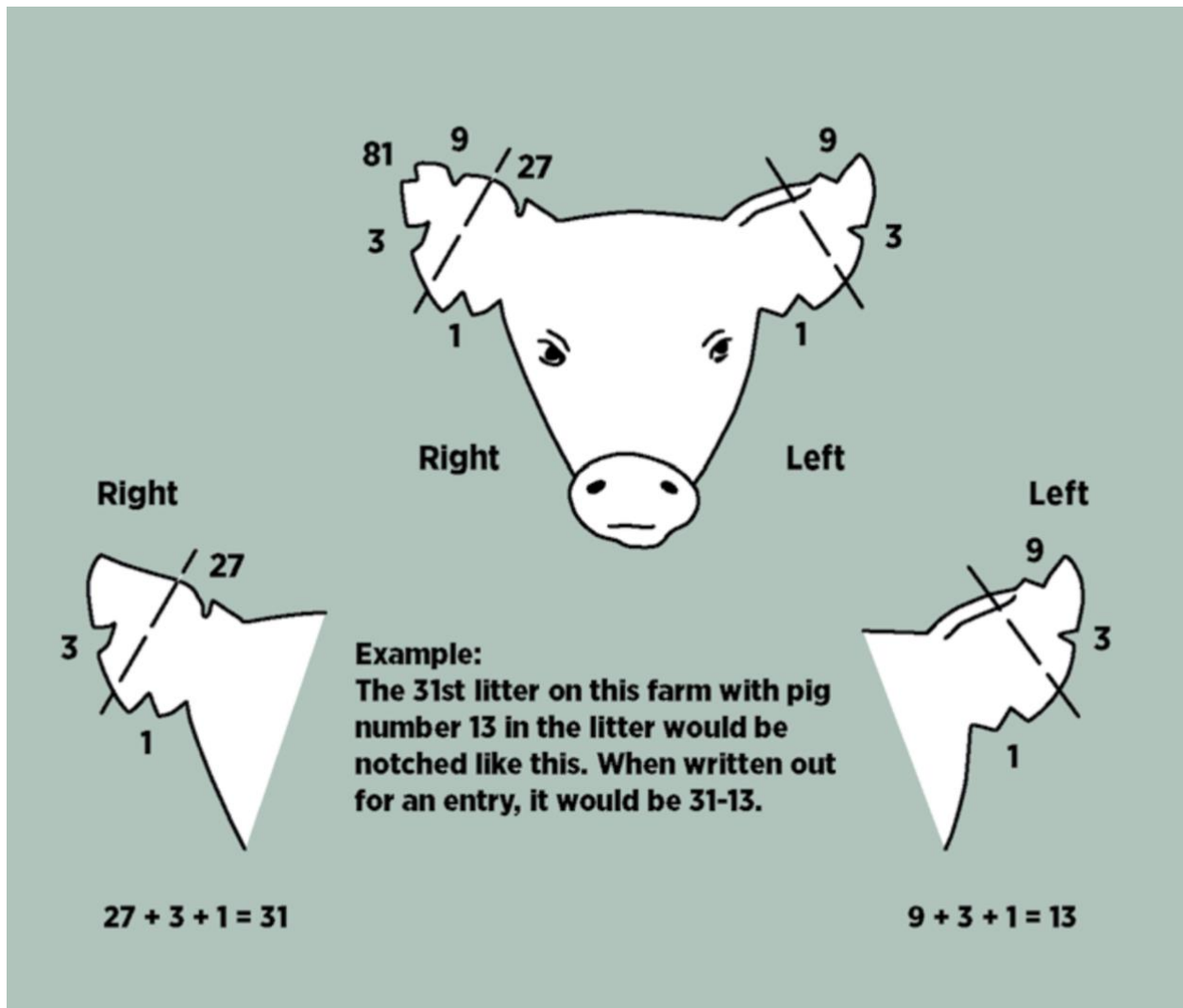


Image courtesy of Michigan State University Extension

## Common Diseases and Treatments

In the table below are some listed common diseases and ailments found in pigs as well as a handful of pertinent details in each column. This list is far from all-inclusive and is just a sampling of what can be found, both of diseases/ailments and in the following columns. Columns two through five are common details related to that disease/ailment.

<b>Disease</b>	<b>Symptoms</b>	<b>Treatment</b>	<b>Prevention</b>	<b>Other Details</b>
Porcine Stress Syndrome (PSS)	-Tremors -Facial twitches -Red, blotchy skin -Elevated breathing -Death	-Treatment almost never works; refer to veterinarian for possible options.	-Cull those from the drove who test positive for the PSS gene	-Hogs that have higher muscle mass are more likely to be impacted
Erysipelas	-Diamond shaped skin lesions -Abortion -Fever -Arthritis -Death	-Penicillin and antiserum at the discretion of your veterinarian	-Regular vaccination	-Often passed from feces of infected animals into soil where it infects healthy animals -Can be spread by feeding pork to pigs -Can be caused by having very wet penning and feeding systems where there is lots of feces
Parvovirus	-Infertility in females -Mummified	-Unfortunately, there is no treatment	-Regular vaccination	-Can be spread through sexual transmission



	<p>piglets</p> <ul style="list-style-type: none"> <li>-Stillborn piglets</li> <li>-Low birth weight piglets</li> </ul>			<p>-Virus can be passed among the drove through feces.</p>
Stomach Worms	<ul style="list-style-type: none"> <li>-Diarrhea</li> <li>-Weight loss</li> <li>-Stomach ulcers</li> <li>-Anemia</li> </ul>	<p>-Deworm</p>	<ul style="list-style-type: none"> <li>-Regularly clean environment and living quarters.</li> <li>-Rotate pastures regularly if grazing</li> </ul>	<p>-Wet and dirty environment and living quarters can contribute to causing this</p>
Scours (Severe diarrhea)	<ul style="list-style-type: none"> <li>-Dehydration</li> <li>-Diarrhea that is white to yellow</li> <li>-Diarrhea on hams and hocks</li> <li>-Lethargic</li> <li>-Foul smelling feces</li> </ul>	<p>-Depending on what caused the pig to scour antibiotics and/or antidiarrheal are advisable at the discretion of a veterinarian</p>	<ul style="list-style-type: none"> <li>-Good pen and barn hygiene. Keeping pen floors clean is vital</li> <li>-Disinfect all tools shared between infected hogs and uninfected hogs</li> </ul>	<ul style="list-style-type: none"> <li>-This is more often seen in larger litters</li> <li>-Temperature and stress can play a role in a pig scouring</li> </ul>

**\*DISCLAIMER:** Authors are not veterinarians and only provide this information as a personal reference. They are not responsible for outcomes. Consult a veterinarian for veterinary advice and treatment.\*

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## **Breeds**

In the hog world, there are hundreds of recognized breeds, all with a wide variety of purposes and uses. Their capabilities vary equally as widely. Below are six breeds of hog cattle selected to show the reader a variety of pigs that have different uses or combination of uses. Listed after are some characteristics to the breed that make it unique, characteristics, or are strong suits of that breed.

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## Hampshire



Image courtesy of Prater Show Pigs  
<http://pratershowpigs.com/gallery-2018/>

- The Hampshire breed, also referred to as Hamps, are the leaders of lean muscle content.
- They have a low amount of back fat with about .85 inches of back fat.
- It's speculated that this breed is the oldest of American hog breeds and comes in fourth in the nation for the most recorded breed.
- In addition to being fairly lean, they are relatively thin-skinned for a pig.

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## Duroc



Image courtesy of Triple C Showpigs  
<https://www.facebook.com/TripleCShowpigs/>

- Durocs can be colored from a light golden to an almost mahogany color with all colors in between being acceptable.
- This breed is the second most recorded breed of hog in America.
- They have a 3.07% intramuscular fat, putting them above Berkshires, Chester Whites, Hampshires, and Yorkshires in intramuscular fat percent.
- The average daily rate of gain for a Duroc is an impressive 1.79 pounds.

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## Berkshire



Image courtesy of Prater Show Pigs  
<http://pratershowpigs.com/gallery->

- The American Berkshire Association is the oldest hog registry in the world, they are also the first.
- The first hog registered was a boar that was bred by Queen Victoria of England. The boar was named Ace of Spades.
- This breed is one of the oldest that can be discerned. This breed is traceable to over 300 years ago when they were in England.
- This breed tends to be heavier handed in fat marbling.

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## Chester White



Image courtesy of Schminke's Genetics  
<http://www.schminkelivestock.com/pigs-winners.html>  
Image is cropped; Contrast, and brightness are altered

- This breed was developed in America, specifically, Chester County, Pennsylvania.
- Chester Whites are preferred by meat packers due to the quality of muscle on the breed.
- They have a higher pH level in their meat coming in at 5.70.
- While a rather hearty kind of pig, they are prone to sunburns due to their whiteness of skin and complete lack of pigment. This means they require more shelter or ways to get out of the sun.

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## Yorkshire



Image courtesy of Prater Show pigs [http://pratershowpigs.com/gallery-2\\_1.html](http://pratershowpigs.com/gallery-2_1.html)  
Image is cropped

- The Yorkshire is the most common breed in American.
- This breed has an extremely low percentage of intramuscular fat, coming in at 1.70%.
- They have one of the higher dressing percent's of hogs, coming in at 73.6%.
- They have a remarkably low pH level in their meat, coming in at 5.47, making their meat acidic.

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## Hereford



Image courtesy of Quizz Herefords <https://www.facebook.com/quizzherefords/>  
Image is cropped

- The Hereford hog breed is classified as “Recovering” by the Livestock Conservancy. This means they have graduated from the “Watch” list having exceeded more than 2,500 yearly registrations and more than 10,000 estimated globally.
- Mature sows weigh about 594 lbs., making them a more medium breed.
  - By the time a Hereford reaches five to six months of age they will weigh between 198 lbs. to 242 lbs.
- The breed got their name from their striking similarity to Hereford cattle.
- Breeders of Hereford cattle were so taken by Hereford hogs that the Polled Hereford Cattle Registry Association sponsored the National Hereford Hog Record during their formation.



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## **Grooming and Clipping**

It is important that your pig be presented clean and well groomed to the judge. Having a soft bristled brush in your back pocket can help with this so if they get shavings on them in the show ring you can quickly brush them off. Before you go into the show ring, however, you should clip the hair bristles on your pig(s). This is something that cannot be taught through a diagram and should be taught in person. Please contact your extension agent, superintendent, leader, or a local breeder to teach or direct you to someone who can teach you the proper method of trimming.

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## Fast Facts

- While humans have about 9,000 taste buds, pigs have 15,000
- America comes in second for amount of hogs in the country while China comes in first.
- Pork is the most consumed animal protein in the world, accounting for 40% of animal protein consumed a year.
- Gelatin, that an ingredient in marshmallows, can come from the bones of hogs.
- Diesel engines can reach 80 decibels, jet engines can reach 120 decibels, and pigs can reach a whopping 130 decibels when screaming.
- Pigs roll in the mud because they do not have sweat glands to help cool them like we do.
- Supposedly, Alexander the Great used pigs to counter the war elephants he was going up against because the elephants were scared of the pig squeals.
- A pig from Poland named Big Bill holds the world record for largest pig, weighing in at a staggering 2,552 pounds and reaching a length of nine feet and height of five feet.
- Pigs have poor eyesight.
- Insulin can come from pigs used for diabetes management and treatment.

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## Getting Ready For Clackamas County Fair

The Clackamas County Fair is in August. Information about the show, such as weigh-ins, weight gains, breeds, and market classes can all be found in the Clackamas County Fair book. All market hogs must weigh a minimum amount of weight. Below, is important information pertaining to fair:

### General Information

- Members are expected to set-up, paint, and decorate their pen areas.
- Member **MUST** participate in showmanship.
- Good sportsmanship and herdsmanship are strongly emphasized.
- Members are expected to care for animals themselves, including shearing, feeding, and caring for the animal, both at home and at fair.
  - Club members or members from another club enrolled in 4-H may help with these tasks but the sole responsibility falls on the member.
- Fall gilts are permissible as a showmanship animal only if there is no other hog that has been entered under the exhibitors name as a project animal at fair.
- Tank tops and sleeveless shirts are not permitted for showmanship.
- All hogs **MUST** have ear notches.

### Market Hogs

- Animals will be checked for lice and lice eggs on the fairgrounds by the superintendent or someone he or she has designated.
- Pig must be dirt-free and clean upon entry into fairgrounds for health inspection.
- Hogs that were bought out of state must have premise ID tags and/or health papers that will be presented to a veterinarian or the superintendent.
- Market animals **MAY NOT** be shown in the 4-H breeding classes.
- Hog must weigh between 230 lbs. and 300 lbs. to show in a market class and sell at auction.
- Hogs must gain a minimum of 140 lbs. between first and second weigh-ins.

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- Hogs not falling into the weight requirement will be placed in the non-auction market hog class and will not sell.
  - Only blue-ribbon animals in the market classes may sell.

### **Breeding Sows and Gilts**

- Animals moving into the fairgrounds will be checked for lice and lice eggs, by the Superintendent, Assistant Superintendent and/or Fair Veterinarian.
- Pig must be dirt-free and clean upon entry into fairgrounds for health inspection.
- Hogs that were purchased out of state must have premise ID tags and/or health papers that will be presented to a veterinarian or the superintendent.
- Sows that are bred **will not** be permitted at the fair, nor will any litters be allowed to be brought/shown.
- Papers for purebred animals **must** accompany the animal to the fair and **will** be checked by the superintendent, 4-H agent and judge. Pending papers **will not** be accepted

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## Resources

1. [https://www.facebook.com/4d.livestock10/?ref=page\\_internal](https://www.facebook.com/4d.livestock10/?ref=page_internal)
2. [https://www.crestcapital.com/tax/pig\\_farming\\_glossary](https://www.crestcapital.com/tax/pig_farming_glossary)
3. <http://littlepigfarm.com/swine-terminology/>
4. <http://chaparral4h.weebly.com/swine-terms.html>
5. [https://commons.wikimedia.org/wiki/File:American\\_Pork\\_Cuts.svg](https://commons.wikimedia.org/wiki/File:American_Pork_Cuts.svg)
6. [https://www.pubs.ext.vt.edu/content/dam/pubs\\_ext\\_vt\\_edu/414/414-001/414-001\\_pdf.pdf](https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/414/414-001/414-001_pdf.pdf)
7. <https://meatscience.org/TheMeatWeEat/topics/fresh-meat/grades-of-meat>
8. <https://thepigsite.com/disease-guide/porcine-stress-syndrome-pss>
9. <https://thepigsite.com/disease-guide/erysipelas-diamond-lesion>
10. <https://thepigsite.com/disease-guide/porcine-parvovirus-ppv>
11. <https://thepigsite.com/disease-guide/diarrhoea-scours>
12. <https://www.roysfarm.com/hampshire-pig/>
13. <https://www.facebook.com/TripleCShowpigs/>
14. <http://www.schminkelivestock.com/pigs-winners.html>
15. <http://pratershowpigs.com/home.html>
16. <https://www.facebook.com/quizzherefords/>
17. <https://iamcountryside.com/pigs/hampshire-pig-meat-breeding/>
18. [https://nationalswine.com/resources/docs/education/ideal\\_flyers/duroc\\_ideal\\_flyer.pdf](https://nationalswine.com/resources/docs/education/ideal_flyers/duroc_ideal_flyer.pdf)
19. <https://animals.mom.me/traditional-pig-breeds-8187.html>
20. [https://www.canr.msu.edu/resources/swine\\_breeding\\_systems\\_for\\_alternative\\_pork\\_chairns\\_breed\\_options\\_use](https://www.canr.msu.edu/resources/swine_breeding_systems_for_alternative_pork_chairns_breed_options_use)
21. <https://americanberkshire.com/history/>
22. <https://center-of-the-plate.com/2012/05/02/all-about-the-berkshire-pig/>
23. <http://www.breedsl.com/chester-white-pig.htm>
24. <https://livestockconservancy.org/index.php/heritage/internal/conservation-priority-list#Pigs>
25. <https://livestockconservancy.org/index.php/heritage/internal/parameters-cpl>
26. <https://www.roysfarm.com/hereford-pig/#targetText=The%20Hereford%20pigs%20are%20medium,a%20medium%20sized%20dropping%20ears>
27. <https://www.thatsfarming.com/funnies/fun-facts-pigs>
28. <https://realpigfarming.com/15-trivia-winning-facts-about-pigs-6ab00f2d1049>
29. <https://www.nationalhogfarmer.com/node/12126/gallery?slide=2>

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4-H Reference Books:

1. Swine Resource Handbook for Market and Breeding Projects by The Ohio State University Extension

Note: These books are available to check-out or purchase from the Clackamas County 4-H Extension Office in Oregon City.