

# **JUDGING MARKET HOGS**

## **Steps to Judging Swine**

When judging swine, you should first view the animal from the ground and work your way up and then from the rear and work your way forward. The animals in the class should be ranked based on the traits of importance they possess, and contestants should always evaluate the most important traits first. Contestants should also eliminate any easy placings in the class, and place the remainder of the class based on the volume of the important traits.

## **Ranking of Traits**

### **Ranking of Traits for Market Hogs**

The ranking of traits in the order of their importance for market hog judging is as follows:

1. Degree of muscling
2. Growth
3. Capacity or volume
4. Degree of leanness
5. Structure and soundness

### **Ranking of Traits for Maternal Line Breeding Gilts**

The ranking of traits in the order of their importance for market hog judging is as follows:

1. Structure and soundness
2. Growth
3. Underline quality
4. Capacity or volume
5. Degree of muscling
6. Degree of leanness

### **Ranking of Traits for Terminal Line Breeding Gilts**

The ranking of traits in the order of their importance for market hog judging is as follows:

1. Structure and soundness
2. Degree of muscling
3. Growth
4. Capacity or volume
5. Degree of leanness
6. Underline quality

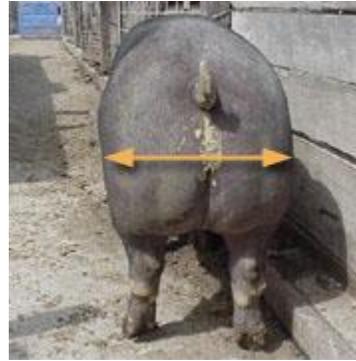
## **Evaluating Degree of Muscling**

When judging swine, the best indicator of degree of muscling is thickness through the center of the hams. The second look should be the width at the ground between the feet when the animal is standing and walking. Because heavy muscled pigs will also be wide based, always compare width at the ground to width down the pig's top to ensure they are equal. Anytime top width exceeds base width it should register as a red flag that the animal is getting fat. The third look should be an evaluation of shape over the top (or loin). It is important to make sure the animal is lean before evaluating the top so that you aren't confused by width due to fat cover. A muscular top will have a butterfly shape with the loins on both sides of the backbone extending out higher than the center.

### Center Width of Hams

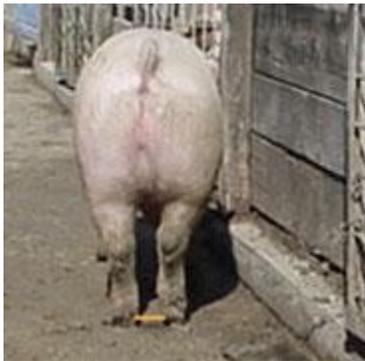


Too Narrow



Good Width

Center width of the hams should be wide and expressively muscled. The white pig on the left is too narrow through the stifle area of the ham. Notice that the widest part of this pig is over its top. The black pig on the right shows good width and muscle expression through the center part of its ham.



Too Narrow



Good Width

Not only is the white barrow on the left narrow through the center part of the ham, but is also very narrow between its rear feet as it stands and walks. The black barrow is very wide based, providing additional confirmation that it is heavy muscled.

### Shape of Top



The white on the left is very smooth over its top, with no shape or expression of muscle being evident. The thickness down its top is flat due to the high degree of fat cover that it possesses. In contrast, the black hog on

the right has great shape to its top. The large pork chops on both sides of the backbone give this pig's top the extreme butterfly shape that is desired.

### Evaluating Growth

Because hogs are still sold by the pound, it is important that pigs have good growth rate and reach market weight at an early age. Unless you are instructed otherwise, assume that all animals in a judging class are the same age. This means that you can evaluate growth simply based on the weight of the animals in the class. The heaviest pig is the fastest growing pig, and the lightest pig is the slowest growing pig.

### Evaluating Capacity or Volume

Hogs with good capacity or volume will be able to consume the feed necessary for growth and be able to perform well in terms of reproduction. Capacity or volume is determined by body width, depth, and length, as well as how well these three factors fit together (balance).

#### Width

Width is best evaluated starting at the ground and working your way up. Pigs with good width will walk and stand wide both in the front and rear, and will have good width through the chest. Also, top width (the top 1/3) and base width (the lower 1/3) should be equal, with the middle 1/3 of the animal being the widest.



Too Narrow



Good Width



This picture illustrates a pig with good chest width, which equates to good capacity or volume.

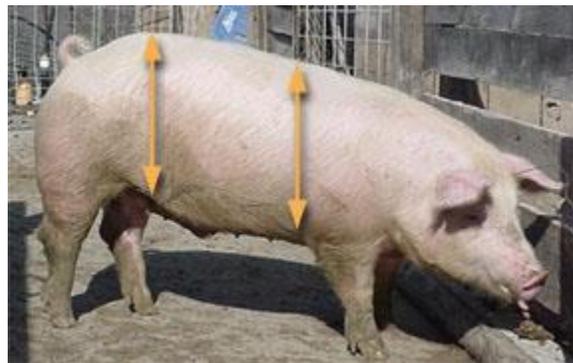
#### Depth of Body

Depth of body is also important so that the pig will adequate capacity for feeding and reproduction. Depth of body should be uniform from the fore flank to the rear flank. An excessively deep appearing hog will usually indicate a fat problem. A lack of depth, or a shallow body, takes away from the overall balance of the pig and will hurt the pig's placing in the class due to a lack of a production look.

**Source:** University of Kentucky, College of Agriculture, Food and Science, [www2.ca.uky.edu/agripedia/agmania/Livestock/Hogs.asp](http://www2.ca.uky.edu/agripedia/agmania/Livestock/Hogs.asp)



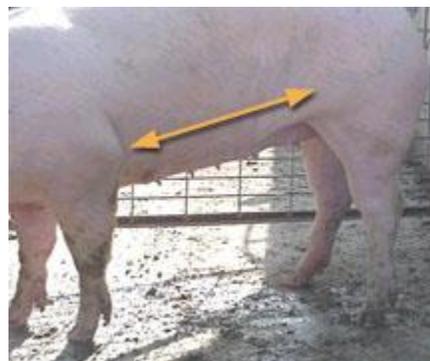
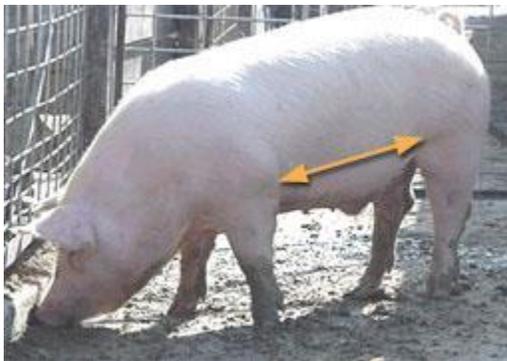
The pig on the left lacks adequate depth of body, being especially shallow in its rear flank. The body depth of the pig on the right is unbalanced due to a rear flank that is too deep.



This picture shows a pig that is uniform in body depth. However, this pig is beginning to exhibit excessive body depth, and is likely becoming too fat.

### **Length of Body**

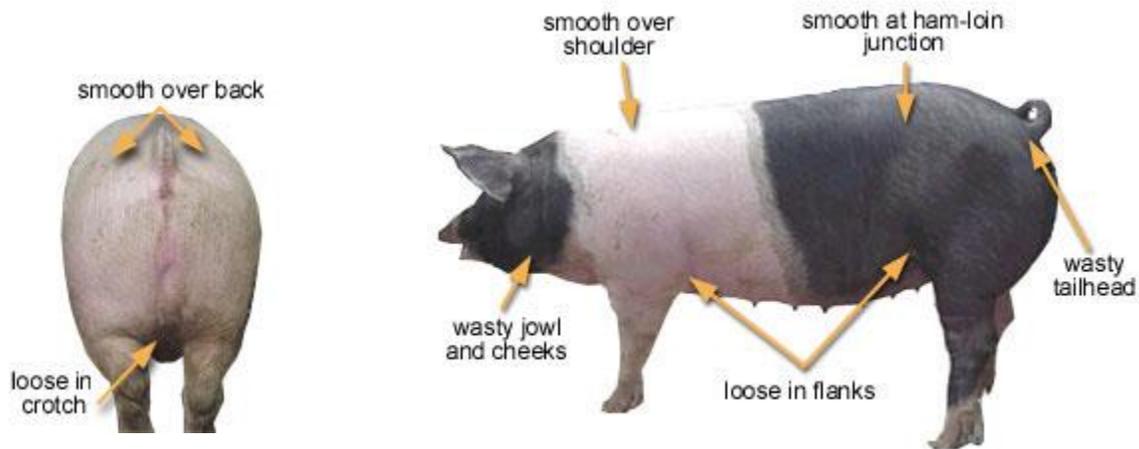
Length has increased in importance as the swine industry has moved to a heavier market weight. Length is measured visually from flank to flank. A hog's typical growth curve is a combination of first growing frame, then depositing muscle, and then depositing fat as the animal matures. A hog that is longer bodied and bigger framed will mature later, delaying fat being deposited until 260 pounds instead of 220 pounds. Always be careful of a hog appearing abnormally long taking away from width and depth, thus, upsetting the animal's balance. The pig on the left is too short bodied, while the pig on the right has good body length.



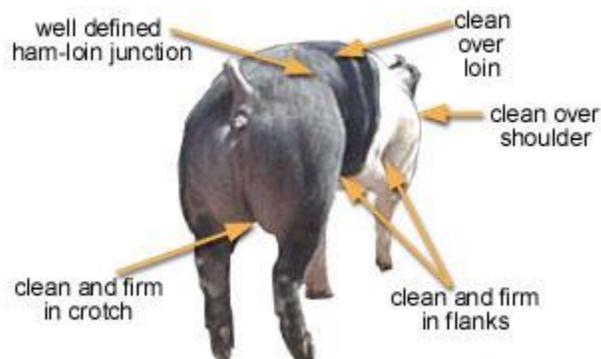
## Degree of Leanness

An animal's degree of leanness is influenced by its degree of muscling, its frame size, its sex, and its age and weight. Leanness should only be viewed after muscle has been evaluated. The assumption that heavy muscled hogs will be lean and light muscled hogs will be fat is normally true except in situations of extreme weight or extreme lack of frame size. Because gilts mature at a later age (or at a heavier weight) than barrows, they will be leaner than barrows if compared at the same age or weight. It is also important to remember that fat will be deposited from the front of the animal to the rear. Fat will first be deposited in the checks and jowl, then behind and over the shoulders, then in the flanks, and finally around the tailhead.

Leanness is best evaluated by looking for indentations over and behind the shoulders and at the ham-loin junction, and by looking for the presence of a dimple just in front of the tailhead. When an animal is lean it will have a neat, trim, tight jowl and underline, and you will be able to see the shoulder blade work just under the skin when it walks. A couple of key points to remember is that muscle will be hard and firm, while fat will be soft and loose.



The white pig on the left is very smooth over its top and loose and wasty in its crotch indicating it is too fat. You should notice that this pig is wider over its top than it is at its base. This should also raise a red flag that this pig is too fat. The belted pig on the right also gives several indications that it is too fat. Note the smoothness over the shoulder and the lack of definition in the ham-loin junction. This pig is also wasty and loose in its jowl and cheeks, loose in its flanks, and lacks a dimple in the front of its tailhead.



This picture illustrates a pig that is extremely lean. It is clean over its shoulder and loin, clean and firm in its flanks, has a well-defined ham-loin junction, and is clean and firm in its crotch. This pig is a lean, mean, heavily muscled machine.

## Evaluating Structure and Soundness

Structure and soundness is another trait that is best viewed beginning at the ground and working your way upward. When evaluating structure and soundness, attention should be given to the feet and pasterns, hocks, knees, rump, and the shoulders.

### Feet and Pasterns



The feet should be big with even toes that are squarely set forward. Pasterns should be set at a 45-degree angle to the ground allowing for maximum cushion and flexibility. The picture on the left shows the dewclaws on the rear feet touching the ground, providing evidence that the pasterns have too much set. The picture on the right shows feet that are turned outward (not square with the body). This structure defect will restrict flexibility and place additional stress on the pasterns, knees, and hips.



This picture shows a pig with good feet that are squarely set and pasterns that have the correct angle.

### Hocks



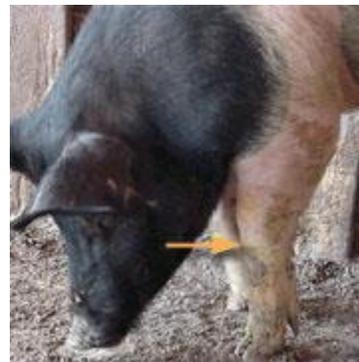
Hocks should be constructed of flat, clean bone with approximately 20 degrees of set so that it provides power with flex when the animal walks and gets up and down. The pig in the left picture is too straight in its hocks with

a round bone design, a defect that often leads to swollen or "puffy" hocks, as shown in the picture on the right. Hocks with too much set (not shown) are a worst defect for surviving the stress of concrete and confinement.



This picture shows a pig with the correct set and curvature to the hocks.

### Knees



Knees should be straight or slightly set backward to provide cushion and flex to the front end. The picture on the left illustrates a pig with too much set to the knee joint. The pig shown in the right has inadequate length between the foot and knee and is severely bucked-over in its knee.

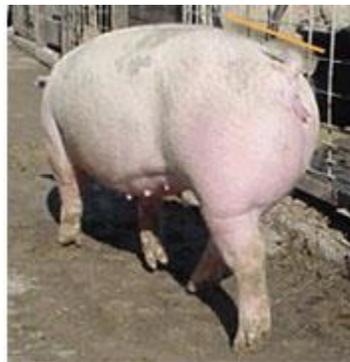


This pig has a good set to its knees. Note the slight backward set or curvature to the knees.

## Rump



The ideal rump structure should be average or above in length and level to slightly sloping from front to back. This type of rump design allows for maximum power and strength, additional flexibility, and good length of stride. The rump on the left is too steep, and the rump on the right is extremely too steep. Rumps that are too short and steep restrict movement and cause extra stress the other joints.



This picture shows a pig that has a good rump design, allowing for a long fluid stride off the rear end.

## Shoulders



Shoulders should have adequate set allowing for the front leg to extend at a correct angle that gives flex in the shoulder, and cushion in the knee and ankle. Shoulder set is directly related to length of stride. The pig shown in the left picture is too straight in its shoulder, giving the appearance of the shoulder being forced forward into the neck. This results in extra pressure on the front legs so that they are extended backwards, and causes the pig to be short strided off its front end. The pig in the right picture is extremely straight in its shoulder. This type of shoulder structure severely limits flexibility through the front end and puts tremendous pressure on the knee and pastern joints.



Shown in this picture is an example of a pig that has the correct slope and set to the shoulder.

### Evaluating Underline Quality



Gilts need to have good underlines to raise large litters of pigs, thus, teat accessibility, teat numbers, teat size, and teat placement is critical for proper function. Both rows of teats should point directly downward so they are completely accessible when the sow lies on her side. A good underline will have 6 to 7 teats on each side, with the teats spaced 2.5 to 3.0 inches apart. This allows for maximum mammary tissue development to feed the piglets and space for the piglets to nurse. The ideal teat size should be about the size of a pencil eraser so it will easily fit into the piglet's mouth. Some problems that can occur regarding teat structure include pin, blind, or inverted nipples. A pin nipple is a small (half the normal size or less) nipple between two normal teats that does not give milk. A blind nipple is one that looks like it has a BB at skin level in the end of the teat, giving it a flat look. An inverted nipple is one in which the BB is pushed up into the body cavity, leaving the look of a hole at the end of the nipple.