

Conformation & Evaluation

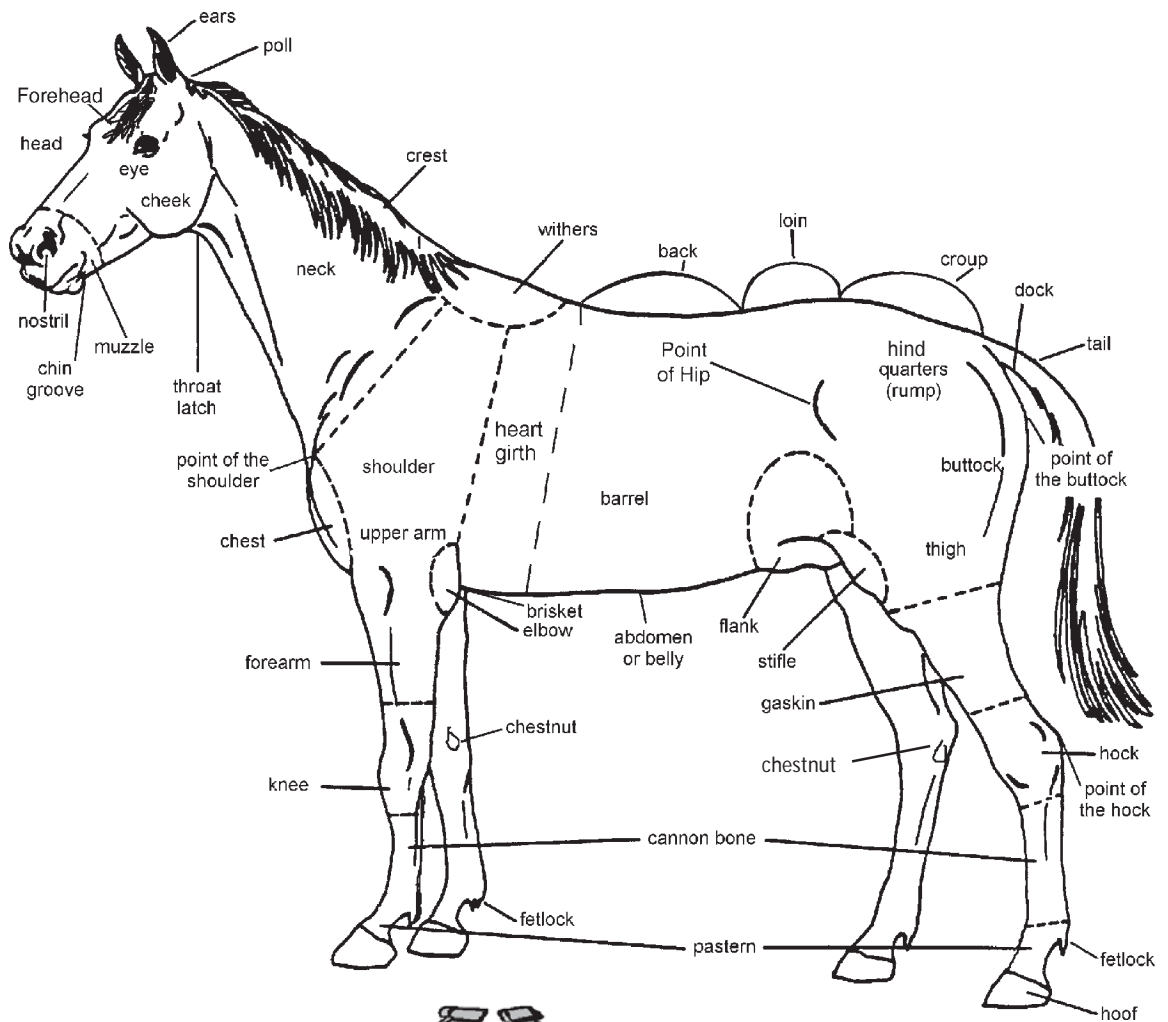
How is this horse put together?

Conformation - Conformation refers to how the horse is built, or the structural makeup of the horse.


Conformation affects how the horse will perform. For each particular purpose or function of horses, there is a particular form that will enhance that function. Consider the following points when evaluating the conformation and form of a horse for a certain function.





- 🐾 The horse is an athlete. We must evaluate the structures which contribute to the horse's ability to perform and remain sound.
- 🐾 Conformation is inheritable - whether it is good or bad.




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Head  Conformation and breed type should be evaluated against a standard of excellence. Most breed associations establish a standard of excellence for their own breed.

 Look for a head that is in proportion with the rest of the horse and has a pleasing profile.

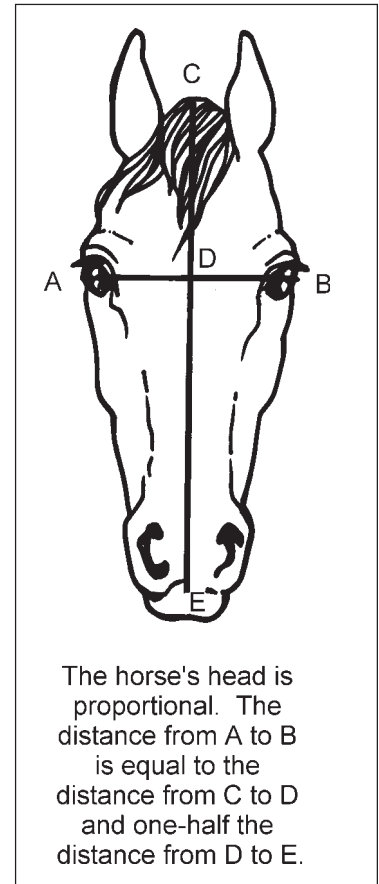
 The eyes should be large, bright, wide set and placed well to the outside of the head.

 Muzzle should be well tapered, not coarse. Nostrils should be large and able to flare to allow increased airflow in and out of the lungs. Mouth of the horse should be such that the lips and front teeth meet evenly. A horse with an overshot upper jaw (front top teeth extend out past the lowers) is said to have a parrot mouth. A horse with an overshot lower jaw (lower jaw is longer than the upper) is said to have a monkey mouth. Both of these traits are undesirable because they are inheritable and they make grazing difficult.


Parrot Mouth
(Overshot top jaw)



Monkey Mouth
(Undershot top jaw)



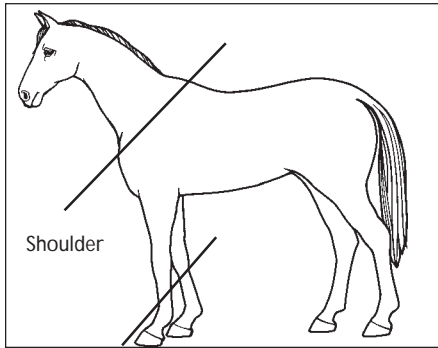
 Ears should be alert and proportionate to the rest of the head.

 Check that there are no unsightly bumps or cavities and check for signs of blindness and deafness when buying a horse.


Chest The chest should be relatively wide, deep and well-muscled. A chest that is too wide produces a laboured, waddling, unathletic stride. A chest that is too narrow may cause the horse to experience interference when it travels.


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Shoulder



The horse's front leg is attached to the body only by muscle and tendons. A longer shoulder increases the area of attachment and length of muscles, providing greater shoulder rotation, forearm extension and length of stride.

 The slope of the shoulder is measured along the ridge of the scapula (shoulder blade). The shoulders of the horse should be sloped at the same angle as the pasterns.

 Muscling in the shoulder should be long and well-developed for strength and absorption of concussion. Too much muscle increases the weight on the forehand and decreases the freedom of movement.



Forearm The size of the forearm affects its function. The forearm should be relatively long in relation to the length of the cannon bone, and well muscled. A short forearm decreases the length of the stride. Long muscling in the forearm provides greater contraction and lift of the leg. Volume of muscling provides power and support for the lower leg.

Gaskin A longer gaskin allows greater extension of the hindleg. Long muscling provides greater contraction and lift of the leg. A greater volume of muscling provides power for impulsion to drive the horse forward.

Knee The size of the knee affects its function. A relatively large flat knee increases the area of attachment for tendons, ligaments and muscles from the forearm. A large and flat knee also increases the area of support to reduce stress on the knee.

Hock A strong hock that is large enough to provide room for adequate muscle and tendon attachment, while keeping in proportion to the size of the horse is desirable. The front of the hock should be reasonably smooth with no meatiness or swelling. The back of the hock should be square and well defined.

Cannon Bone The length of the cannon bone affects the function of the horse. A short cannon bone is stronger than a long cannon bone. The bone should be relatively large. The legs are a very important part to watch for major scars, swelling, and any injuries that may cause lameness. When viewed from the front or back the legs should be straight, with joints lined up. A horse's legs should stand straight under the four corners of its body without angling in or out.

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Pasterns The length and angle of the pasterns are important. These short sections of leg just above the hoof should be sloped. When the horse is standing square, the front pasterns should be at an angle of about 45 degrees to 50 degrees and the back pasterns should be at an angle of about 50 degrees to 55 degrees. Moderately long, sloping pasterns help to absorb concussion. If the horse is built so that its pastern is too upright it will be rough to ride. If it is too sloped or too steep, the horse may be susceptible to injury of the tendons, ligaments and the fetlock joint.



Ideal Pastern Angle



Pastern Angle Too Sloped



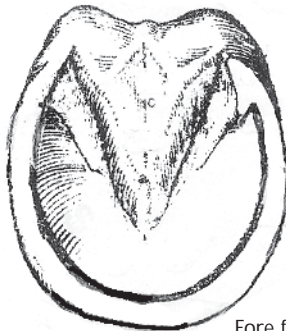
Pastern Angle Too Upright

Hooves

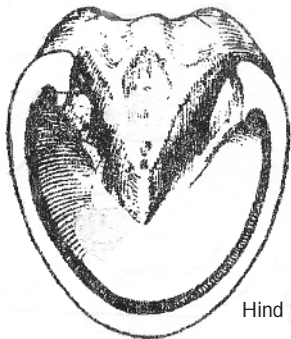
It is a good idea to start looking at a horse from the ground up; “No Hoof - No Horse”. Hooves should be healthy and a good size for the size of the horse. They should be big enough to distribute the stress and concussion of the horses weight.

Hoof walls should be free of major cracks where the outer wall is actually split from the coronet down. Such cracks may cause a horse to be lame. Hooves should be clear of founder rings. Front feet tend to be round. Hind feet tend to be more pointed.

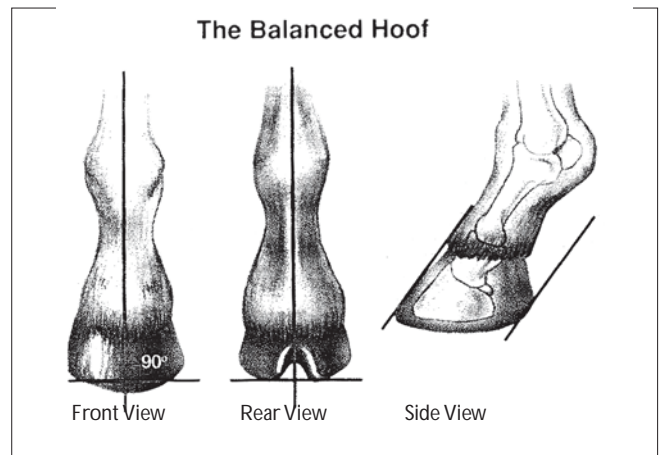
Both front feet should be the same shape and size, and both back feet should be the same shape and size.



Fore foot



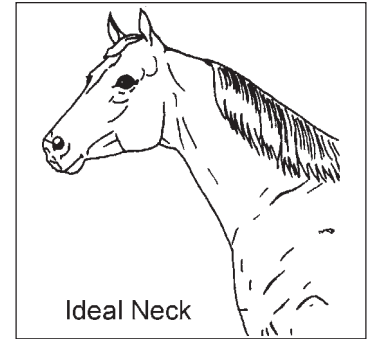
Hind foot



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Throat latch A clean, trim, well defined throat latch that is capable of flexing is desirable.

Neck Horses use their head and neck to balance. Adequate length depends on what the horse is used for. The depth and set of the neck on its shoulders also affects the horse's function. A trim neck, set relatively high into the shoulder, is preferred over a thick, low set neck.



Withers The withers are located at the base of the neck, between the shoulder blades and are the highest point of the horse's back. The height of a horse is measured from the ground to the top of the withers because they are the highest constant part of the horse. The withers should be prominent and well defined in order to hold a saddle in place.

Heartgirth The horse needs depth of heartgirth and spring of fore-rib to provide room for maximum function of the heart, stomach, liver and lungs.

Back The horse's back should be about as long as its neck. Avoid a short-neck, long-back combination. This reduces the balance, handling and ability of the horse to manage weight. The loin and back muscles help carry the weight of the rider and lift the forehand of the horse. The back must be strong and well-muscled. When you feel along the back of the horse, it should be flat and "soft", not rough and bony.

Loin The loin is the pivot point of the horse's back. A short, wide and muscular loin is needed to carry power from the hind legs forward. In contrast to the rest of the back the loin is not supported by any bony structure except the spine. The loin should feel elastic when palpated (examined by touch), showing lots of muscling and strength. It should be short, wide and strongly muscled.

Hip and Croup A long hip and croup have longer muscles which increases the length of stride. The shape of the hip and croup varies according to the body type. A more level hip and croup provides a long, flowing stride. A more sloping hip and croup allows the hind legs to drive further underneath the body for power and speed.

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Hindquarters The hindquarters include the croup, hip, stifle, gaskin, hock and lower hindleg. The muscling and strength of the hindquarters determines the amount of power the horse has to offer. Everything about their structure should reflect speed, power, endurance and athletic ability (depending on the purpose of the horse).

Muscling

Muscle is the tissue which contracts and relaxes to cause your horse to move. Muscling refers to the length, definition and volume of muscling in your horse.

Length Long, smooth muscles are more desirable than short, bunched muscles. Long muscles give the horse a longer stride and more endurance. Bunched muscles tire more quickly and give your horse less endurance.

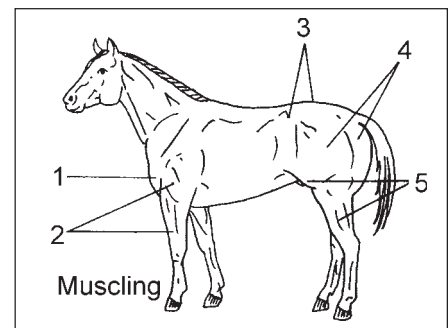
Definition You can easily see the outline or definition of each muscle beneath the skin of your horse. A horse that is overweight has little muscle definition because it is difficult to see the muscles. A horse that is in good condition (neither underweight so that the ribs stick out, nor overweight), will show the best muscle definition. For more details, refer to the Body Condition Score Chart in the Health Section (page 106-107).

Volume This is the amount of muscle. The greater the volume or amount of muscle, the greater the strength of the horse.

Where do you look for muscling?

To find the amount of muscling on your horse, look in these areas.

1. Chest
2. Shoulder, arm and forearm
3. Loin and croup
4. Buttock and thigh
5. Stifle and gaskin



What is the volume of muscling? Is it desirable for the breed and for the purpose of the horse? For example, a reining horse requires more muscling in his hindquarters than in his forequarters.

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Note: a lack of masculinity in the stallion or a lack of femininity in the mare may indicate a reduced ability to reproduce.

Stallions - Should look masculine and, when compared to geldings and mares, stallions show:

1. heavier, more powerful muscling
2. a larger and broader head
3. a larger muzzle and jaw
4. a thicker more muscular neck
5. more substance of, or (larger) bone.

Mares - Should look feminine. Compared to stallions and geldings, mares show more refinement about the head and neck. Compared to stallions, mares are not as heavily muscled and have less substance of bone.

Geldings - Should look more masculine than the mare, but much less masculine than the stallion. The volume of muscling and substance of bone in a gelding will be about the same or slightly more than in the mare.



Balance

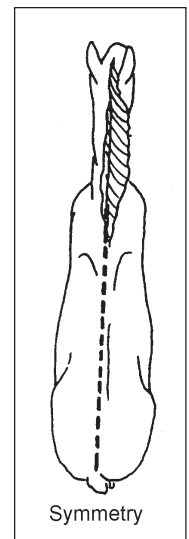
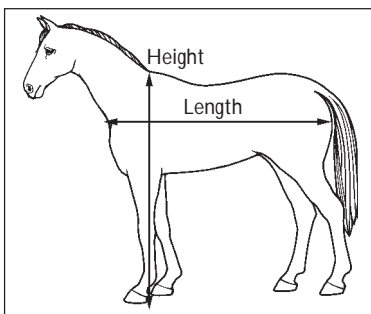
A horse is said to be in balance when all of the parts of the body are in correct proportion to each other (no part is too big or too small in relation to other parts). Smoothness is how the parts of the horse's body blend together.

Symmetry Methods of Determining Balance:

When viewing the horse from the front and rear, divide the horse in half down the spinal column and down the middle of each limb. Each half should be a "mirror image" of the other.

Length = Height

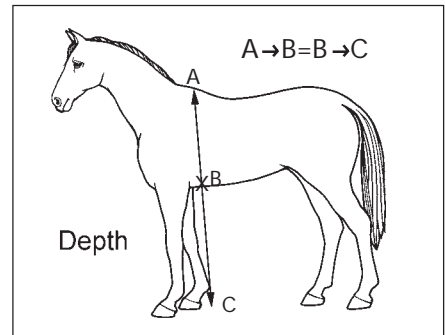
The length of the horse from the point of shoulder to the point of buttock should be equal to the height of the horse from the top of the withers to the ground.



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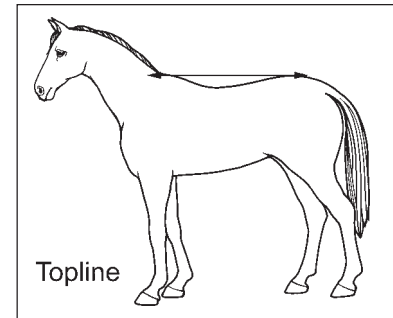
Depth of Heartgirth
= Length of Leg

The length of the leg from the fetlock to the elbow should be equal to the depth of the heartgirth from the elbow to the top of the withers.

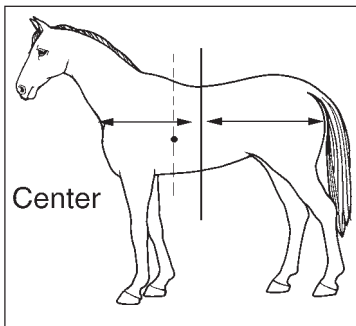


Levelness of Topline

The point of the croup should be on the same height as or lower than the top of the withers, so that the horse naturally travels "uphill".



Center of the Horse

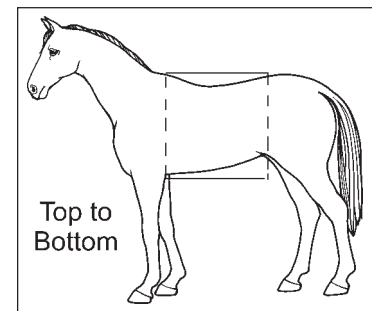


⌘ When the horse is divided through the center of the back, the forequarter (not including the head and neck), should be equal in size to the hindquarter.

⌘ Note that the center of gravity is different from the center of the horse. Because of the weight of the head and neck, the center of gravity is just behind the elbow when the horse is standing. When the horse is divided through the middle of the back, approximately 60 per cent of the weight is carried on the front legs, because of the additional weight of the head and neck.

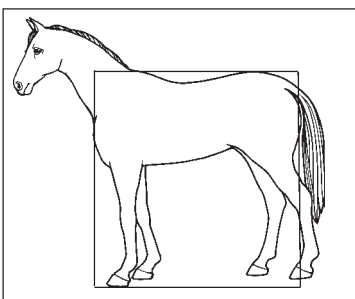
Top to Bottom Line
Ratio

The well balanced horse has a shorter top line (from the point of the withers to the point of the hip) in comparison to a longer underline (from the point of the elbow to the stifle).



Square

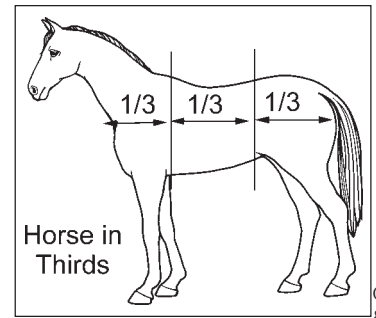
Draw a box around the horse so that the width of the box is equal to the length of the horse from the point of the shoulder to the point of the buttock and the height is equal to the height of the horse from the top of the withers to the ground. On a well balanced horse, this box will form a square - all sides are equal.



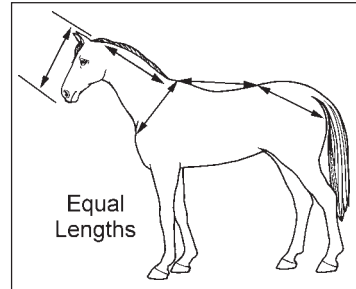
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Divide the Horse in Thirds

Divide the horse into thirds by dropping lines down from the top of the withers and the point of the hip. The length of each of the three segments should be the same.



Equal Lengths



In the well balanced horse, each of the head, neck, shoulder, topline and hip should be of approximately equal lengths. However, it is often preferable for the neck to be slightly longer.

Quality and Refinement

Refinement is a general lack of coarseness. The factors closely associated with quality and refinement are:

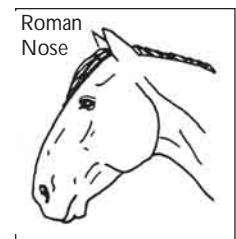
- A. A refinement of body parts - the horse should be smooth and clean-cut, not coarse, with body parts that blend smoothly together.
- B. Tendons and joints should be well defined, not fleshy.
- C. Tight, thin skin.
- D. Hard, smooth, durable hooves.
- E. Obvious gender characteristics.

Conformation Faults

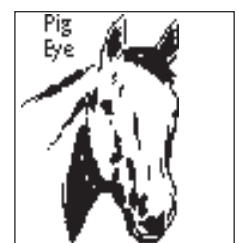
In the following list are a number of common conformation faults found in horses and deviations from the "ideal" horse. All horses have some conformation faults, and judging conformation involves evaluating which horse has fewer and less important ones, or which horse is more correct than the others in its class.

Head

Roman Nose - the bridge of the nose has a rounded or convex shape when viewed from the side. This conformation fault restricts the horse's frontal vision.



Pig Eye - small eyes which are set too far back into the head. This conformation fault restricts vision, especially to the rear, as a result the horse often has a nervous or unruly disposition.



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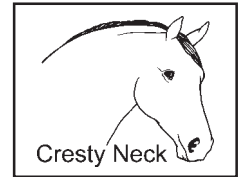
Conformation

Faults (continued)

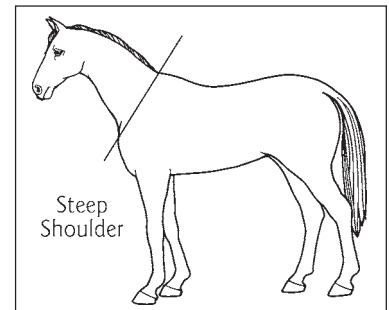
Neck **Ewe Neck** - neck appears to be “*turned over*”. This conformation fault restricts flexion at the poll.



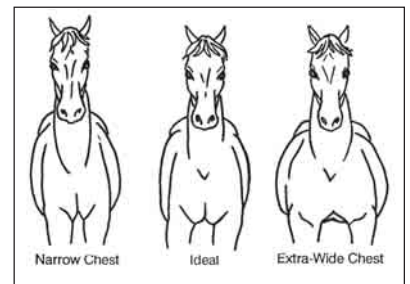
Cresty Neck - excess fat deposits on the crest of the neck. This fault may be a sign of a horse that will founder easily. A cresty neck reduces flexibility and suppleness.



Shoulder **Steep Shoulder** - shoulder angle steeper than 50 degrees. This decreases the length of stride in a horse and makes them rough to ride. It also increases concussion on the forelegs.



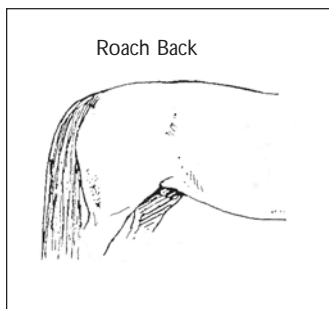
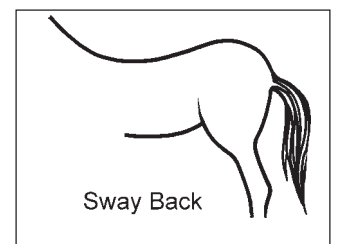
Chest **Narrow Chest** - legs are too close together and legs may interfere when horse travels.



Extra-Wide Chest - legs set too far apart. This produces a labouring, waddling stride and lack of flexibility. Therefore, it reduces the horse's athletic ability.

Topline **Mutton Withers** - low, wide withers. It is hard to keep the saddle in place without the girth (cinch) being too tight and the saddle is prone to slip to the side.

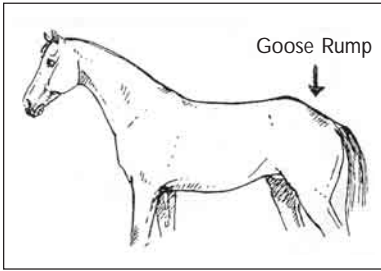
Sway Back - weak topline. This is usually seen in older horses and in horses with long backs and, or loins. This restricts the horses ability to pull legs forward beneath the hindquarters.



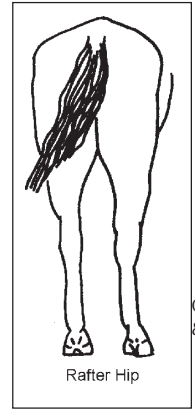
Roach Back - loin has a rounded (convex) appearance when viewed from the side. This can restrict flexibility.

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Hip and Croup



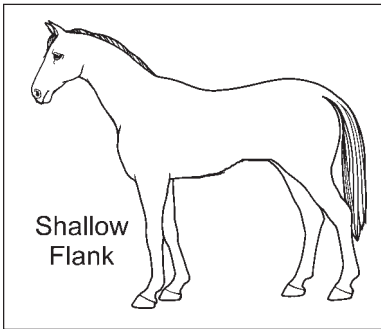
Goose Rump – the rump slopes sharply from the croup to the dock when viewed from the side. This decreases the length of stride.



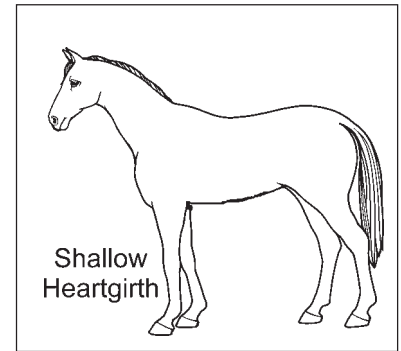
Rafter Hip - when viewed from the rear, the width at the point of the hip is greater than the width at the stifle. It indicates a lack of muscular development.



Heartgirth and Flank



Shallow Heartgirth - depth from withers to elbow is less than the length from elbow to fetlock. This restricts the capacity for heart and lungs and may decrease the endurance of the horse.

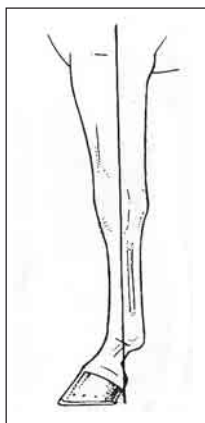


Shallow Flank - pronounced narrowing in the flank region. This decreases capacity of the digestive system and decreases the foal carrying capacity in mares.

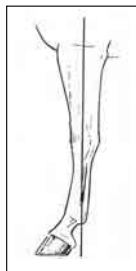
Feet and Legs

It is common to have more than one defect in the feet and legs. For example offset knees accompany toed out. To help identify defects in the feet and legs, take a “string” with a weight attached to the bottom, or a straight stick. This string or stick, can then be used to help evaluate the front legs and the back legs of a horse standing square.

Front Leg Defects



Ideal Front Leg



Calf Knee

A. Viewing from the Side - From the side, the string or stick, would hang so that it divides the knee, cannon and fetlock, and hits the ground at the bulb of the heel.

Buck Knees (Over at the Knee) - the knee is forward of a line that bisects (divides in half) the foreleg. This horse may be susceptible to bowed tendons.



Buck Knee

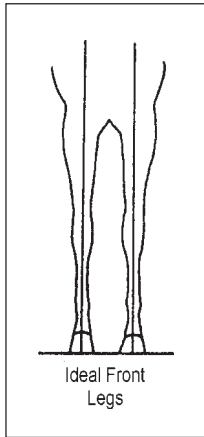
Calf Knees (Back at the Knee) - the knee is behind a line that bisects the foreleg. This places excess stress on the front of the knee and strain on the tendons. This horse will be susceptible to chip fractures of the knee and bowed tendons. Calf knees are more serious than buck knees.

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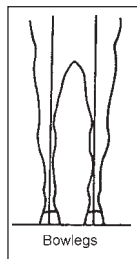
Conformation Faults (continued)

Feet and Legs (continued)

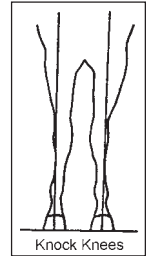
Tied-In at the Knee – small, narrow tendons look as if they are squeezed in just below the knee. The leg appears narrower at the base of the knee than at the fetlock, when viewed from the side.



B. Viewing from the Front - From the front, the string or stick would hang so that it bisects the knees, cannons, pasterns and hooves.

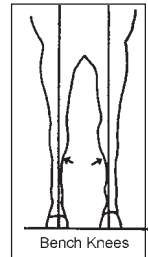


Knock Knees - the knees lie inside parallel lines bisecting the forelegs. This places excess stress on the outer knee and strain on the inside ligaments of the forelegs.



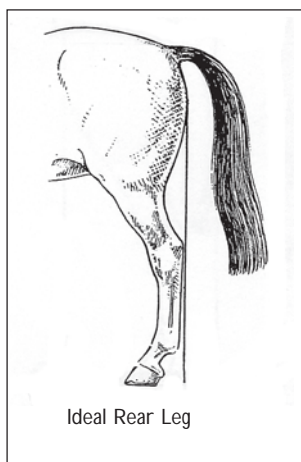
Bowlegs - the knees lie outside parallel lines bisecting the forelegs. This places excess stress on the inner knee and strains on the outside ligaments of the forelegs.

Bench Knees - the cannon bone is offset to the outside of the knee. This places more stress on the inside splint bones and the horse will be more susceptible to splints or knee chips.

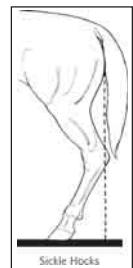


Hind Leg Defects

A. Viewing from the Side - From the side, a “string” dropped from the point of the buttocks, should run down the back of the hock, cannon and fetlock. It should hit the ground about ½ a hoof’s distance behind the bulb of the heel.



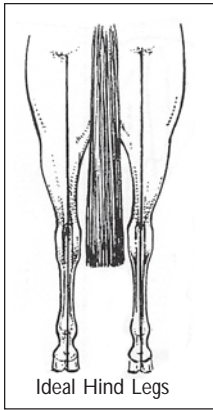
Sickle Hocks - excessive angulation of the hock joint. The horse appears to be standing under from the hock down. This places excess strain on the plantar ligament and the horse will be susceptible to curbs.



Post-Legged - insufficient angulation of the hock joint and stifle. The entire leg appears too straight and the hind leg is set ahead of a line dropped from the point of the buttock. The pasterns are usually also too upright. This places excess stress on the front of the hock joint and on the stifle joint. A horse will be susceptible to bog spavins, thoroughpins, bone spavins or stifling.



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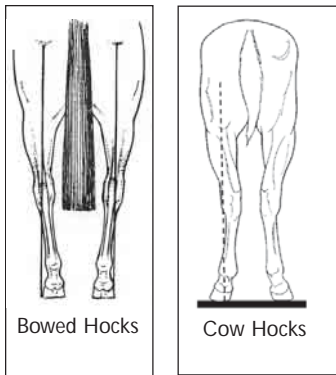


B. Viewing from the Rear - From behind, the “string” would still hang from the point of the buttocks. Ideally, it should run through the middle of the gaskin, hock, cannon bone and fetlock. It should hit the ground between the bulbs of the heel.

Cow Hocks - the hocks are closer together than the fetlocks when standing. They point toward one another, causing the feet to be widely separated and often pointing outward. This hindleg defect places excess stress on the hock joint and strain on the ligaments. This horse is susceptible to bone spavins, curbs or thoroughpins.



Bowed Hocks (also called “Out at the hocks” or Bandy-legged) - the hocks lie outside parallel lines bisecting the hind legs. This may cause interference because horse moves narrower at the ground than at the hock and places excess stress on the hock joint and strain on the ligaments. This horse will be predisposed to bog spavins, curbs or thoroughpins.



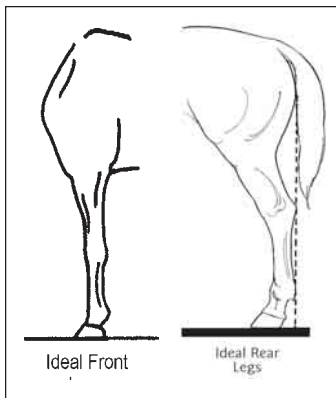
A. Viewing from the Side - The front and rear legs must also be evaluated for how they are positioned under the body of the horse. They should come under the horse’s body so that they stand square and strong, as the ideal pictures show. With a picture of ideal legs, it is then easier to evaluate legs for the following defects:

Front or Hind Leg Defects

Standing Under

Front - the entire foreleg from the elbow down is too far under the body. This places excess weight on the forelegs.

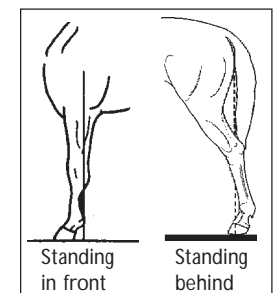
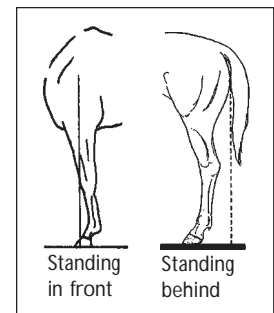
Rear - the entire hindleg is placed too far forward under the body. The horse may also be sickle-hocked or post-legged; stress is the same as for sickle hocks or post-legged, respectively.



Standing Out

Front - the entire foreleg from the elbow down is too far forward. This places excess stress on the front of the knee and strain on the ligaments and tendons.

Rear - the entire hindleg is placed too far backward. These horses are usually not very athletic, as they cannot work off their hindquarters.

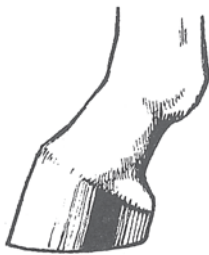


4 - H Horse Project Manual - Conformation & Evaluation

Pasterns



Ideal Pastern

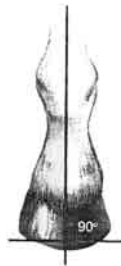


Steep Pastern



Weak Pastern

Correct Pasterns



Front View



Side View



Rear View

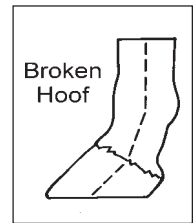
Steep Pasterns - often accompanied by a steep shoulder. This increases the effect of concussion on the fetlock joint, pastern joint and navicular bone.

Weak Pasterns - pasterns are usually too long and sloping. In extreme cases, the fetlock may touch the ground when the horse travels. This horse will be predisposed to injury of the tendons, ligaments and the fetlock joint.

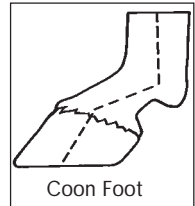
Broken Hoof/Pastern Angle - the angle of the pastern and the angle of the hoof are not the same.

Coon Foot - when the pastern slopes more than the front wall of the hoof, so much that the angle is nearly parallel to the ground it is called a "coon foot". This places additional strain on the tendons and ligaments.

Club Foot - A "club foot" is a serious conformation fault in which the hoof angle is too steep (60% or more). This horse may be susceptible to osselets, ringbone, navicular syndrome, side bones and splints. They often stumble and are unsafe to ride.



Broken Hoof



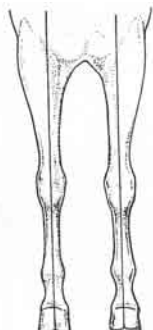
Coon Foot



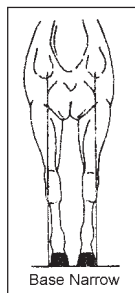
Club Foot

B. Viewing from the Front/Rear

Base-Narrow - the forelegs and/or hindlegs are closer together at the ground than at the top of the leg. If the base of the feet is narrow, this may be accompanied by toe-in or toe-out conformation. There is more weight and stress placed on the outside of the legs and the horse may be susceptible to windpuffs, ringbone and sidebone.

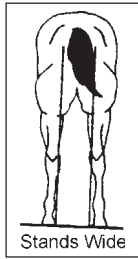


Ideal Front Legs

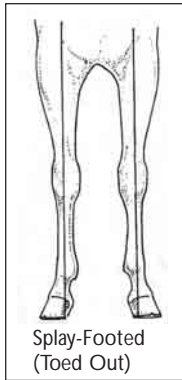


Base Narrow

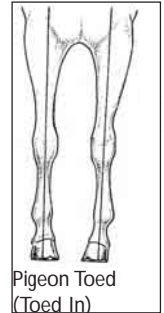
4 - H Horse Project Manual - Conformation & Evaluation



Base-Wide - the forelegs and/or hindlegs are farther apart at the ground than at the top of the leg. This may be accompanied by toe-in or toe-out (most common) conformation. This places more weight and stress on the inside of the legs and predisposes a horse to windpuffs, ringbone and sidebone.



Toe-In (Pigeon Toed) - the toes point toward each other. If the horse toes in, or is pigeon toed, more weight and concussion is placed on the outside of the pastern and hoof. This is usually seen with base-narrow and bow-legged conformation.



Toe-Out (Splay-Footed) - the toes point away from each other. This may be seen with either base-narrow or base-wide conformation and is often present if the horse is cow-hocked. If the horse toes out, or is splay-footed, more weight and concussion is placed on the inside of the pastern and hoof. More horses are splayed in the front than back. This is one of the most common conformation faults.

Way of Going or Travel

The way the horse travels is the way the horse moves. Ideally, both the front and hind legs should move forward in a straight line. The back feet should travel in almost the same tracks as the front feet. The horse should move with a long, fluid, ground clearing stride rather than a short, choppy stride. This is the most efficient way of moving and it places the least stress on the limbs. Watch the horse's feet carefully for how straight the horse travels and check the tracks left by the horse for signs of deviations in the horse's stride. Such deviations may indicate a conformation fault, that may eventually cause a problem.

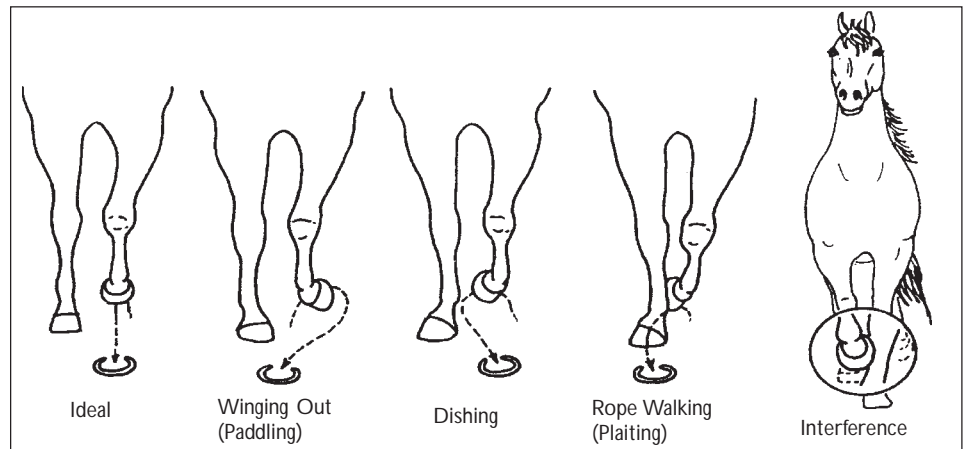
Assessing Athletic Movement

Athletic movement should not be confused with "*way of going*". A horse's athletic movement is determined by the lightness, rhythm and impulsion of his stride. Some horses can travel extremely crooked, yet possess a very light, rhythmic movement with tremendous impulsion. For further information, a video entitled "**Assessing Athletic Movement**" is available through Alberta Agriculture, Rural Development and Food.

4 - H Horse Project Manual - Conformation & Evaluation

Deviations from Travel in Horses

A. Viewing from the Front/Rear

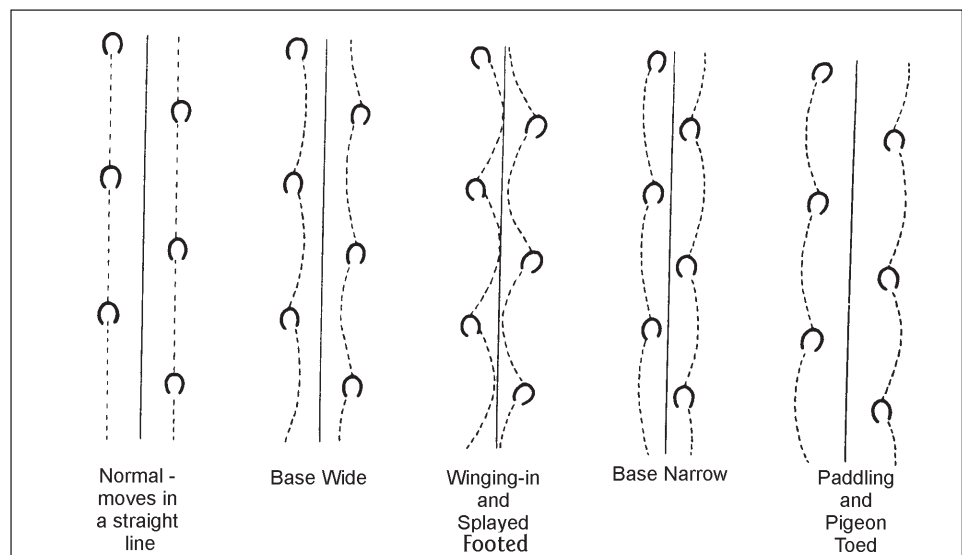


Paddling (Winging Out) - throwing the feet outward while in motion. This is usually associated with toe-in conformation.

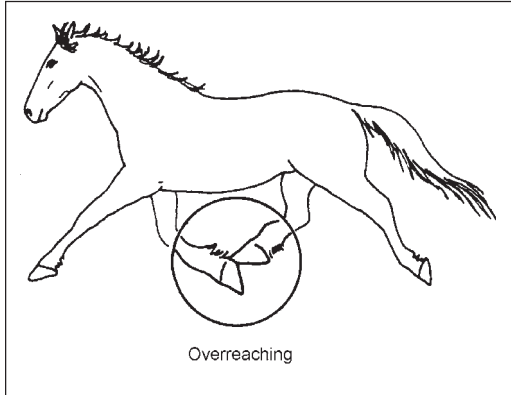
Winging In (Dishing) - throwing the feet inward while in motion. This is usually associated with toe-out conformation and is more serious than paddling since it may lead to interference when the horse moves.

Plaiting (Rope Walking) - twisting of the striding leg around the supporting leg so that the horse appears to be walking a tightrope. One forefoot may appear to land directly in front of the other. This is more serious than paddling since it may lead to interference and stumbling.

Interference - when one foreleg/hind leg strikes the opposite foreleg/hind leg while in motion.



B. Viewing from the Side



Overreaching - the hind foot strikes the heel of the forefoot before the forefoot leaves the ground. If the horse is shod, the front shoe may be pulled off by the hind foot.

Forging - the toe of the hind foot strikes the sole or shoe of the forefoot while in motion.

Scalping - the toe of the forefoot strikes the coronet band of the hind foot.



Is this horse sound?

Unsoundnesses and Blemishes

The term “*Sound*” describes a horse that has no problems or injuries that affect its usefulness. Soundness is extremely important because a horse’s useability depends on its ability to move. When you look at a horse, it is important to watch for unsoundnesses and blemishes. The difference between these two terms is in how they affect the horse.

Blemishes are an injury or imperfection which affect the appearance of the horse, but not its usefulness. For example healed wire cuts, rope burns, and so on.

Unsoundness is an injury or defect which affects the horse’s usefulness. They may cause lameness or, in some other way, affect the horse so that it cannot be used. Horses need to be sound of sight, wind, limb and mind.

While blemishes may not look nice, they don’t affect how useful the horse will be. If your horse has an unsoundness it will restrict what you can use it for.

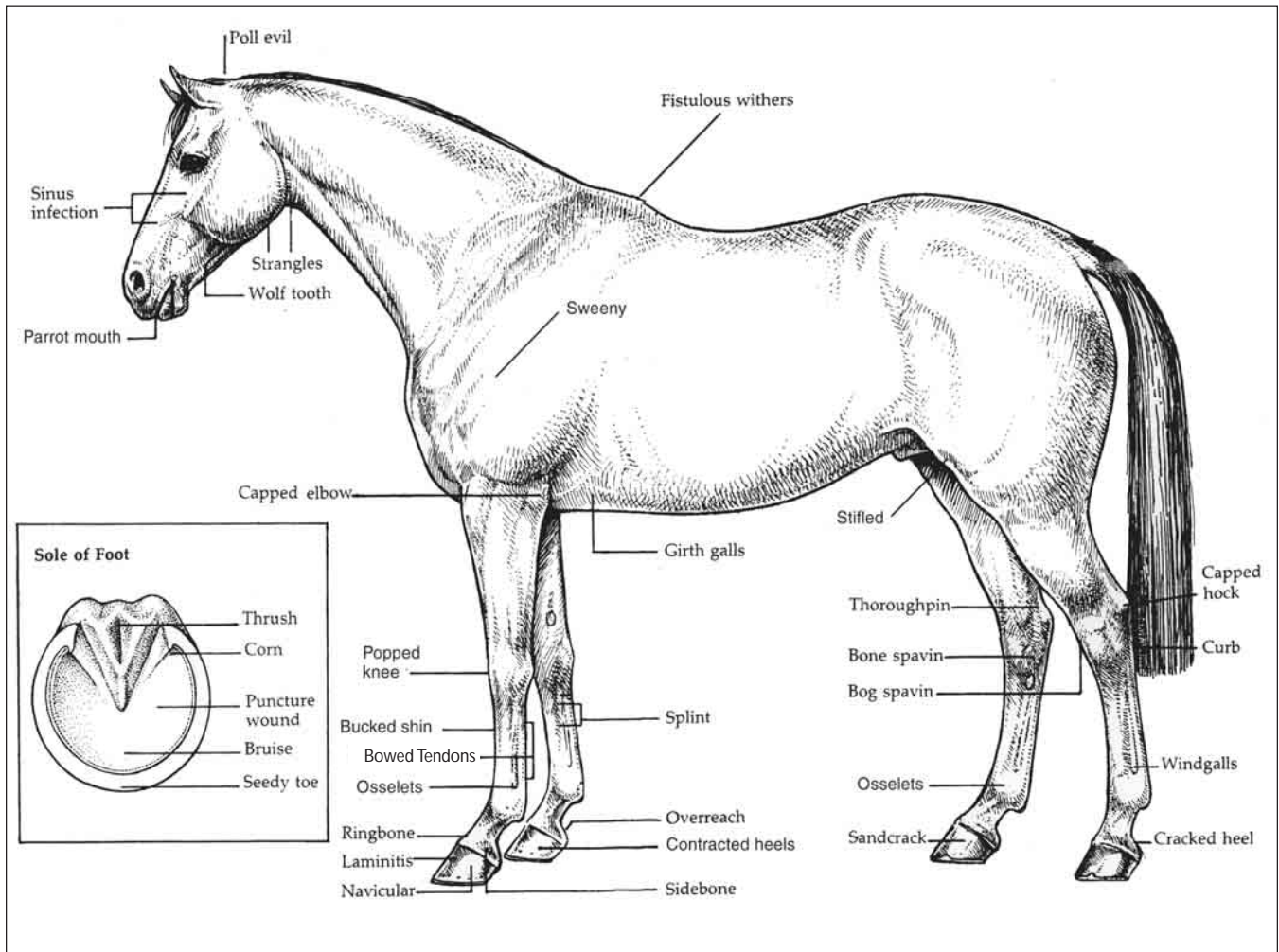
The following is a list and description of common unsoundnesses (**U**) and blemishes (**B**) to watch for when selecting or judging horses. Some are classified as both **B** and **U** because blemishes may be unsoundnesses, depending on their severity.

Blindness (U) - a partial or complete lack of vision in one or both eyes which may be caused by injury, disease or heredity. Blind horses will not react to quick motions near the affected eye(s). Blind horses require special care if they are going to be kept.

4 - H Horse Project Manual - Conformation & Evaluation

Is this horse
sound? (continued)

Bog Spavin (B, U) - a soft swelling in the natural depression on the front and inside of the hock joint, usually due to sprain, strain or faulty conformation of the hock joint. For example a horse that is too straight in the hindlegs may get a bog spavin. This rarely causes long term lameness.



Bone Spavin (Jack Spavin) (U) - a bony enlargement on the inside and front lower hock where the hock tapers into the cannon bone, usually due to faulty hock conformation, excessively straight hindlegs, cow or sickle hocks, or injury. This usually causes lameness.

Bowed Tendon (B, U) - an enlargement of any or all of the tendons and ligaments behind the cannon, caused by excess stretching of the tendon due to stress or faulty conformation such as long weak pasterns or toes that are too long. A bowed tendon may heal enough to return the horse to work, but the scarring leaves a bow that is never as strong as before the bow occurred. This occurs most commonly in the forelegs.

Is this horse sound? (continued)

Bucked Shins (U) - inflammation of the front side of the cannon bone. This is characterized by painful swelling. The horse will usually try to rest the affected leg(s). It is seen most frequently in young horses which are subjected to hard, fast work. Lameness is usually temporary if the horse receives adequate rest.

Capped Elbow (Shoe Boil) (B) - a soft fluid-filled or firm swelling at the point of the elbow caused by insufficient bedding, kicks and falls, or by rubbing with the heel of the shoe on the elbow, while lying down.



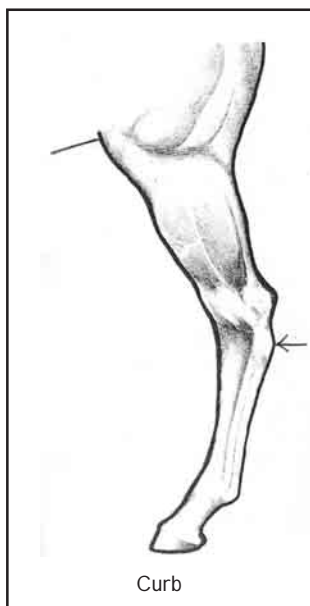
Capped Hock (B) - a soft fluid-filled or firm swelling at the point of the hock. It is usually caused by lack of bedding; kicking at the sides of the box or trailer, etc.



Club Foot (U) - abnormally upright foot with high heel and short toe, resulting from inability to straighten the coffin joint. Severely club footed horses are unsafe to ride or drive.

Contracted Heels (B) - the heels of the hoof are too close together and too upright. This is most common in the forelegs and is usually genetic, but may be due to improper shoeing. This may be associated with founder or navicular syndrome.

Cresty Neck (B) - the crest of the neck is thickened by excess fat deposits (this is not usually considered a blemish). This condition increases the weight carried on the forelegs and may be an indication of laminitis. This condition may be associated with founder.



Curb (B, U) - an enlargement of the ligament found on the upper rear part of the cannon below the hock (the plantar ligament). This is caused by injury or faulty conformation (sickle or cowhocks) and may cause lameness. Usually once healed and permanent, the horse becomes sound again.

Fistulous Withers (B, U) - an infection and/or inflammation of the withers that leads to an abscess and is usually caused by bruising.

Founder (Laminitis) (U) - an inflammation of the sensitive laminae of the foot. It is often characterized by horizontal "founder rings" in the hoof wall and is usually more severe in the front feet. The horse may stand camped out in front to relieve pressure on the front feet. The most common cause of founder is an ingestion of an excessive amount of feed.

4 - H H o r s e P r o j e c t M a n u a l - C o n f o r m a t i o n & E v a l u a t i o n

Is this horse
sound? (continued)

Heaves/C.O.P.E. (Chronic Obstruction Pulmonary Emphysema) (U) - difficulty in forcing air out of the lungs due to a loss in elasticity in the lungs. This is usually more noticeable after exercise as the horse contracts abdominal muscles forcibly to expel air. It is usually accompanied by a chronic cough and a heave line (a thickened ridge of muscle along the lower side of the abdomen). The horse is unsound for strenuous work. This is often caused by dusty, moldy feed.

Hernia (U) - a protrusion of an organ or body tissue through the abdominal wall or through another natural or accidental body opening, there are two types of hernias: reducible and irreducible.

Monkey Mouth (U) - a hereditary condition in which the lower jaw is longer than the upper jaw.

Navicular Syndrome (U) - an unsoundness caused by a degeneration of the navicular bone. The primary causes are strenuous work, concussion, improper shoeing and poor conformation (small feet, steep pasterns and shoulders). It rarely affects the hind feet. The horse may point the most affected foot or stand with the forefeet extended forward. The horse will try to land toe first when travelling to avoid frog pressure and concussion, making the stride short and choppy. No cure exists, but drugs, corrective shoeing and some surgery may be used to ease pain.

Osselets (B, U) - an enlargement, either fluid-filled or bony, on the front side of the fetlock joint. The horse may travel with a short, choppy stride. It is usually caused by stress and concussion from hard work or faulty conformation. Lameness is usually temporary unless the bone growth interferes with joint mobility.

Parrot Mouth (U) - a hereditary condition in which the lower jaw is shorter than the upper jaw.

Poll Evil (U) - an inflamed area between the ears usually caused by a bruise in the poll region.

Popped Knee (Water on the Knee) (B, U) - a swelling of the front of the knee, usually caused by injury or concussion.



Is this horse
sound? (continued)

Quarter Crack (B, U) - a deep crack in the area of the outside or inside quarter, starting at the coronet and running down through the entire wall of the hoof. Requires proper hoof care.

Quittor (B, U) - a deep-seated inflammation of the hoof which drains pus through the coronary band. This is caused by a direct injury such as puncture wounds, cuts, interference, etc. It is usually only a temporary lameness if treated early.

Ringbone (U) - bony enlargement(s) (arthritis) on one or more bones and, or joints of the pastern region. It is most common in the forelegs and is caused by injury or faulty conformation such as short, upright pasterns.

Roaring (U) - characterized by a whistling or roaring sound when the horse breathes in. This occurs especially with increased respiration from exercise. It is caused by paralysis of the muscles of the larynx, often due to a lengthy respiratory infection.

Sand Cracks (B) - surface or shallow cracks in the hoof wall. They may start at the coronet and go down, or at the bottom of the hoof wall and go up. This is usually caused by improper hoof care or alternating wet and dry conditions.

Sidebone (B, U) - bony enlargement(s) above and to the rear of the hoof, a result of ossification (turning to bone) of the lateral cartilage. It is most common in the forelegs and is usually caused by concussion or faulty conformation.

Splint (U) - a bony enlargement, most commonly found on the inside of the front cannon bone. May occur anywhere along the length of the splint bone. It usually is due to strain, injury or faulty conformation. It rarely affects the horse after the initial lameness has disappeared except where it occurs high enough to interfere with joint action.

Stifled (U) - when the patella, found in the stifle joint (which corresponds to the kneecap in the human), becomes displaced and locks in an extended position, it is referred to as a stifled condition. It may release on its own or may require manual manipulation. This is seen most frequently in post-legged horses and once this occurs, the ligaments are stretched and the horse will be prone to stifling again. It may be surgically corrected.



4 - H H o r s e P r o j e c t M a n u a l - C o n f o r m a t i o n & E v a l u a t i o n

Is this horse
sound? (continued)

Stringhalt (U) - an involuntary flexion of the hock causing an upward jerking motion during movement. It may affect one or both hind legs. The cause of this is unknown and the action is accentuated when the horse is turned or backed. It is most noticeable after the horse has rested. Severe cases may be corrected surgically.

Sway Back (B, U) - a weak, hollow topline. This restricts the ability of the horse to pull its legs forward beneath its hindquarters.

Sweeny (B, U) - atrophy or shrinkage of the shoulder muscles. In advanced cases, the shoulder appears flat and the shoulder blade or scapula is readily visible. Caused by a direct injury to the suprascapular nerve which serves the shoulder muscles. The nerve does not regenerate, so the performance ability of the horse is limited unless surgery is performed.

Thoroughpin (B) - a puffy swelling in the hollow above the hock joint. It is moveable by hand pressure from one side of the hock to the other and is usually due to strain injury or faulty conformation. It rarely affects the horse after the initial lameness has disappeared.

Thrush (B, U) - an infectious condition of the frog of the hoof characterized by a black, foul smelling discharge. It is an anaerobic condition (meaning that it thrives on a lack of oxygen) and usually results from wet and/or dirty conditions. It must be treated.

Toe Crack (B, U) - a deep crack in the toe area of the hoof, starting at the coronet and running down through the entire wall of the hoof. Requires proper hoof care.

Windpuffs (Windgalls) (B) - puffy, fluid-filled swellings at the fetlock joint. It is usually a result of heavy work or stress to an unconditioned horse.

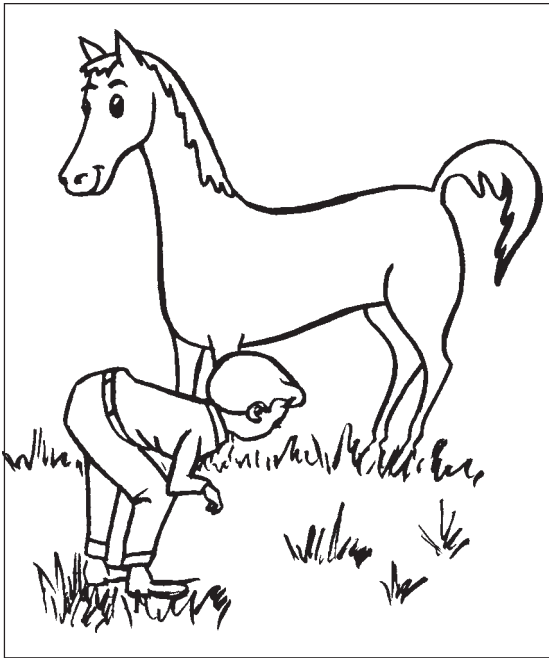
Evaluating

Look closely at a horse's conformation, muscling, balance and the way that he travels. Compare each horse to a quality standard (ideal) and decide which one is most desirable to you.



Judging

Judging a Conformation Class



A common activity in 4-H is to judge the conformation of a class of horses. This activity usually involves four horses. The task is to compare the horses and select out the one that you think is most structurally correct, 2nd, 3rd and the least structurally correct.

When judging conformation, consider each of these factors:

- 🐾 Soundness
- 🐾 Conformation
- 🐾 Muscling and Balance
- 🐾 Travel or Way of Going

Check the animals over carefully from bottom up and front to back, comparing these factors. The horse with the *best combination* of all of these will be your top placing.



General Appearance

Judging Tips - Comparative Terms

Below are examples of some terms used in horse judging. Please refer to horse judging manuals or breed web sites for additional terms.

- 🐾 Heavier muscled, more ideally balanced mare (stallion etc)
- 🐾 Shows more refinement and style
- 🐾 Was a balanced, refined and feminine mare.
- 🐾 More alert and attentive expression.
- 🐾 More substance of muscle and bone
- 🐾 More rugged and durable type of frame.

Balance

- 🐾 Longer, more sloping shoulder
- 🐾 Deeper barrelled horse
- 🐾 Deeper ribbed, wider chested
- 🐾 Shorter top line
- 🐾 Stronger over the back, loin and croup
- 🐾 Exhibited more balance with all parts blending smoothly together.

Grants give credit to an inferior animal for an area where quality surpassed the higher-placed animal.

Criticisms are a chance to demonstrate that you know the "ideal". They are used to describe an animal's faults as they relate to the "ideal". They are used in the body of the reasons only when a problem can not be described by comparisons and grants.

Muscling

- U Showed more tone and power of muscling from end to end.
- U Was more powerfully muscled in his quarters.
- U Fuller through (his/her) forearm and shoulder, and was more powerfully muscled through (his/her) hindquarter.
- U Thicker, heavier muscled stifle.
- U Heavier muscled forearm.

Head and Neck

- U Trimmer throat latch coupled with a longer, smoother neck
- U Finer featured
- U Longer necked
- U More prominent through the jaw
- U Shorter distance from eye to muzzle.

Structure

- U Stood straighter on his/her legs
- U Cleaner about the knees and hocks, with a flatter cannon bone
- U Stands on a shorter cannon
- U More correct angle at the hock
- U Longer more sloping pasterns
- U Wider, deeper heel
- U Hooves more proportional to body size.

Way of Going

- U Moves out straighter and more correct at the walk (trot)
- U Straighter, truer stride
- U More fluid
- U More flexion of the knee and hock, showing more reach
- U Drives from behind with more hock action

Breed, Sex, Character and Quality

- U Higher quality hair coat
- U Showed more breed character and femininity/masculinity
- U More prominent, deeper jaw
- U Showed more breed character about the head and neck
- U Was more stylish and eye appealing

4 - H H o r s e P r o j e c t M a n u a l - C o n f o r m a t i o n & E v a l u a t i o n

Outline for a Set of Reasons

When you give your reasons for placing animals in a certain way, you should give your reasons based on how you have judged the animals, i.e. comparatively. If you were buying a horse from this group, why would your first choice be the horse that you have placed on top? Why was your #2 horse your second choice and not your first choice? Why was #2 placed over #3. Why was #3 placed over #4? And, finally, why would you not buy #4?

In giving reasons, a class of four animals is divided into three pairs: a top pair, a middle pair and a bottom pair. The basic outline for an entire set of reasons (for a placing of 1-2-3-4) is as follows:

Give the name of the class and how you placed it.

"I placed this class of <name of class> <placings - using the numbers of the horses in the order you place them> for the following reasons:"



Top Pair

Reasons for placing 1 over 2, using comparative terms. Include grants for 2 over 1, which point out advantages of 2 over 1 (if any). Use comparative terms. Include criticisms of 2 using comparative or descriptive terms.

Middle Pair

Reasons for placing 2 over 3.

Grants for 3 over 2 (if any).

Criticisms of 3.

Bottom Pair

Reasons for placing 3 over 4.

Grants for 4 over 3 (if any).

Criticism of 4.

Repeat how you placed the class

"For these reasons, I placed this class of <class name> <placings>".

For more information on judging, refer to your judging manual.

