Steps for Picking Hooves

Here are the steps to help you care for the hooves.

Step 1—Put a halter on the horse and tie it to a rail or post with a quick-release knot. Make sure the horse is standing square with its weight evenly distributed.

Step 2—Stand beside the horse's left foreleg, facing toward the tail. Run your left hand down the leg so the horse is aware that you are going to do something. Many horses will lift the foot when the hand reaches the pastern (just below the fetlock joint and above the hoof).

Step 3—If the horse does not lift its foot, apply gentle pressure with your thumb and forefinger to either side of the fetlock, or firmly pinch the pastern with your thumb and index linger.

Step 4—If your horse still does not pick up its foot, lean against the horse slightly, pushing its weight to the other foreleg while trying steps 2 and 3 again.



A professional shoer at work

A shod horse's hooves should be picked daily. This will give you a chance to check for infections, foreign objects, loose shoes, and other problems.

Step 5—Once the horse lifts the leg, hold it in your left hand. Hold the hoof pick in your right hand, and begin cleaning from heel to toe to remove debris. Pay particular attention to cleaning the cleft between the sole and the frog. Check for dampness and any dark, foul-smelling fluid oozing from the frog or sole. The frog should be firm, with no discharge. If you find problems, have a veterinarian examine the horse.

Step 6—Check the shoes for loose or missing nails. Make sure nails are crimped down so they do not pull out.

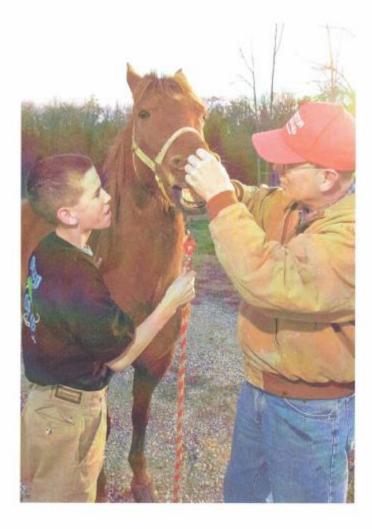
Step 7—Repeat steps 1 through 6 with the remaining three hooves, working in order from the near hind foot, the far (right) forefoot, and the right hind foot. To pick up a horse's hind foot, stand beside the horse's flank. Place a hand on the horse's flank. Place a hand on the horse's hip and run your other hand down the leg to the cannon. Pull the leg forward, binding it to the hock. Walk straight back, resting the horse's cannon on your thigh. Lock your arm over the hock so that the horse cannot kick.

Step 8—Use a paintbrush to apply a hoof dressing, especially if the hooves are dry and brittle. Work from the inside of the hoof to the outside.





40 HORSEMANSHIP HORSEMANSHIP 41



Health Matters

A healthy horse has bright eyes, and the membranes under the eyelids and nostril are an even, pink color. A healthy horse's coat lays flat and has a glossy sheen. The skin should be clean and loose. The limbs should not have swelling.

An unhealthy horse could have many of the following signs:

- Red, yellow, white, or purple membranes under the eyes or in the nostrils
- · A tight, blotchy coat
- · Puffiness in the limbs
- · Loss of appetite
- A cough, runny nose, or watery eyes
- Abnormal bowel movements
- · Strong-smelling manure
- · Thick and dark urine
- · A protruding bone structure
- · High temperature
- · Uneasiness or restlessness
- · Sweating while at rest

If your horse displays any unhealthy conditions, consult a veterinarian.

A horse's normal temperature is between 100 to 101.5 degrees. The normal pulse rate is 32 to 44 beats per minute. A horse at rest will have respiration of eight to 15 breaths a minute. The temperature is taken professionally using a rectal thermometer. The pulse can be taken by feeling the inner surface of the lower jaw, just behind the elbow and the eye. Count the pulse for 20 seconds on a stopwatch, then multiply by three.

Keep a calendar and mark each time that your horse has been shod, vaccinated, and dewormed, and when its hooves have been trimmed and its teeth rasped.

Regular Checkups

Besides having your horse examined by a veterinarian when it is ill or lame, your horse also needs regular checkups. For example, a horse needs vaccinations to prevent serious diseases such as tetanus and equine flu. All horses should be wormed on a regular basis. A horse's teeth should be checked once a year, Older horses might need more frequent teeth checkups.

Dangerous Plants

If your horse grazes in pastures and fields, you will need to be aware of the poisonous plants in your area. Check with a veterinarian or horse expert to learn more.

Make sure that horses on pasture have adequate hay and/or grass so that they will not resort to eating poisonous plants. Some of the more common poisonous plants include:

- Ragwort, which also can be found in hay
- 2. Acoms, when eaten in large quantities
- 3. Buttercups
- 4. Nightshade
- 5. Hemlock
- 6. Bracken fern
- Yew trees are extremely toxic, and all parts of the tree, whether dead or living, are poisonous.



You will need a first-aid kit to tend to minor scratches and wounds. Any serious injuries must be treated by a veterinarian. If your horse is wounded, take the following steps while waiting for the veterinarian:

- Calm the horse by talking in a soothing voice and stroking, patting, and rubbing the horse gently, quietly, and slowly.
- Slow the bleeding if necessary, confine the horse, then clean and disinfect the wound.
- Do not attempt to treat eye, joint, or deep abdominal wounds.



A first-aid kit prepared specially for your horse (with a veterinarian's advice, if necessary) will ensure that you have the right materials available in case of an emergency. Store the first-aid items in a sealable plastic container and keep the container where you can reach it easily, such as the tack room.

First-aid kits for horses should include most of the following items:

- Disinfectant (rubbing alcohol)
- Antiseptic ointment
- · Antibiotic ointment
- · Swabs
- Sterile gauze sponges or pads (a variety of sizes)
- · 3-inch gauze roll
- Adhesive tape (2-inch rolls)
- · Safety pins

- · Instant ice pack
- Scissors
- Tweezers or forceps to remove thorns or splinters
- · Fly repellant
- · Horse thermometer
- · Petroleum jelly
- Epsom salts, for soaking abscessed feet

To slow or stop the bleeding, place a pressure pad on the wound and apply a bandage over that. You might have to hold it in position. Hosing a fresh wound will delay clotting; however, a quick light hosing to eliminate dirt or foreign objects might be necessary. You also can clean the wound by gently swabbing it or flushing it with a mild disinfectant.

Ailments

Keeping your horse and stable clean will belp prevent many of the ailments that can afflict a horse. Keep feed boxes and bedding clean, as well. Make sure your horse has access to clean, fresh water at all times.

The following common horse-related ailments require immediate examination by a veterinarian.

Colic is pain in the abdomen. Colic can be mild or serious enough to cause death. Some of the causes include moldy feeds, internal parasites, overfeeding on grain when the horse is tired, letting a horse gorge on feed while it is still hot after a workout, or riding a horse immediately after a full feeding.

A horse with colic is in great pain. The horse will be agitated, constantly moving, sweating, and trying to roll. Rolling can be dangerous because it could cause a twisted intestine, which requires emergency surgery. Halter an afflicted horse to keep it from rolling. Walk the horse until the veterinarian arrives.

Founder, or laminitis, is an inflammation of the sensitive tissue in a horse's hoof that usually causes lameness. It is one of the most serious hoof diseases, A gap forms between the hoof and the sole, pushing the coffin joint out of position. This condition causes severe pain when the horse puts weight on the affected foot.

One common cause is letting a horse cat in lush grasses. Horses are not able to cope with large amounts of lush spring grass or feed mixes that are rich in protein.

Parasites such as roundworms, stomach worms, bloodworms, or bots (botfly larvae) can infect a horse. An infected borse might suffer from poor growth, anemia, a dull coat, listlessness, and digestive problems. Strongyloides (types of parasite worms) can damage abdominal arteries. Roundworms can cause problems for young horses and yearlings. Colts and fillies often suffer from pinworms, which cause severe itching around the tail. In addition to giving an afflicted horse deworming drugs, regularly clean and remove manure from stables or indoor areas where the horse is kept. Do not dispose of the manure in pastures or near water or feed. Have a veterinarian screen the horse's manure for parasites a couple of times a year and two weeks after deworming.

Respiratory problems and coughing also are common horse ailments. An afflicted horse will cough and/or wheeze because of irritation in the airway. This could be caused or aggravated by dusty, moldy feed; fungal spores in hay; or being ridden in cold air.

Strangles, or equine distemper, is a fairly common, contagious disease that stems from an infection caused by Streptococcus equi bacteria. Young horses between 6 months and 5 years of age and very old horses are most susceptible to the disease.

Symptoms can be swollen lymph nodes in the head and neck regions, nasal discharge, lack of appetite, and high fever. Isolate any horses showing these symptoms in a clean, well-ventilated stall.

EPM, or equine protozoal myeloencephalitis, is a debilitating neurological disorder caused by a parasite that enters the horse through infected drinking water or food and settles in the spinal cord. Symptoms include lameness, weakness, loss of motor control, loss of appetite, muscle atrophy (loss of muscle), and paralysis. Tests cannot prove conclusively if a horse has EPM.

Most experts believe that the source of the parasite is opossum droppings. To help prevent the disease, protect water and feed from opossums, conduct proper grooming routines, and minimize stress to the horse.

Equine infectious anemia, also called swamp fever, is transmitted by biting flies and mosquitoes. The ailment attacks a horse's immune system, and there is no vaccine.

Symptoms include high fever, no appetite, labored breathing, pounding heartbeat, bleeding in the mouth, and leg swelling. Because this is a viral disease, no drugs can effectively treat it, Infected horses usually die within 30 days.

Moon blindness, or periodic ophthalmia, is the most common cause of blindness in horses. Not much is known about the condition, which causes an inflammation of the blood vessels in the eye. It usually affects only one eye and

46 HORSEMANSHIP 47

Some people believe the recurrence of moon blindness coincides with the phases of the moon, thus the name. often recurs. Thoroughbreds 2 to 3 years old are the most commonly affected, but horses of any age can become afflicted.

Symptoms include redness, increased tearing, half-closed, and painful-looking eyes, as well as swelling and tenderness of the eye or eyes.

Monday morning disease, or azoturia, is most often noticed when a horse has worked hard during the week while on full feed but gets sick when put to work on Monday (or any day) after a period of iddeness during which the horse continued to receive full feed. Though eating too much while idle is the cause, azoturia is regarded as a more complex issue, involving type of diet, vitamin deficiencies, and other factors.

When being worked or exercised again after the idleness, the loins and quarters stiffen and cramps result. Other symptoms might include a high temperature, sweating, and stiffening of the legs.

Common unsoundness is linked to a horse's conformation and includes anything that inhibits or interferes with the horse's strong, natural instincts or that affects the intended use of a horse.

Lameness is the impaired movement of the legs. A horse generally is considered lame when pain causes it to alter the usual weight distribution on one or more legs. Lameness can be caused from:

- · Inherited conformation faults
- · Bruised soles
- · Cracked or badly trimmed hooves
- · Tendon, ligament, or joint problems
- · A sore back
- · Improper riding (also called "rider-induced lameness")

Problems of Unsoundness

Splints are swellings and bony enlargements on the splint bones, which are small bones located near the cannon bone of each leg. Several things can cause splints, including faulty conformation, injuries, strains, and nutrition.

Ringbone is caused by faulty conformation, overwork on hard ground, poor nutrition, improper foot balance and shoeing, wire cuts, infections, or strained ligaments. Ringbone involves bone change or new bone growth at the pastern and/or coffin joints. The most severe condition can be life-threatening.

Lameness and an enlarged pastern are symptoms. Treatment includes complete rest for an entire season, immobilization of the affected joint for at least a month, anti-inflammatory drugs, and surgery.

Parrot mouth, also called overshot jaw, occurs when the upper incisors overlap the lower ones. Many foals that are slightly affected will grow out of it. Severe cases are unsightly and make grazing difficult for the horse.

Orthodontic treatments are available.

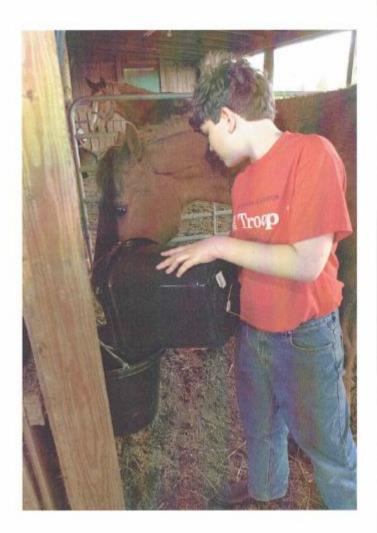
Bone spavin is joint disease, or arthritis, of the hock. Causes include strains, faulty hock conformation, mineral deficiency, injury, or working a young horse too much too early. Symptoms include the horse dragging its toe, firm swelling on the inside of the hind leg where the cannon bone joins the hock joint, a decrease in hock action, and lameness that disappears with exercise. Treatment varies; it could include complete rest, adding mineral supplements to the diet, or surgery.











Feeding Horses

Although horses are built to forage, it is not always practical to put a horse out to pasture. So, you will have to feed your horse. When feeding, there are a few rules to follow.

- Provide an amount of feed appropriate to the horse's activity level. Too much feed can cause digestive and circulatory problems. Too little feed can lead to a loss of energy, and it could harm the horse's overall condition.
- Do not feed a horse that is tired or overheated. Let a horse cool off sufficiently after exercise or work before allowing it to our
- Water is critical for a horse's health. It helps produce saliva and other fluids, regulates body temperature, carries nutrients through the body, and is important for digestion. A horse can drink from 4 to 15 or more gallons of water each day, depending on the weather, amount of work, and its age and size.

Horses have small stomachs and do best when fed a little at a time and often. After feeding, allow an hour for the horse to digest the food before exercising or working it.

To determine a correct proportion between hay and grain in your area, consult a veterinarian, horse nutritionist, or horse breeder. It is generally suggested that a horse doing light work (one to three hours daily) be fed 1½ to 1½ pounds of hay and ½ to 3¼ pound of grain per 100 pounds of weight. It is best to feed most of the hay (approximately two-thirds) at night, and the rest in two small feedings during the day.

Horses working or exercising under saddle for five to eight hours a day need about 11/4 pounds of hay and 11/4 or 11/3 pounds of grain per 100 pounds of weight. It is best to divide the food into four feedings during the day. If your horse is stabled, give it clean water before feeding.





Types of feed include commercial grain mix, bran, barley, hay, oats, com, apples, carrots, supplemental minerals and vitamins, and salt lick. Get a veterinarian's or nutritionist's advice before adding supplements.

Feed Me

Approximate amount of feed (hay and grain) per day can be determined by the size of the horse and its working conditions. If the horse is healthy, stabled, and not exercising, hay might be all it needs. Consult a veterinarian, horse nutritionist, or horse breeder to help you determine a proper feeding schedule.

Horse's Size	Amount of Feed Per
Under 12 hands*	14 to 16 pounds
12 to 13 hands	16 to 18 pounds
13 to 14 hands	20 to 22 pounds
14 to 15 hands	22 to 24 pounds
15 to 16 hands	24 to 26 pounds
Taller than 16 hands	26 to 28 pounds

*A hand is a unit of measure equal to 4 inches.

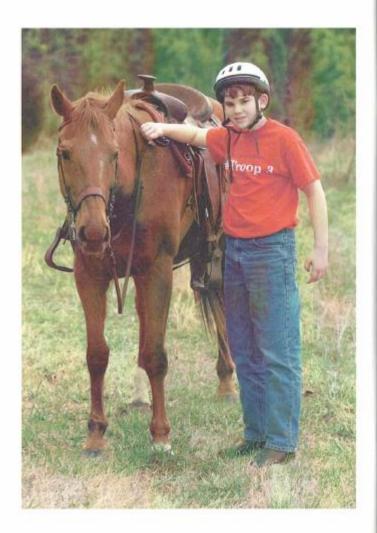
Feeding Tips

- Clean feed boxes regularly to keep them free of moldy feed.
- . Use only clean, bright, sweet-smelling hay.
- Avoid hand-feeding, which can lead to nipping and charging.
- Remember that mares with nursing foals need more protein than other mares, and young horses usually need more protein than older horses.
- Do not store more than a two-week supply of processed grain, and keep feed covered to avoid contamination with rodent feces.

Horses need a constant supply of salt, which can be provided by a salt lick block or by spreading loose, trace mineral-type salt in a shallow box. If you need to change the horse's diet, do so gradually to give its system time to adjust.

Horses left to pasture spend much of their time grazing on grass. They often have to eat a lot of grass to gain enough nutrients. If the pasture grass is poor in nutrients and vitamins, concentrated feed mix can help provide a more balanced diet.





Ready to Ride

Learning how to handle a horse is just as much a part of riding as being in the saddle. A good horseman needs to learn how to catch, lead, turn, back, saddle, and bridle a horse.

Never enter a field of horses alone.

Catching a Horse

When you first try to catch a horse, have a more experienced person help you. Walk slowly toward the horse at an angle while talking gently to let the horse know you are there.

Consider renting a good lesson horse by the hour to learn how to ride and perform other merit badge requirements.

Do not chase the horse if it runs. Continue walking slowly toward the horse without looking directly at it, keeping your halter or lead rope draped over your left arm. If the horse does not let you get close, try standing still. It might get curious and come to you. Approach from the left because that is where you will always saddle the horse and mount it.

Haltering

Before approaching a horse, unbuckle the halter and attach the rope to it. Lead ropes are about 5 feet long and 3/4 inch in diameter with a spring or trigger clip on one end, which attaches to the halter.

Never approach a horse from behind or unannounced.



A correctly adjusted halter should fit snugly, with the noseband 2 inches below the bony point of the horse's cheek. If the noseband is too low, it could damage fragile nasal bones and tissues. If the halter is too loose, it will slide around and could come off. You should be able to fit two fingers between the horse and the noseband.



Step 1—Approach the horse from the left shoulder. Talk to the horse gently and reassuringly.

Step 2—Rub the horse's shoulder, then slip the lead rope under the horse's neck with your left hand. Put your right hand over the horse's neck and take the rope from your left hand.

Step 3—Hold the rope together in your right hand to help restrain the horse. Have the rope and halter strap in your left hand and the halter buckle in your right hand.

Step 4—Position the noseband so that the horse's nose will slide into it. Then raise the halter into position.

Step 5—Position the halter strap over the horse's head, just behind the ears, then fasten the buckle. Remove the loop of rope from around the neck.

To remove the halter, release the buckle. The halter then can be slipped forward over the nose and removed. When storing the halter, do not let it dangle near the floor where you or the horse might trip on it.



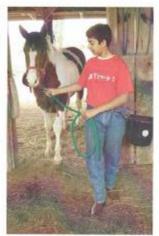
Once the horse is haltered, stand on the near side. Take the lead rope in your right hand, right beneath the jaw. Hold the slack folded in your left hand with your fingers around the outside of the rope.

Position yourself at the horse's shoulder and face forward. Now you can guide the horse forward using the lead rope. With your right arm near or against the horse's shoulder, you can feel its actions and anticipate its moves. Look where you are going (not at the horse) and keep a decent pace, but do not rush the horse. If the horse tries to get ahead of you, tug lightly a couple of times on the lead rope to slow it down. If the horse tries to charge ahead, circle the horse around you, using your elbow in its neck if necessary.

Walk calmly but decisively. When you change directions, always turn to the right. A trained horse might need only a touch on the neck to move to the right. Otherwise, you might have to straighten your right arm and push the horse's head or neck. Always maintain your position at the horse's shoulder. Slow your pace when you want the horse to slow down, and gently pull on the lead rope.

Before entering a narrow opening such as a doorway, stop the horse. If necessary, increase the tension on the lead to increase your control. Walk through the door in front of the horse. If the horse starts to rush through and you cannot hold it back, do not try to pass it. Stand still. Turn to face the horse's shoulder, even if you have to let the horse loose. To avoid this situation, be sure you have trained long enough so that you can control the horse before trying to lead it through a door or gate.





To prevent rope burns and pinches, wear gloves when working with your horse.

English saddles do not come with girths, stirrup leathers, or stirrup irons. These are sold separately. Western saddles, on the other hand, always include stirrups and usually cinches, too.

Tying

When you tie a horse, use a strong lead rope; do not use reins. Make sure to tie the horse in a safe place away from other horses, barbed wire, machinery, movable equipment, and other such objects. Use a quick-release knot so that it can be undone with one tug of the free end in case of emergency.

The tying point should be as high as the horse's head and above the height of its withers. If the tie is low or slips down a pole, the horse could get tangled in the rope. Also, do not use a long rope; the horse could step on it, trip, or get tangled. Mind the saying, "Eye high and arm long," when tying a horse.

Saddling

Whether saddling a horse with a Western or an English saddle, you will follow certain procedures. You might need help controlling the horse the first few times you attempt saddling.

Halter the horse and tie it using a quick-release knot. Then brush the horse to remove any caked dirt, remembering its belly and brisket area. Talk to the horse reassuringly.



Step 1—Shake out the saddle blanket or pad. (Because they are easily frightened, do not do this with the horse nearby.) Inspect it carefully, removing any objects that might cause discomfort, such as burrs.

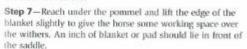
Step 2—Approaching the horse from the near (left) side, place the blanket or pad well up on the withers and then drag it back a few inches to smooth down the hairs. Step 3—Balance the blanket or pad evenly on the horse. Make sure there are no wrinkles.

Step 4—Before placing a saddle on the horse's back, lay all of the dangling pieces such as the stirrups, cinch, and latigo over the top of the saddle to prevent them from banging on the borse's side and startling it. On an English saddle, run the stirrup irons up the stirrup leathers, or cross them securely over the top of the saddle. On the Western saddle, lay the cinches, the right stirrup, saddle strings, and other rigging over the seat.

Step 5—Place your left hand in the saddle gullet and the right hand on the rear skirts. On English saddles, and on Western saddles with a Cheyenne roll on the cantle, grasp the cantle

with the right hand. Lift the saddle slowly and high enough so that the flaps do not brush against the horse, and place the saddle gently near the horse's withers.

Step 6—Slide the saddle backward until it sits just behind the withers Be careful to properly place the saddle on the horse's back, because if it is too far back over the soft part of the horse's back, it can cause kidney problems or back pain. If it is too far forward, it will restrict the horse's shoulder movement.



Step 8—Slide both the pad and saddle into position, and make sure the saddle is level. Lift the pad well into the gullet or fork of the saddle. If the saddle pad has any tabs or straps to secure it to the saddle, attack them. Go to the right-hand side of the horse and secure the saddle pad on that side also. Then gently drop the girth or cinches, making sure they are not twisted. Pull out any saddle strings from under the saddle. On a Western saddle, gently put down the right stirrup. On an English saddle, leave the stirrup irons up until you are ready to mount.

Be sure to line up the clinch slightly behind the front legs.



Step 9—Return to the near side to cinch the horse. Do not fasten the girth too tightly at first because the horse will breathe in and puff out its chest when you first put on the saddle. After a couple of minutes, when the horse breathes out, you can tighten the girth more securely. The girth should fit smugly under the chest or "barrel," behind the horse's elbows. You

should be able to just slide your hand between the girth and the horse's skin.

If the horse's skin wrinkles under the girth, move the left foot forward with your toe. Or, pick up the left front foot firmly and pull it forward to get rid of the wrinkes. Some saddles will have a buckle guard fitted to the girth. Pull the buckle guard over the girth buckles to prevent rubbing.

Latigo Knot

On a Western saddle, the cinch is formed with a latigo knot.

Step 1—Loosely loop the latigo, or cinch strap, through the cinch ring and Dee ring twice.

Step 2—Pull the latigo out to the side, cross it over the looped latigo, put it up under the Dee ring and then out through the Dee ring.

Step 3—Place the latigo under the crossed-over section and pull it down.

Step 4—Pull up on the cinch and pull down on the end of the latigo to take up the slack and tighten the cinch.











To make sure the Western saddle fits, have an experienced rider mount the horse. With the horse mounted, three fingers should fit between the arch of the pommel and the horse's withers. To make sure that the saddle tree is the correct width, put three fingers with a flat hand sideways between the saddle and the top of the horse's shoulder. If your hand fits too loosely, the saddle tree is too narrow. If you have to squeeze your fingers, the tree is too wide.



With an English saddle, have someone sit in the saddle with their feet in the stirrups. Again, slide your fingers under the pommel. Three fingers should fit comfortably between the horse's withers and the arch below the pommel. The saddle should not inhibit the horse's shoulder movement. Then stand behind the horse and look under the saddle. You should see some light between the horse and the saddle when the horse's head is down.

After you have checked that the girth is secure, adjust the stirrups before riding. An experienced horseman can show you how to adjust the stirrups to fit you.

Bridling

Bridle a horse after saddling, Although the Western and English bridles differ somewhat, the procedure for bridling is basically the same.

Step 1—Gently talk to the horse while you approach from its left.

Step 2—Unfasten and reposition the halter around the horse's neck. This way, the horse remains tied while you work. Keep the reins over your left arm to keep them out from underfoot. Unbuckle the throatlatch and noseband, then put the reins over the horse's head and neck.





Step 3—Hold the bridle with the bit in your left hand and the top of the bridle in your right hand. Guide the bit into the horse's mouth while gently pulling up on the bridle with your right hand. You might need to gently press the horse's gum at the gap between the teeth to get the horse to open its mouth.

Step 4—Continue to gently pull the bit over the horse's tongue by lifting the bridle with your right hand and guiding the bit with your left hand. Never force the shank of the bit between the horse's teeth. If you hurt the horse's gums, the horse might resist the next time you try inserting the bit.

Step 5—Use both hands to position the headpiece. Slide it over the horse's ears, one piece at a time, over the left ear first. Be careful not to pull on the ears.

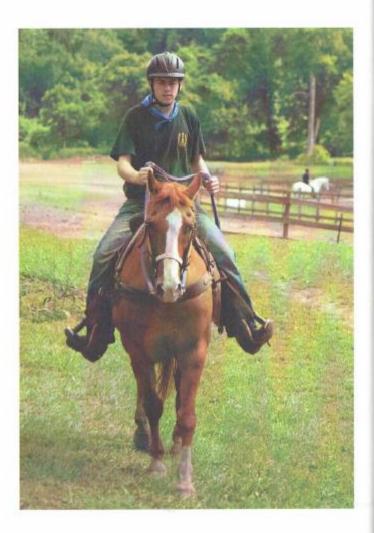
Step 6—Pull the horse's forelock over the browband, and then check from the front to make sure the bit, noseband, and browband are level and not twisted. Check again to make sure the bit is over the tongue. Step 7—Fasten the noseband, if your bridle has one, so that it fits sougly and inside the cheekpieces. You should be able to slip four fingers in the space between the throatlash and the horse's jaw. You should be able to place one finger between the noseband and the horse's nose, and two fingers under the browband.

Step 8—When putting on the bridle, keep your head clear to avoid being hit if the horse throws back its head. Before you fasten the buckles, check to see that the bit fits the horse's mouth. If there are two or three wrinkles at the corners of the horse's mouth, the bit is too high.

After the borse is saddled and bridled, lead the borse by holding the reins under the bit with your right hand. Hold the other end of

the reins in your left hand so that you are leading the horse with both hands. The horse should move just by urging it with the weight of the reins. Do not tug.





Riding

Riding is basically a matter of balance and control. You will learn balance with practice, and control will come as you learn the proper riding techniques. Learning to ride correctly requires time and patience.

A good rider keeps arms and hands quiet, moving them only back, forth, or sideways—never up and down. Do not jerk the reins, and do not pull or tug very long or you could burt the horse's tender mouth.

Develop a soft, relaxed, give-and-take grip on the reins to help maintain easy contact with the horse's mouth. When first learning to ride, let your hands follow the bobbing of the horse's head by keeping your shoulders and elhows loose so they can "open" and "close" with the horse's movements.

Even though a horse's mouth is tender, it will resist your pull on the reins. Because a horse can pull harder than you can, it can develop a hard mouth—one that becomes insensitive—if you pull too hard or too long on the reins.

When learning Western and/or English riding, you will use aids such as your voice, legs, hands, weight, and reins to control your horse.

Western Horsemanship

Western riding probably originated with the arrival of Spanish conquistadors in the Americas in the early 1500s. But Western riding as it is practiced today developed on cattle ranches in the Western United States and Mexico.

As Western horse shows grew more popular, the style became standardized. Western-style riding includes trail; show classes, such as pleasure and reining; and competitions that include rodeo, cutting, barrel racing, and pole bending. The obvious difference between Western and English riding is that in most Western show events, the reins are held in one hand only—the left hand. However, in classes for junior horses, rules allow for two hands with certain bits and bridles. Also, Western riders generally do not use their legs to maintain a gait. Judges look for slack in the reins, which makes it important to learn how to control your horse without tugging on the reins.

Western riders should sit tall in the saddle with head up, back straight, shoulders level and square, and feet deep in the stirrups with beels below the toes and knees slightly flexed. Ride relaxed, but alert.

Mounting



Step 1—Speak gently to the horse as you stand facing it on the left side, even with the saddle. Grasp the reins evenly in your left hand, short enough to stop the horse if it tries to move. Place your left hand firmly on the horse's neck, just in front of the withers.

Step 2—Steady the stirrup with your right hand. Raise your left foot into the stirrup and brace your knee against the horse.

Step 3—With the foot well into the stirrup, take hold of the saddle born with your right hand and spring straight up with your right foot until you are standing with your right foot even with the

left. Lean forward just enough to keep your balance. Your left hand can rest on the horse's neck.

Step 4—Swing your right leg over the saddle, being careful not to kick the borse. Ease lightly into the saddle.

Step 5—Place your right foot in the right stirrup. If the horse tries to move, hold it in check with the reins using your left hand. Hold the reins in your left hand just in front of the saddle horn. Rest the right hand on your thigh.

Dismounting

Step 1—Place your left hand, holding the reins, on the horse's neck and grasp the saddle horn with your right hand. Lean slightly forward and shift your weight to the left stirrup.

Step 2—Swing your right leg backward over the saddle, again being careful not to hit the horse.

Step 3—Continue to step down, place your right foot on the ground, and remove your left foot from the stirrup.
Practice so that you can mount and dismount in a smooth,

Practice so that you can mount and dismount in a smooth, easy movement.

The Gaits

Horses have four natural gaits—walk, trot, canter, and gallop plus some specialized ones.

The walk is a four-beat gait in which the horse's feet touch the ground in even intervals. To move into a walk, lean slightly forward in the saddle, from the hips up. Shift a little more of your weight to the stirrups and urge the horse forward with leg pressure. Hold the reins lightly and do not pull on the horse's mouth. Keep your thighs and upper calves in close contact with the horse, Ride more forward and not with your seat on the cantle.

The **trot** is a two-beat diagonal gait where the opposite front and hind feet touch the ground together. To put your horse into a slow trot, take the slack out of the reins to prevent the horse from starting too fast, and lean a little farther forward. Putting a little more weight in the stirrups will help keep you from bouncing. To go to a fast trot, urge the horse to the desired pace by squeezing the horse with your legs and heels.

In Western riding, the jog or slow trot is ridden by absorbing the slight jar through your knees and back. With your legs slightly bent and your heels down, your knees and ankles act as shock absorbers. The fast trot, Western style, is ridden by standing slightly in the stirrups and resting your free hand on the saddle horn, if you need to, for balance.

The lope or **canter** is a rhythmical three-beat diagonal gait:
(1) one hind foot hits the ground, then (2) the opposite front
foot and the other hind foot hit the ground together, followed by
(3) the other front foot. To canter from a walk, gather the horse
slightly in the reins. Pull on the reins slightly to one side and
press with the leg on the same side, then release the head. The
sudden release and shifting your weight cause the horse to shift

If you are short or have a tall horse, you may have to lean into the saddle, remove your left foot from the stirrup, and slide down on your right hip to avoid falling or getting your left foot caught in the stirrup.

Beginning English riders must learn to post while the horse trots. Posting is an up-down movement that makes the trot more comfortable.

its weight and step out on the foot you have indicated. The horse should break directly from a walk to a lope. Don't go into a canter from a trot, because the horse will learn to do that and will never be dependable at an extended trot.

To ride a canter, lean forward from the hips up without slumping in the saddle. Give your horse some slack in the reins but do not let them flop. Keep your elbows near your body at all times and not flapping up and down. Always keep your heels low.

The gallop is a series of four beats, but the sequence of footfalls will vary according to the speed. When the right fore-leg leads, the sequence will be left hind leg, right hind leg, left foreleg, right foreleg. This will be followed by a full suspension when all four hooves are off the ground. In a gallop, lean slightly forward from the hips up and raise your seat slightly. This is a typical cue used to prompt a gallop.

Reining

In Western riding, horses are taught to turn by the weight of the rein against the neck. To turn left, move your rein hand to the left so that the right rein falls against the horse's neck. To go right, move your rein hand to the right.

English Horsemanship

The basics of riding are the same whether the style is Western or English. However, the styles have different traditions, equipment, and purposes. Also, English riding techniques involve coordinating the legs, reins, and balance to control the horse. The rider might not feel as secure in an English saddle as in the wider Western saddle, which has a saddle horn and a raised cautle and pommel.

Among the events in which English riders can participate include dressage, hunter or jumper, and eventing or combined training.

In dressage (pronounced dress-AHGE), horse and rider must perform a series of designated movements in an arena before judges. The goal is precision and harmony in movements. The hunter jumper course is an obstacle course over fences that the horse and rider must complete as faultlessly as possible. Eventing, or combined training, is a three-day triathlon for the horse-and-rider team. It combines the skills of dressage, cross-country, and jumping.

Holding the Reins

With a single-rein bridle (see 1), to hold the reins with both hands, each rein should come into your hand under the little finger and pass between the thumb and forefinger, continuing on over the thumb.

To use one hand (correctly, the left hand; see 2), the near-side rein should pass under the little finger and out through the thumb and forefinger. The offside rein should pass through the hand in the opposite direction, and on top of the near-side rein (in through the thumb and forefinger and out under the little finger).

With a double-rein bridle (see 3), to hold the reins with both hands, take the snaffle rein in your hands as described above for the single-rein bridle, leaving the bight of the curb rein on the horse's withers. Keep the snaffle rein in your hands, open up the forefinger and second finger on each hand and with them pick up the curb rein at about the same length as you are holding the snaffle rein. The curb rein should be just a little looser than the snaffle rein.

To pull the curb rein and loosen the snaffle rein, bend your hands down at the wrists toward the horse's withers, rolling the backs of the hands toward each other if necessary to maintain tension.

To hold double reins in one hand (see 4), the snaffle rein is held the same as for a single-rein bridle; the near-side curb rein should pass between the second and third finger and the off-side curb between the forefinger and second finger, crossing inside, the off side over the near side.









NEAR SMAFFLE REIN

3 HORSEMANSHIP 69

English riding clothes include breeches, which usually are made of stretch material and worn with riding boots; a sweater or thick shirt in cold weather; jodhpur boots, which are worn with jodhpurs (pants made from two-way stretch materials that are longer than breeches); a hacking jacket; a tie or stock for hunting or hacking; a shirt with collar for showing; string or wool gloves; and a protective cap. English riders also carry a jumping, cross-country, or keeper whip to guide the horse using a slight tap; it is never used to discipline or hurt a horse.





Mounting

Step 1—Hold the left rein in the left hand. With the right hand, pull the right rein to take up the slack on the off side.

Step 2—With the left rein in the left hand, bring the hand up until it meets the right rein on the horse's neck just in front of the withers. Take both reins in the left hand. The leftover reins should drop neatly alongside the shoulder of the horse, and where they will not eatch in the stirrup.

Step 3—Open the fingers of the left hand enough to grasp a handful of the horse's mane to help pull you up, Do not pull on the reins when you mount; it will hurt the horse's mouth.

Step 4—Take the stirrup in your right hand and turn it toward you. Place the ball of your left foot in the stirrup, keeping your heel down.

Step 5—Grasp the cantle with your right hand. In a springlike movement from your right leg, push yourself up and stand straight with the right foot even with the left and your weight balanced over the horse's back. Be sure not to jab the horse with your toe.

Step 6—As you stand in the left stirrup, your weight should be on your arms and left leg. Lean on your left arm and move your right hand from the cantle to the right-hand side of the pommel. At the same time, swing your right leg over the horse's back, taking care not to kick the horse.

Step 7—Place your right foot in the right stirrup, settle gently into the saddle, and take the reins in both hands.

Dismounting

Step 1-Gather the reins in your left hand on the horse's neck.

Step 2—Place your right hand on the pommel, then take your right foot from the stirrup and pass your right leg over the horse's back without touching it.

Step 3-Shift your right hand to the cantle.

Step 4—Keeping your weight on your hands, take your left foot from the stirrup and drop lightly to the ground, sliding down the horse's side.

Position and Reining

Keep your head up and eyes ahead. Your back should be straight, but not stiff. Keep your arms and hands flexible, and your elbows bent. The reins should be held evenly in each hand in front of the horse's withers and about 2 inches apart.

Sit in the deep part of the saddle, not on the cantle. There should be enough space behind you for the width of your hand. Place the ball of each foot on the inside of the stirrup iron so that your feet are turned out slightly and your heels hang below your toes. Use your calves to apply pressure to signal the horse, Keep your elbows close to your sides.

Both hands hold the reins in English riding, and horses are trained to respond to direct pressure on the mouth. When using two reins (one pair), let them pass between the last two fingers of each hand, up from beneath your hands, and out between the thumb and first finger. Your thumbs should hold the reins in place. The loop that is formed falls over your hands, down to the horse's right shoulder.

You can carry a crop, an English riding whip, when trotting or cantering. It is held in the right hand along with the rein. To use it, take both reins in your left hand and tap the horse briskly behind the girth.

70 HORSEMANSHIP 71



Turning

When riding, always look in the direction you want to go. This includes turning. The slight change in your weight in the saddle helps the horse understand your requests. To turn left, move both hands slightly sideways to put pressure on the right side of the horse's neck. Move the hands in the opposite direction to turn right. While walking the horse, practice turning in both directions, then circle the horse to the right and to the left.

Stopping

Learn how to stop your horse without jerking back or pulling too hard on the reins. This action can burt your horse's mouth, and it will cause the horse to begin resisting you.

To stop while English riding, sit down firmly in the saddle, and set your hands while not yielding to the horse's head motion. Be firm on the reins, but gentle.

Riding the Canter (English)

Because of its easy rolling motion, the lope or canter is probably the most popular gait. At the canter, your hands continue to restrain too much forward movement while remaining easy on the horse's mouth. Your weight should be more on your knees than heels. You rock gently forward and down as the horse moves away beneath you and rises again at the next stride. Once you have the feel of it, it is easy to relax and let your body follow the motion of the horse.

It is best to break a horse into the canter from a walk.

Posting the Trot

Once you have learned how to walk, turn, stop, and back your horse, you are ready to go to the trot. In English riding, you should learn to post. This in an up-down, up-down movement that makes the trot more comfortable for both you and the horse.

Shorten the reins, bend slightly forward, and use your legs or heels to urge your horse from a walk into a trot. For a moment just sit there, letting your knees and ankles absorb the shocks and jobs.

To post, use your thigh muscles to hold yourself in the air while the horse's hooves strike the ground, thus avoiding the jolt. Then let yourself down until the horse's leg action pushes you up again. Allow yourself to be "thrown" out of the saddle with each thrust of a hind leg, and to land back in the saddle at the instant of the next thrust. Repeat the motion in rhythm with the horse's movement.

Don't stand up in the stirrups or heave yourself out of the saddle. Let the horse do most of the work by giving the push while you help by holding yourself up momentarily with your log muscles.

It will take practice. Most people find posting the most difficult part of English riding. The trick is to balance from your heels and knees. If your heels are well down and your weight forward, posting is simply a matter of rolling onto your knees and rising up and slightly forward about an inch out of the saddle.

You can throw your mount off balance if you post on the wrong diagonal. In a small circle at a fast trot you can throw your borse to the ground. Remember, post on the outside diagonal—the leg next to the rail in an enclosed area.

To change diagonals, as you would in a figure eight at the intersection of the two circles, don't rise on the count. Instead, skip one beat and rise on the following count. You will then be on the opposite diagonal.

Don't come down with a thump. You should post at the same speed as the horse trots and change speeds as he goes faster or slower.

Correcting Poor Habits

To prevent a horse from developing and keeping poor habits, correct them as quickly as possible.

Do not let the horse head for the barn, stable, or its "home" every time it is near. Practice riding the horse in front of the stable or barn without letting it stop there. When you are ready to dismount, ride away from the barn, stop, dismount, and lead the horse back to the stable or barn.

When a horse attempts to bite, push it away and say "No!" in a firm voice. Praise the horse when it does not try to bite. If a horse bites, you need to find out why. It could be that the horse expects a treat. Restrict or quit giving treats, if this is the reason. A horse might bite during grooming or cinching if you are careless or too rough.

If a horse ever attacks with its teeth, do not attempt to deal with it. Seek the advice of a horse expert.

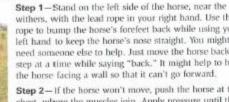
Never back a horse by pulling or jerking on the mouth!

Backing While Mounted

Backing while mounted is helpful when you need to back up a few steps to get out of a tight spot on the trail. Walk your horse forward, gently but firmly restricting the motion so that your horse lifts its leg forward then drops it back because it cannot go forward without straining the rein. The horse should only back one, two, or three steps. Keep your horse quiet, calm, and straight while backing.

Backing Up Straight

As you teach your horse to move backward with a halter, remember that horses dislike moving backward. Your horse's first reaction might be to raise its head and plant its hind feet. However, there is an effective way to teach your horse to back up.



withers, with the lead rope in your right hand. Use the rope to bump the horse's forefeet back while using your left hand to keep the horse's nose straight. You might need someone else to help. Just move the horse back a step at a time while saying "back." It might help to have the horse facing a wall so that it can't go forward.

Step 2-If the horse won't move, push the horse at the chest, where the muscles join. Apply pressure until the horse steps back. Then release and repeat.

As the horse learns to move back, touch it lightly on the chest less and less often until it backs with just the pressure from the halter rope or when you say "back."



Unsaddling

After your ride, make sure the horse has cooled off and relaxed before taking it to the stable or barn. When you have stopped the horse, pat it on the neck. Now dismount to the left, and lift the reins over the horse's head.

After dismounting an English saddle, run the stirrups up the leathers, making sure they do not flop. Unbuckle the girth on the near (left) side of the horse and lay it over the seat.

On a Western saddle, lay the "left" stirrup over the saddle or hook the stirrup on the horn. Untie the latigo knot and

completely release the cinch, Take the cinch (latigo) strap and wrap on the front D-ring a couple of times to ensure that it doesn't drag on the ground. Move to the off (right) side of your horse and tie the cinch using the saddle strings or the cinch tab.

Place one hand on the pommel and the other hand on the cantle. Lift the saddle off the horse's back and set the saddle on the ground. It is usually best to prop it against a wall with the pommel down.

Before taking off the bridle, strap a halter around the horse's neck so that you can maintain control. Undo the noseband and the throatlatch from the bridle, and lift the headpiece and reins together over the ears. The bit will drop from the horse's mouth when you do this.

Next, fasten the halter and tie the horse while you put your tack away.

There are two ways to carry a saddle. One way is to place it on your right arm with the pommel in the crook of your elbow and the cantle end in your left hand. The second is to put the headpiece of the bridle and the reins on your left shoulder. This will leave your hands free to carry the saddle.

Lastly, groom your horse and clean the tack.

Stable Safety

In case of an emergency, it's important to keep certain items handy in the stable. Spotlights, flashlights, fire extinguishers, and ropes with easily loosened knots or snap fasteners all are items that may be necessary in an emergency.

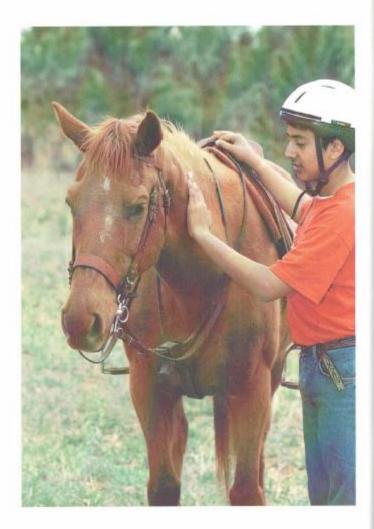
Fire Prevention Tips

- · Stable horses in a building separate from machinery, fuel, lubricants, paint, and fertilizers.
- · Store feed and bedding in a building separate from where horses are stabled.
- · Keep matches and flammable materials outside the stable area.
- · Pile manure away from the stable because manure builds beat.
- . Buy or store only well-cured hav and bedding, Damp grass is a hazard because it builds heat and might ignite by spontaneous combustion.
- · Do not allow smoking in the stable area.

As you remove the bridle, do not pull the bit from the horse's mouth-you might hurt the horse. Let the bit fall out as you remove the bridle.

Keep a balter with a lead rope on each stall door. In case of an emergency, you won't have to look for one for each horse.

75



Horsemanship and You

By now you know what it takes to be a kind and responsible horseman. Just remember to practice your riding and handling skills slowly and methodically. As you do, you will notice that you become more comfortable and many of the skills will become second nature. If you are consistent with your handling and riding skills, you will be able to work with any kind of horse.

It is important to be respectful of horses' nature.

Remember that they do not think like people do, but if you communicate with them in ways they understand, they make wonderful companions and riding partners. One of the most rewarding things about horsemanship is the deep and lasting trust you can have with your horse.

You might discover that you enjoy horsemanship enough to own your own horse or to compete in rodeos or jumping events. Whether you use your horsemanship skills for pleasure rides or competition, horsemanship is more than just riding a horse; it is a practice of respect for horses and your relationship with them.

Horsemanship Resources

Scouting Literature

Fieldbook; Animal Science, Mammal Study, and Veterinary Medicine merit badge pamphlets

Visit the Boy Scouts of America's official retail website at http:// www.scoutstuff.org for a complete listing of all merit badge pamphlets and other helpful Scouting materials and supplies.

Books

Bennett-Talbot, Betty. Games on Horseback. Storey Books, 1999.

Edwards, Elwyn. The New Encyclopedia of the Horse. DK, 2001.

Haas, Jessie, Safe Horse, Safe Rider. Storey Books, 1994.

Harris, Susan. United States Pony Club Manual of Horsemanship: Basics for Beginners. Howell Book House, 1994.

Hayes, Karen. Hands-On Horse Care. Trafalgar Square Press, 1997.

Henderson, Carolyn. The New Book of Saddlery and Tack. Sterling, 2002.

Hill, Cherry. Horse Handling and Growning. Storey Books, 1997. Ramey, David. Concise Guide to Nutrition in the Horse. Hungry Minds, 1998.

Rodenas, Paul. Random House Book of Horses and Horsemanship. Random House, 1997.

Vogel, Colin. The Complete Horse Care Manual. DK, 1995.

Magazines

P.O. Box 8237 Lexington, KY 40533

Website:

http://www.horsechannel.com/horsemagazines/horse-illustrated

Horse & Rider

Website: http://www.equisearch.com/ horseandrider

Practical Horseman

Website: http://www.equisearch.com/ practicalhorseman

Organizations and Websites

http://www.equestriantimes.com

International Equestrian News Network

P.O. Box 227 Marshfield Hills, MA 02051 Telephone: 781-834-7137 Website: Oklahoma City, OK 73107 Telephone: 405-946-7400 Website: http://www.nrha.com

National Reining Horse Association

Pony of the Americas Club 3828 South Emerson Ave.

3000 NW 10th St.

Indianapolis, IN 46203 Telephone: 317-288-0107

Website: http://www.poac.org

United States Dressage Federation

4051 Iron Works Parkway Lexington, KY 40511 Telephone: 859-971-2277 Website: http://www.usdf.org

United States Equestrian Team Foundation

1040 Pottersville Road P.O. Box 355 Gladstone, NJ 07934-9955 Telephone: 908-234-1251 Website: http://www.uset.com

United States Eventing Association 525 Old Waterford Road NW

Leesburg, VA 20176 Telephone: 703-779-0440 Website: http://www.useventing.com

The United States Pony Clubs

4041 Iron Works Parkway Lexington, KY 40511 Telephone: 859-254-7669 Website: http://www.ponyclub.org

Acknowledgments

The Boy Scouts of America gratefully acknowledges the assistance of the Horse Trail Guide Committee of the Greater St. Louis Area Council with this revision of the Horsemanship merit badge pamphlet. The Committee and Council graciously hosted a photo shoot at their summer Horse Camp, and a number of the images shot there can be seen herein.

Thanks to Susan A. Herking of the Certified Horsemanship Association and Instructional Services Inc., and Phil Peterson, director, Miracle Ranch, Poulsbo. Washington, in preparing the 2003 revision of this merit badge pamphlet. Thanks also to Dr. Dale Linebaugh, director, Miracle Mountain Ranch Missions, Spring Creek, Pennsylvania, and to riding instructor and trainer Don Matschull, Plano, Texas, for their expertise and assistance.

We appreciate the Quicklist Consulting Committee of the Association for Library Service to Children, a division of the American Library Association, for its assistance with updating the resources section of this merit badge panuallet.

Photo and Illustration Credits

American Morgan Horse Association, courtesy—page 18 (Morgan)

American Quarter Horse Journal, courtesy—page 19 (top)

BananaStock-page 37

Chris Evans, River to River CWMA, Bugwood.org, courtesy—page 44 (bracken fern and yew tree)

Mary Ellen Harte, Bugwood.org, courtesy—page 44 (raguort)

Im Your Gold Huckleberry, Tennessee Walking Horse Stallion, owned by Mary Bittner of Deer Creek Walkers, Quitman, Texas, courtesy—page 13 (palomino)

78

HORSEMANSHIP RESOURCES =

Steven Katovich, USDA Forest Service, Bugwood.org, courtesypage 44 (acorns)

Ohio State Weed Lab Archive, Ohio State University, Bugwood.org. courtesy-page 44 (hemlock)

OPhotos.com—pages 3, 9, 11 (photo). 13 (Pinto), and 53

U.S. Department of Agriculture/ Bob Nichols, courtesy-page 3

U.S. Department of Agriculture/ Bill Tarpenning, courtesypage 13 (Appaloosa)

Wikipedia.org/Appaloosas, courtesypage 16

Wikipedia.org/Arsdelicata, courtesypage 13 (dun)

Wikipedia.org/Dan Dee Shots, courtesy-page 18 (Tennessee walker)

Wikipedia.org/Ealdgyth, courtesypage 17 (top)

Wikipedia.org/Paula Jantunen, courtesy-page 13 (buckskin)

Wikipedia.org/Belinda Hankins Miller, courtesy-page 38 (bottom)

Wikipedia.org/Kersti Nebelsiek, courtesy-page 19 (bottom right)

Wikipedia.org/USDA/Bill Tarpenning, courtesy-page 17 (Clydesdale)

All other photos and illustrations not mentioned above are the property of or are protected by the Boy Scouts of America.

Daniel Giles-cover (top left, center left); pages 4, 6, 22, 26, 30-33, 35-36, 38 (top), 41-42, 45, 50, 52, 54, 56 (both), 57 (both), 61-63 (all), 70 (both), 72, 74, and 76

John McDearmon-all illustrations on the cover and on pages 10-12, 20-21, 27-29, 36, 38-39, 49, 56, 60,

Brian Payne-cover (bridle); page 34



HORSEMANSHIP

MERIT BADGE LIBRARY

Though intended as an aid to Boy Scouts, Varsity Scouts, and qualified Venturers in meeting merit badge requirements, these pamphlets are of general interest and are made available by many schools and public libraries. The latest revision date of each pamphlet might not correspond with the copyright date shown below, because this list is corrected only once a year, in January. Any number of ment badge pamphlets may be revised throughout the year; others are simply reprinted until a revision becomes necessary.

If a Scout has already started working on a merit badge when a new edition for that pamphlet is introduced, he may continue to use the same ment budge pamphlet to earn the badge and fulfill the requirements therein. In other words, the Scout need not start all over again with the new pamphlet and possibly revised requirements.

Merit Badge Pamphlet	Year	Merit Badge Pamphlet	Year	Merit Badge Pamphlet	Year
American Business	2002	Engineering	2008	Photography	2005
American Cultures	2005	Entrepreneurship	2006	Pioneering	2006
American Heritage	2005		2006		2005
American Labor	2006		2005	Plumbing	2004
Animal Science	2006		2008	Pottery	2008
Archaeology	2006	Fingerprinting	2003	Public Health	2005
Archery	2004	Fire Salety	2004	Public Speaking	2002
Architecture	2008		2007		2006
Art	2006	Fish and Wildlife		Radio	2006
Astronomy	2004	Management	2004		2003
Athletics	2006	Fishing	2009		2003
Automotive Maintenance	2008	Fly-Fishing	2009		
Aviation	2006	Forestry	2005	Amphibian Study	2005
Backpacking	2007	Gardening	5005		2001
Basketry	2003	Genealogy	2005		2006
Bird Study	2005	Geology	2005	Sufety	2006
Bugling (see Music)		Golf	2002	Salesmanship	2003
Camping	2005		2006		2004
Carioeing	2004	Hiking	2007	Scuba Diving	2009
Chemistry	2004	Home Repairs	2009		2007
Ginematography	2008	Horsemanship	2003		2005
Citizenship in the		Indian Lore	2008		2005
Community	2006	Insect Study	2008	Small-Boat Sailing	2004
Citizenship in the Nation	2006		2006	Snow Sports	2007
Citizenship in the World	2005		2008	Soi and Water	
Climbing	2006	Law	2003	Conservation	2004
Coin Collecting	2008	Leatherwork	2002	Space Exploration	2004
Collections	2008		2008	Sports	2006
Communication	2009	Mammal Study	2003	Stamp Collecting	2007
Composite Materials	2006		2009	Surveying	2004
Computers	2009	Metalwork	2007	Swimming	2008
Cooking	2007	Model Design and Building	2003	Textile	2003
Crime Prevention	2006	Motorboating	2008	Theater	2005
Cyclina	2003	Music and Bugling	2003	Traffic Safety	2006
Dentistry	2006		2003	Truck Transportation	2005
Disabilities Awarmness	2005	Nuclear Science	2004	Veterinary Medicine	2005
Dog Care	2003	Oceanography	2009	Water Sports	2007
Drafting	2008		2003	Weather	2006
Electricity	2004	Painting	2008	Whitewater	2005
Dectronics	2004	Personal Fitness	2006	Wilderness Survival	2007
Emergency Preparedness	2008	Personal Management	2003	Wood Carving	2006
Energy	2006	Pets	2003	Woodwork	2003

BOY SCOUTS OF AMERICA . SUPPLY GROUP

NATIONAL DISTRIBUTION CENTER

2109 Westinghouse Boulevard P.O. Box 7143 Charlotte, NC 28241-7143

www.scoutstuff.org

DIRECT MAIL CENTER

P.O. Box 909 Pineville, NC 28134-0909 For fast credit card orders-VISA, MasterCard, American Expresscall BSA operators toll-free 1-800-323-0732