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Introduction to Horse Management

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Before experiencing the pleasure of owning a horse, certain decisions must be made if you are going to be prepared for this undertaking. One of the biggest decisions is choosing a place to keep the horse. Boarding a horse at a stable is the most convenient method, but it can be expensive. It normally costs from \$75 to \$150 per month, depending on the stable services, to keep a horse in a boarding stable. If there is an indoor arena, trails, or other expensive facilities, the price can be higher.

Certainly, boarding has the advantage of freeing you from the daily chores and management responsibilities as well as providing a nicer place to use the horse than you may have available at home. Most boarding stables charge extra for worming, vaccinations, hoof care, etc. There are stables where the cost is less if you are willing to clean stalls, provide feed, or feed your own horse.

The alternative to boarding is to keep the horse at home. Many owners derive great enjoyment from seeing their horses out the back window, and the convenience of using them. Keeping the horse at home, of course, requires space, time, responsibility for management decisions, daily care, equipment, and knowledge of the horse's needs.

Depending on your location and the existing facility, it may not be cheaper to keep the horse at home. You need to plan for shelter, fencing, bedding, hay, concentrates, equipment and storage, manure disposal, and facility repair. Minimally, the mature horse will cost about \$800 or more to maintain annually. Of course, if you intend to compete with your horse, it will cost more because you pay for a trailer, training fees, transportation, clothes, tack, etc.

It is the purpose of this publication to review the basic needs of the horse and those management considerations important to his comfort and health. References providing more detailed information are listed at the end of each section.

Housing

Before choosing housing for your horse, ask yourself the following questions:

- What are the horse's needs? The animal only needs shelter from the wind and weather, and a dry place to eat.
- What do I intend to do with my horse? If you want to show early in the year, you will need a place to ride all year, and possibly a more elaborate place to fit and condition the horse.
- What can I afford? You can spend as much as you want to on a horse facility! Estimate \$4 per square foot of floor space as the absolute minimum cost for an enclosed barn for horses.

Answers to these questions should help you find housing appropriate for your horse. It is often possible to remodel an existing building to accommodate horses rather than to build a new one. If your horse is primarily a pet to ride in the summer or fall, then a three-sided shed or cold barn is adequate. As you expect more from the horse, you will have to provide it with more protection from the weather and with more elaborate working facilities.

Outdoor Shelter

Three-sided sheds with their backs to the north or west, or to the prevailing winds, provide excellent windbreak and shelter for pleasure animals. These shelters are normally 8 feet high and allow 100 square feet per horse. They can be built of oak or metal, or bought commercially.

Placement

Whatever structure you build, it should be built 1 foot above the surrounding terrain. This is especially true of closed barns for keeping horses indoors. Barns often become flooded if their drainage is not

well planned. Plan the total layout of your potential facility before deciding where to build the first structure.

Stalls

Box stalls allow the animal more freedom of movement than tie stalls. If space, however, is limited and the horse is exercised regularly, tie stalls will work well. Stalls should be at least 10 feet x 10 feet for box stalls and 10 feet x 5 feet for tie stalls. It is recommended that stalls be constructed of a hardwood and be treated with creosote to deter the horse from wood chewing. The base of the stall should be crushed rock covered with clay or field lime, but sand or asphalt also can be used. Cement is slippery, does not allow drainage, and is not recommended for stalls because it is so hard on the horse's legs. All stalls should have proper ventilation and drainage, and be equipped with water and feed containers.

Bedding

The type of bedding used depends upon the availability, price, and suitability of materials. Wood shavings and straw are both excellent bedding materials; however, they can be expensive or hard to obtain. Contact local furniture or lumber manufacturers, or wheat and oat farmers as possible sources for shavings and straw. Other acceptable bedding materials include peat moss, rice hulls, peanut hulls, sawdust, and paper pulp. When using a dirt floor, 3-4 inches of bedding is usually adequate. If the stall floor is asphalt or cement based, bedding should be at least 8-10 inches deep. Be sure to plan for storage space for the kind of bedding you choose. Straw will take up the most room and make the largest manure pile.

Fencing

All horses should be allowed as much outside, free exercise as possible, but most horses are kept in small, fenced lots. When choosing fence material, find one that is sturdy, yet will not injure an animal caught in it. The most common types of fencing are hardwood board, post and rail, woven wire, electrified wire, or a combination. All line fences should be at least 4 feet high. As a general rule, the smaller the paddock (fenced area), the stronger the fences need to be. Wooden fences look the best, but cost and maintenance are higher than other choices.

References

AS-418 Fencing for Horses in Indiana
MWPS-15 Horse Housing Handbook

Feeding

Horses, like people, have certain nutritional requirements. The nutrients of greatest concern to horsemen are water, salt, protein, calcium, phosphorus, vitamins A and D, and energy. There are five nutritional classifications of horses that include maintenance, gestation (pregnancy), lactation, growth, and work. A horse being maintained is not growing, pregnant, lactating, or doing any work, and has the lowest requirements of any classification of horses. Most pleasure horses are mature (not growing) and have relatively low nutrient requirements. The growing foal and the lactating mare have much higher requirements than the pleasure horse and must be fed accordingly. For example, the mature horse requires only 9 percent crude protein, .35 percent calcium, and .25 percent phosphorus, while the six-month-old foal requires 16 percent crude protein, .70 percent calcium, and .55 percent phosphorus. As horses are worked harder or more often, their energy needs go up but the protein requirement stays about 9-10 percent.

The horse, unlike ruminants (cattle, goats, sheep, etc.), has a relatively small capacity for feed in his digestive tract. Therefore, horses are usually fed twice per day at about 12-hour intervals. Horses can consume about 2½ percent of their body weight per day. That means a 1,000-pound horse will eat about 25 pounds of feed per day of which at least half should be forage.

Forage

As a general rule of thumb, a horse should receive 1½ percent of his body weight as forage. Because of the bacteria in the horse's cecum and colon, the horse needs to receive the large-size particle fiber to avoid colic. Forage can come in the form of either pasture or hay products. Many horses can get by on just hay or pasture with water and salt, and, in fact, may need to be limited in their consumption to avoid obesity and founder.

Pasture

Many horses are fed most of their nutrients while in fenced areas. If pasture is used to provide the majority of the nutrients the horse needs, you should plan on 2-3 acres per animal. The pasture will need to be fertilized, renovated, and properly cared for if it is to be of high quality. Overgrazing and turning out the horses in the spring before the sod will support their weight will quickly destroy the pasture. From April through early November, the pasture can provide an excellent source of forage. During the winter months, it will be necessary to supplement those animals on pasture with hay and possibly concentrates.

Hay

The maintenance requirement for an adult horse can easily be met with a good quality hay. The three classifications of hay are: *legumes* such as alfalfa, clover, or lespedeza; *grasses* such as orchardgrass, bromegrass, and timothy; and *mixed hays* such as alfalfa-bromegrass or clover-timothy, etc. Legume hays are higher in protein, minerals, and vitamins than grass hays but are harder to harvest.

The most popular hay for horses is a mixed hay of alfalfa and either orchardgrass or bromegrass. You should buy one hundred 50-pound bales of hay per horse during June and July to last the entire year. Hay bought out of the field in the summer is cheaper than hay bought in the winter, but it requires storage space.

Hay should be fed from a hay rack or manger to avoid ingestion of internal parasites on the ground. Good, quality hay is free of dust, mold, foreign objects, weeds, and has a high proportion of leaves relative to stems.

Concentrate

Depending on the quality of hay being fed, many horses may need to receive some grain mixture to meet the nutritional requirements. Growing foals, lactating mares, and performance horses will always need some concentrate supplement in addition to hay.

The most common grains fed to horses are corn, oats, and soybean meal; however, barley and wheat can be used successfully. Corn is an excellent source of energy but much lower in crude protein than oats. Soybean and linseed meals are excellent protein sources with soybean meal being of much higher quality. Corn and oats are more easily digested when crimped or cracked, but the cost of these processes may exceed this advantage. You can mix these grains yourself or may find it more convenient to purchase commercially prepared mixed feeds that are already balanced for nutrients

and guarantee the analysis. These prepared feeds are often more expensive but much easier for the person feeding a few horses.

The concentrate mixture is often the carrier for needed calcium and phosphorus supplementation for foals and lactating mares. If you are feeding good quality hay and a concentrate mixture, usually no additional vitamin supplement is needed.

Horses should be fed their concentrates in a bucket, tub, or feedbox to avoid ingesting parasites on the ground. Any change in feed (especially concentrates) should be done gradually over a 10-day period to avoid digestive upsets.

Never feed a horse moldy or dusty feed or any concentrate mixture containing Rumensin, a growth stimulant for cattle, because it can be lethal to horses. Proper nutrition is important to your horse's health; the risks of overfeeding are as great as those of underfeeding.

Water

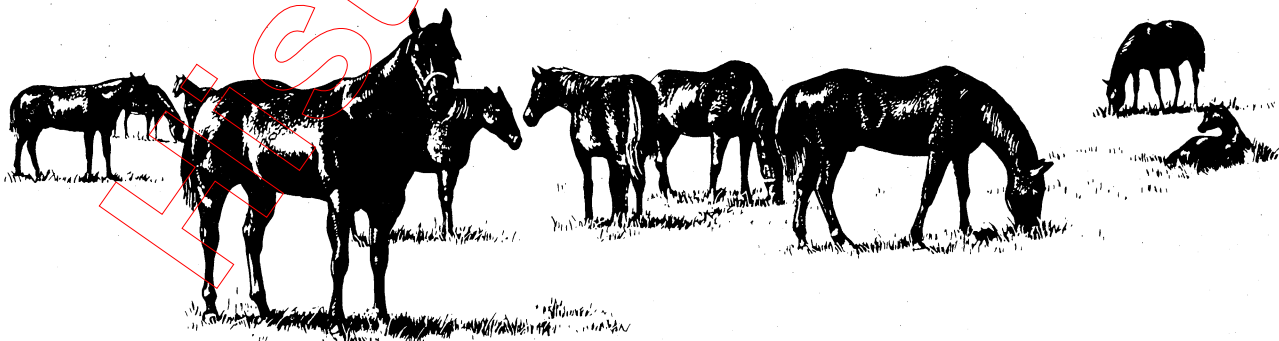
Clean, fresh water, and trace mineralized salt should be available on a free-choice basis on pasture or in the barn. The average adult horse can easily drink 10-12 gallons of water a day. Horses will suffer quicker from a lack of water or salt than if they are forced to go without feed.

Storage

All feed should be stored in a clean, dry, secure area where your horse cannot get at it if he gets loose. Fifty-five gallon drums or plastic garbage tubs work well for concentrates. Hay should always be off the ground or floor on pallets to allow for air movement.

References

- AS-421 Nutrition and Feeding Horses
- AS-429 Management of Feeding Programs for Horses
- AY-251 Improving Pastures by Renovation
- AY-253 Forage Selection and Seeding Guide



Health

A horse is susceptible to many diseases. To keep your horse healthy, it is important to vaccinate him against certain diseases, deworm him regularly, and properly care for his teeth and feet. Establish a regular program with a local veterinarian and farrier (horseshoer), then let them help you make health care decisions.

Vaccinations

Horses should be vaccinated annually against tetanus, eastern and western encephalomyelitis, and rhinopneumonitis. If your horse is exposed to strange horses or is transported frequently, your veterinarian may recommend vaccinating him against influenza and strangles. If your horse wounds himself, especially a puncture wound, it is suggested you give him a tetanus antitoxin. Although not required, you should have a Coggins Test run to be sure your horse is not a carrier of Equine Infectious Anemia. There is no vaccine or cure for this viral disease, so many shows, sales, and farms require a negative test to participate in their activities.

Control of flies and mosquitos is a big part of minimizing disease because they are the carriers of the organisms. Manure disposal and keeping the area sanitized will help reduce infestation and spread of disease.

Parasite Control

Horses are susceptible to internal parasite infestation. The most prevalent parasites are strongyles (bloodworms), ascarids (roundworms), bots, and pinworms. Parasites can be controlled through regular deworming programs, and proper waste and pasture management. In general, it is recommended that your horse can be dewormed four times per year. The common methods of deworming are:

- feed additives,
- pastes or drenches,
- stomach tubes.

When developing a deworming program, it is necessary to rotate the type of anthelmintic used to prevent the parasite from building up a resistance. Some indications of parasite infestation are weight loss, loss of appetite, listlessness, tail rubbing, and colic. Colic is abdominal pain which can be caused by a number of things including the following: excess gas production, decreased blood supply, and lack of fiber in the diet. It can result in abnormal digestive tract motility, torsions, or occlusions. It is often caused by parasite infestation and damage to the tract. External parasites such as lice, ticks, grubs, and ringworm are seldom a problem if the horse is kept clean and groomed regularly.

Dental Care

The horse chews his food in a grinding fashion. As a result, points form on the molars. Eating becomes painful because these points irritate the tongue and cheeks; therefore, the horse chews less. When points occur, they need to be floated (filed off). Teeth should be checked at least once a year for the presence of these points. Indications of sharp points on the molars are weight loss, whole kernels of grain in the manure, and slobbering while eating.

Young horses that fight the bit may have wolf teeth on the top jaw just in front of the first molar. These two teeth are not rooted and often have to be removed if they cause a problem. Impacted or abscessed teeth are not common in horses but cause severe pain when they occur.

Hoof Care

The function of the horse's hoof is to act as a shock absorber. Accordingly, it is important to keep them pliable and in good condition, which can be achieved through routine farrier care.

Because your horse's hooves grow 4-6 inches per year, the hooves need to be trimmed every 6-8 weeks. Not all horses need to be shod (wear shoes). Whenever the wall of the horse's foot is wearing off faster than it is growing, it needs to be protected. If you plan on riding on many trails, along roads, going to shows, etc., then you should put shoes on the horse.

A horse's feet can become very brittle in dry conditions, so the horse may need to stand in mud or water to put moisture back into the hooves. Many moisturizer hoof dressings are available that can be applied to the top of the horse's hoof. Horses that stand in dirty, manured mud and bedding run the risk of the disease thrush. This is a bacterial disease of the frog of the horse's hoof and can cause lameness. You will recognize the black color and the foul odor as symptoms associated with thrush. The damaged hoof should be pared out and copper sulfate or lime applied to dry it out and kill bacteria. The horse should be moved to a dry site.

Founder or laminitis is the most serious disease of the hoof. It can be caused by overeating grain or lush pasture, drinking cold water when hot from exercise, etc. If you find your horse has overeaten and is sore on his front feet, immediately get cold water on his feet and call a veterinarian.

References

- VY-29 Internal Parasites of Horses and Ponies
- VY-30 Laminitis or Founder in Horses and Ponies

Daily Maintenance

Grooming, waste removal, and exercise need to be done regularly for your horse to maintain good health. This takes time and, of course, the proper equipment. Among the equipment you will need are the following: brushes, towels, combs, currycombs, hoof picks, manure forks, shovels, rakes, a wheelbarrow, manure spreader, a bridle, saddle, saddle pad, halters, lead rope, and lunge line. It is not necessary to have fancy equipment, but if you are going to do the needed chores, then some tools will need to be available.

Grooming

Grooming your horse serves two functions. It removes excess dirt and hair to produce a better coat and circulation. Second, it gives you a chance to thoroughly inspect your animal for injuries, swellings, and abnormalities.

Begin grooming by loosening dirt with a hard bristled brush or rubber currycomb. Continue by going over the animal once again with a soft brush, stroking with the grain of the hair, and then towel off the excess dust. Remove any dirt or stones from the animal's feet and finish by combing out the mane and tail.

Exercise

Exercise for the horse takes various forms. Riding, lunging, and turning out the animal are all satisfactory methods. If your horse is kept outdoors, he will exercise himself by walking around. However, if your horse is stalled, he should get out for at least 30 minutes each day.

You cannot allow a horse to stand for months and expect to go riding for 3-4 hours without problems. Remember, the horse is an athlete and requires conditioning to be fit as well as warming up before any type of stressful activity. Never allow your horse to eat or drink immediately after exercising because this can cause colic or founder. Let the horse have a couple of swallows and then wait until he is cool before allowing him to drink. Groom or hose-down the horse after exercise to remove the sweat, dirt, etc., and to reduce saddle sores and improve hair coat quality.

Waste Removal

Cleaning stalls is the bane of every horseman's existence. Horses kept inside should have their stalls cleaned once a day. It is not necessary to take all the bedding out daily, just the soiled bedding and manure. Once a week or so, the stall will need to be stripped and dehydrated. Lime is good to add to keep the moisture and odor down.

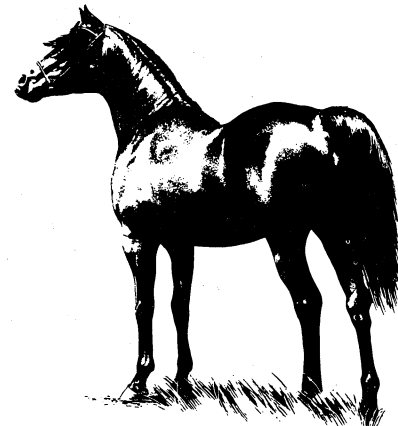
Manure should be removed from pastures periodically depending on the concentration of horses. All manure should be properly composted before use on livestock ground to kill any parasites and parasite larvae. Do not spread horse manure on horse pastures. This manure is the source of most of the parasite recontamination to the pasture and horse. Put it on cropland, give it to neighbor gardeners, etc.

Summary

As you can see, there are many areas that have to be considered before you decide to undertake keeping a horse on your own. Initially, you might be better off boarding the horse out, but when there is more than one horse, the decision may be to bring them home. Managing horses takes a lot of planning, time, and dollars, so do not go in without all the information you can get.

This has been a brief review of the areas of management needs for horses. Refer to the listed publications for further details. Contact your county Extension agent for copies of these and other publications on horse management.

Related Publications



Copies of the following Purdue University Cooperative Extension Service publications are available free to Indiana residents through your county Extension office or from the Publications Mailing Room, 301 South Second Street, Lafayette, IN 47905-1092.

- AS-418 Fencing for Horses in Indiana
- AS-421 Nutrition and Feeding of Horses
- AS-426 Management of the Breeding Herd
- AS-427 Management of the Breeding Stallion
- AS-429 Management of Feeding Programs for Horses
- AY-251 Improving Pastures by Renovation
- AY-253 Forage Selection and Seeding Guide
- MWPS-15 Horse Housing Handbook
- VY-29 Internal Parasites of Horses and Ponies
- VY-30 Laminitis of Horses and Ponies

Historic Document



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