

desirable turned over his loin edge than 4. 1 was trimmer throughout and will hang a longer, trimmer carcass than 4.

I grant that 4 was thicker through his lower ham than 1. However, I placed 4 last as he was over-finished and wasty through the middle and jowl, and is the fattest, wastiest barrow in the class.

These are my reasons for placing this class of Duroc market barrows 2 3 1 4.

## Judging Breeding Swine

Breeding swine should have the same general body conformation as market hogs. The same terminology can also be used. The main difference between market and breeding swine is that in breeding, you place more emphasis on structural soundness.

Selecting productive, performance oriented breeding stock is the first step in breeding quality swine. Productive breeding stock is sound in conformation, fast growing, muscular, lean and reproductively efficient. If you select swine with these characteristics, your chances of being a successful operator are increased.

In today's confinement rearing of hogs, structural soundness is necessary. Because of the demand for sound, fast growing, durable and efficient breeding stock, breeding stock suppliers must produce livestock which will adapt to the breeding pens, farrowing crates and finishing floors.

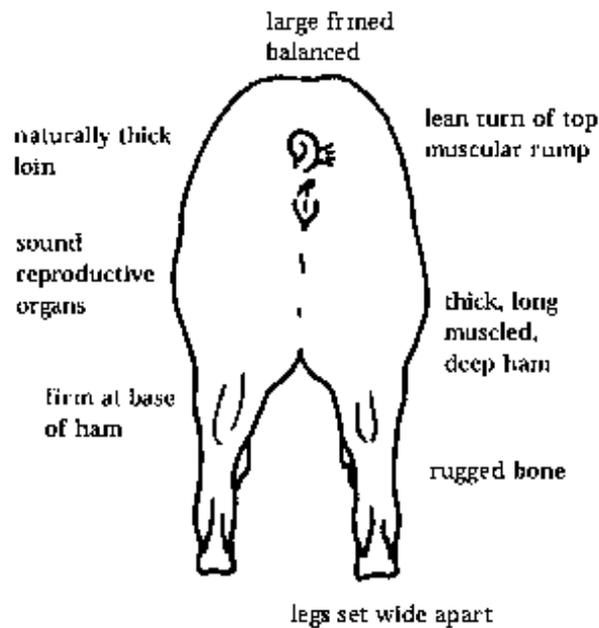
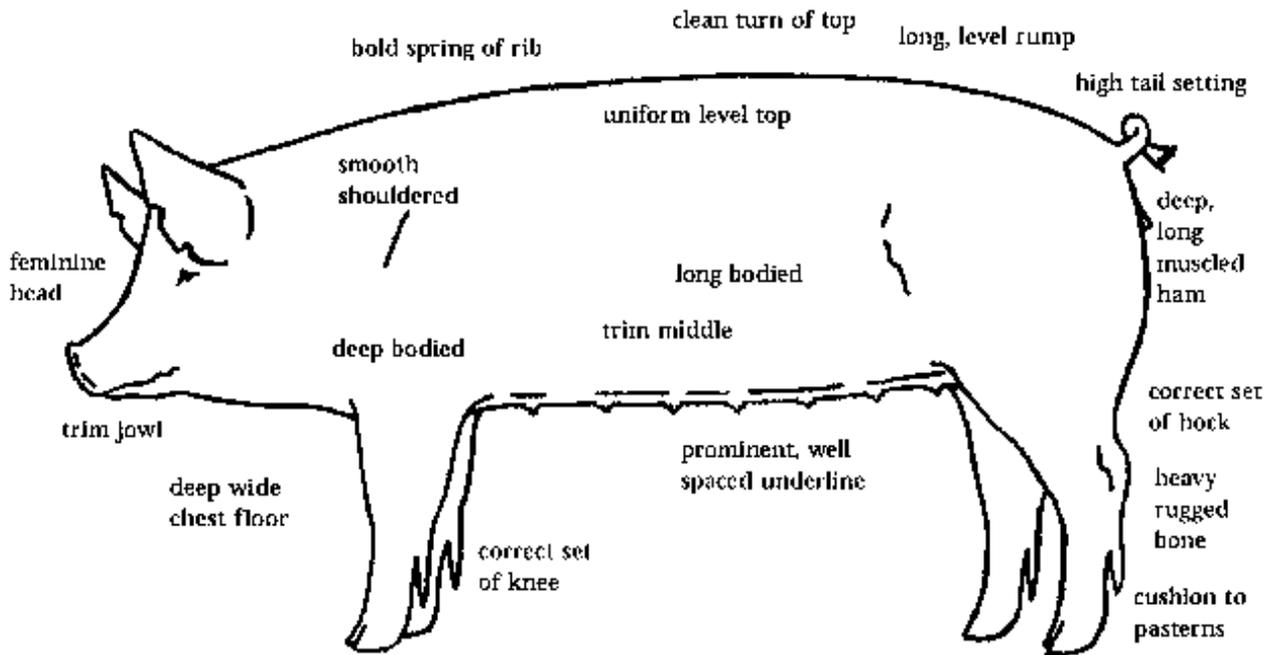
### Structural Soundness

The characteristics of structurally sound breeding stock are:

- sloping shoulder, forearm and pastern
- level rump
- high tail setting
- proper set to the hock joint
- spring or flexion in the hock
- level top
- moderate length of neck
- large, even sized toes, slightly apart
- legs placed squarely under the body.

These characteristics will allow the animal to move freely and soundly on pasture or in confinement. The sow must be able to get up and down in the farrowing crates. Boars must be able to service the sows comfortably.

# Ideal Gilt



## Feet and Legs

In breeding swine, structurally correct feet and legs are very important.

### Ideal Fore Legs

- Sloping shoulder, forearm and pastern serve as front shock absorbers
- Large, even-sized toes, slightly apart
- Straight with strong pasterns

### Ideal Hind Legs

- Spring or flexion in the hock joint provides a cushioning effect
- Move soundly and freely
- Large, even-sized toes, slightly apart
- Proper set to the hocks
- Legs squarely under the body
- Strong pasterns with good bones

The front legs should angle out of the shoulder into a long, sloping pastern. If the shoulder is too straight, there will be more pressure at the shoulder and knee joints. Because the knee offers little resistance to pressure, the front legs will buckle over.

The front legs should reach forward with a long, loose stride. Short, choppy front leg movement comes with straight shoulders, steep pasterns and strongly arched tops.

In normal rear leg placement, the hocks are slightly closer together, and the toes are turned slightly to the outside. With this placement, the joints will absorb the shock equally.

The rear legs should have long, loose strides with good cushion in both the hocks and pasterns.

Large bone size is desirable and important for durability, as long as the animal is structurally correct. The hog must move freely, with the body weight distributed equally on all eight toes.

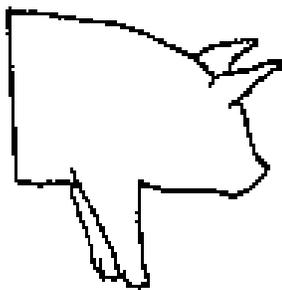
## Growth Rate

Fast growing breeding stock are a must. You cannot measure growth by visual appraisal alone. Performance must be documented to give you accurate information on the actual performance of the animal. If growth records are available, inspect them and use them in your evaluation class.

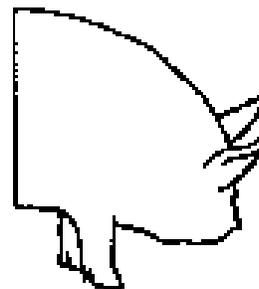
## Head, Neck, Jowl and Shoulders

### The ideal

- Jowl is firm and trim with no sign of flabbiness
- Neck is of medium length and blends smoothly into shoulder
- Shoulders free of wrinkles and muscular
- Head is trim, wide between the eyes, clean cut
- Snout is of medium length and straight
- Broad through the chest



Ideal



Poor

## Ham

The ham is one of the most expensive retail cuts on a hog. Therefore, it is critical that the ham be desirable.

### The ideal

- Outside of the ham bulges
- Good width through center of the ham
- Muscling extends far down the hock



Good



Poor

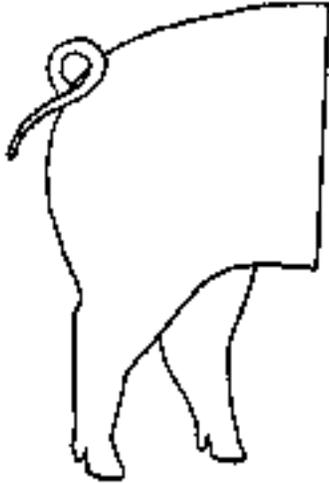


Poor

## Rump

### The ideal

- Long rump, with a gradual slope towards the tail setting
- Root of tail rests above the bulge of the ham
- Hams well muscled, long and thick



Ideal Rump



Poor Rump

## Arch

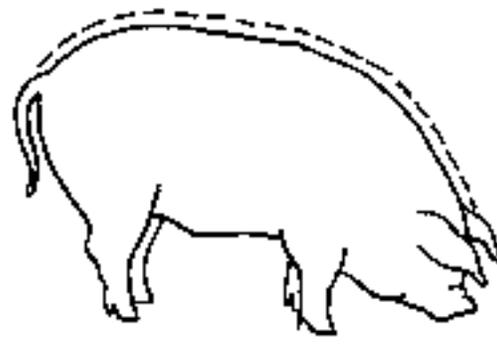
With correct feet, legs and rump structure, the arch should naturally be correct. However, this does not always happen.

### The ideal

- Strong with a gradual arch
- Hog naturally holds this arch
- Sides are long, flat and trim showing muscling at front and rear flanks

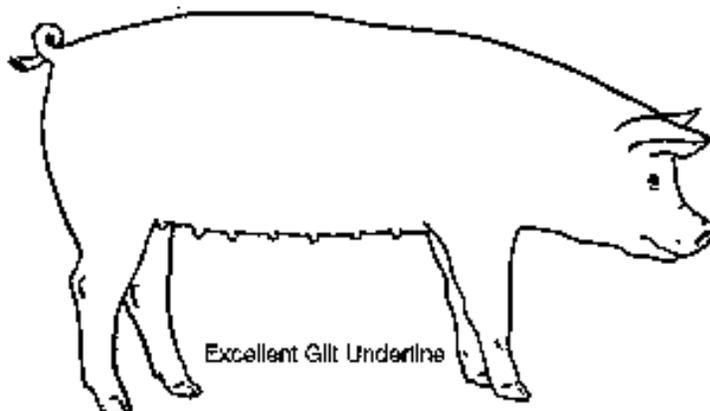


Ideal



Poor Arch

## Underline



### Desirable

- Starts just behind the front legs with the first pair of nipples
- Nipples long, narrow and well-defined
- Nipples even in size and spacing
- Both gilts and boars should have at least six well-spaced prominent nipples
- At least three pairs of nipples should be ahead of the navel
- Correct underlines are important for raising large, healthy litters and increasing profits



### Poor Underline

A poor underline may have these characteristics:

- teats begin too far back from the front
- teats are inverted or not prominent
- teats are blind and/or not functional
- poor spacing between the teats.

## Capacity

### Desirable

- Body cavity should be deep and square
- Ribs well sprung
- Wide throughout the chest and cavity
- Depth should continue through the length of the animal's body in a uniform manner from forerib to rear flank
- Important for maintaining health, intake of feed and having adequate reproductive volume

## Muscle

### Desirable

- Long flat muscles preferred
- Thickness is important too
- Thick, bunchy muscles produce lean and heavily muscled carcasses, but their productivity (litter size, farrowing ease, structural soundness, mating ability) and meat quality was not so desirable
- Ideal is greatest amount of muscle mass (length, depth, thickness) possible without interfering with overall productivity

## Trimness

### Desirable

- Clean over the loin edge and shoulder blades
- Free from excessive waste in the cushion of the ham



Trim, lean topped boar.  
Evidence of muscle and skeletal  
expression.



Fat, round, wasty boar.  
Smooth, lacks expression.

## Character

### Desirable

- Breed character refers to the presence of desired features of the breed
- Head, ear, carriage and colour markings are some features to check
- Each breed has specific desirable characteristics
- Check the Canadian Centre for Swine Improvements for more information

## Sex Character

### Desirable

- Evidence of masculinity and femininity
- Check head, mammary development and external sex organs
- Behaviour also plays a factor

## Breeding Swine Scorecard

Perfect Score

General Appearance.....		20
Weight	appropriate for age and breed 5 to 6 months - 100 kg 9 months - 145 kg mature sows - 160 - 250 kg mature boars - 180 - 270 kg	
Condition	moderate finish in all classes middle trim and free from flabbiness	
Form	well balanced, long, neat and trim sides deep and trim slightly arched topline	
Head and Neck.....		5
Head	face medium length, clean cut eyes well apart and alert ears medium in size, fringed with fine hair	
Neck	neck blends smoothly into shoulder jowl smooth, neat and trim, no sign of excess flesh	
Forequarters .....		10
Shoulders	smooth, showing muscle	
Chest	broad	
Fore legs	straight, good bone, even toes, strong pasterns	
Body .....		25
Loin	long and muscular	
Back	long and muscular strong, slightly arched topline	
Sides	long, flat and trim showing muscling at front and rear flank	
Underline	sows should have a minimum of 6 pairs of sound, well-developed, evenly spaced teats at least three pairs of teats should be ahead of the naval boar should have a clean, tight sheath	

Hindquarters .....	17
Rump	long and muscular
Hams	well muscled, long and thick
Hind Legs	straight; strong pasterns with good bone
Feet and Legs .....	13
	stands on even toes and soles
	legs squarely under the body
Trimness.....	10
	minimum amount of smooth finish, uniformly distributed over body
	excess finish is undesirable
	blemishes are undesirable, i.e. tail biting, bruises, teeth marks, cuts
Total .....	100

## Terminology For Breeding Swine

The terminology to use for breeding swine is the same as the terminology for market hogs. Refer to the information in the section on market hogs (page 10).

Remember that structural correctness is more important in breeding swine. Discuss your most important points first, then move to the less important ones. Discuss general information, then refer to specific traits.

## Sample Reasons

### Duroc Breeding Gilts

I placed this class of Duroc breeding gilts 1 2 4 3.

Starting this class with the two largest volume gilts in the class, I placed 1 over 2 because 1 was larger framed, longer sided, longer rumped and cleaner and longer in the neck than 2. 1 was deeper ribbed and wider sprung than 2, and stood on more cushion at the knees and pasterns.

I grant that 2 was a leveler rumped gilt than 1.

In my middle pair, I placed 2 over 4 because 2 had more balance, being taller in front and more level over the rump than 4. 2 showed a more desirable slope of the shoulder and was freer moving on all four legs than 4.

I grant that 4 was longer and cleaner in the neck, and had a more prominent, more desirable spaced underline.

In my bottom pair, I placed 4 over 3 because 4 was longer sided and more upstanding than 3. 4 carries less fat throughout, and showed more size and scale than 3.

In an easy placing, I placed 3 at the bottom of the class as 3 was short sided, steep rumped and buck kneed. 3 lacked the structural correctness to place any higher in this class today.

For these reasons, I placed this class of Duroc breeding gilts 1 2 4 3.