## Creating \& Using a

 Sacrifice Area for Horses:Your Start to Good Pasture Management!

By Alayne Blickle, Horses for Clean Water

Probably the most important aspect of managing pastures is the time when you take your horses off your pasture. You can greatly improve the health and productivity of your pastures by creating and using a paddock or "sacrifice area" to confine your horses for this time period.

A sacrifice area is a small enclosure, such as a corral, run, or pen meant to be your horse's outdoor living quarters. It is called a sacrifice area because you are giving up the use of that small portion of land as a grassy area to the benefit of your pasture. Your horses should be confined to the sacrifice area during the winter and early spring and in the summer before your pastures become overgrazed. It is also useful for separating or confining animals, for controlling the amount of grass or feed your horse consumes on a daily basis and for caring for sick or injured individuals.

In the winter keeping horses off saturated and rain soaked soils and dormant or frozen pasture plants is critical if you want to maintain a healthy pasture next summer. Soggy soils or dormant plants simply cannot survive continuous grazing and trampling in winter months. Horses are particularly hard on pastures -- the pounding of their hooves compacts the soil, which suffocates plant roots. In addition, when the soils are wet horse hooves act like plungers by loosening fine particles of topsoil that are washed away by the rain.

During the summer practice good pasture management by keeping the golden rule of pasture management in mind: graze pastures no shorter than 3 inches. This ensures that the grass plants have enough reserves left after grazing to permit rapid regrowth and healthy plants. Vigorous plants will out compete weeds, grow new leaves (called tillers), utilize nutrients more effectively and will prevent soil erosion and mud come next winter. Put horses back on pastures when they have regrown to about 6 to 8 inches.

To create a sacrifice area, begin by locating an appropriate site for the area. Choose an area on higher ground, away from creeks, wetlands or other water bodies as well as from surface water flows. For chore efficiency your confinement areas should be convenient to your barn to make it easy for you to care for your horse and maintain the area. A good option is to have one sacrifice area per horse set up like a run off of each stall. This chore efficient arrangement gives the horse free access to the stall, and you'll have a clean, dry, convenient place to feed.

The size of a sacrifice area can vary from that of a generous box stall, say 16 feet $\times 16$ feet, to that of a long, narrow enclosure where the horse could actually trot or even gallop about to get some exercise. If you want your horse to be able to run or play in his paddock an enclosure of about 20 or 30 feet wide by 100 feet in length is needed. The amount of land you have available, the number of horses, their ages, temperaments and the amount of regular exercise they receive all play an important role in determining the size you choose to make your sacrifice area or areas.

Using a sacrifice area confines manure and urine to a smaller area where you can have better control of it. Picking up the manure every one to three days will help reduce your horse's parasite load as well as reducing flies and insects. Regular removal of manure also greatly reduces the amount of mud that develops and it will prevent contaminated runoffs from reaching the surface waters in your area -- a very important environmental concern. The manure you pick up can be composted and reapplied to your pastures during the growing season, another plus for your pasture management program (see the HCW handout "How to Compost and Use Horse Manure").

Footing is an important consideration for sacrifice areas. Using some type of footing, at least in the high traffic areas, will reduce mud. Mud management is as important for the health of the environment as it is for the health of your horse -- as well as for your convenience. Hogfuel or wood chips can provide an excellent footing. These wood products can be good environmental controls, too. Through the natural composting process they contribute to the breakdown of the nitrogen in the horse's urine and manure. This process eliminates the urine smell often present in outdoor confinement areas. Gravel (crushed rock, no larger than $5 / 8$ ") or sand work well in some situations, although you should avoid feeding your horse on these surfaces. Ingesting sand or mud with hay can result in serious sand colic problems and expensive vet bills. You might want to try a combination of footing types, perhaps using the gravel in the high traffic areas and hogfuel in the rest, or a sand or gravel base with hogfuel on top.

Installing rain gutters and a roof runoff system on your barns and shelters to divert rainwater away from your horse's confinement areas is another consideration. This technique will seriously reduce mud and will prevent manure and urine from being washed out of the paddock. In an area that gets 39 inches of rain annually, 14,000 gallons of rainwater would run off a double stalled run-in shed in one year! You can begin to imagine that if you divert 14,000 gallons of water away from your horse's confinement area, you are greatly reducing the amount of mud you have around your horse! Good sites to divert clean rainwater to include a ditch, pond, creek, wetlands, rain barrel, or undisturbed area of your pasture.

As you choose the location and size of your sacrifice area keep in mind that there will still be some surface runoff from your sacrifice area. You can help to control runoff by locating your sacrifice areas so it is surrounded by at least 25 feet of lawn, pasture, woods or even a garden. Vegetation in these buffer areas will act as mud managers -- a natural filtration system to help slow down runoffs-and reduce sediments and nutrients.

Choose the very safest fencing you can for your sacrifice area. Whatever type of fencing you choose, you may want to reinforce it with some type of electric tape or hot wire -- a good "psychological barrier". Horses are hard on fences and will test most types. They tend to have more respect for electric fencing.

Be sure that corners are safe and there are no protruding objects where the horse could get hurt, like bolt ends, nails, boards, or the tops of metal T-posts. Also watch out for the corners of roofs and the bottom edges of metal building. There should be no wires or cords hanging in the yard and absolutely no junk, garbage or machinery in the paddock. Keep in mind that gates on fences need to be adequately sized for the types of truck deliveries you expect (such as gravel, hogfuel, hay, etc.).

Even though your horses can move around in their sacrifice areas, they still need regular exercise. Be sure to plan for and maintain a regular exercise program for your horse.

Now you are ready to integrate your sacrifice area into your pasture management program! In the summer when the majority of the grass in your pasture is grazed to about 3 to 4 inches take your

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horse(s) off the pasture and put them in their sacrifice area. Allow them back on when the grass has regrown to about 6 to 8 inches. In the winter when the ground is wet or frozen and the plants are dormant keep your horses confined to their sacrifice areas.

Remember to begin grazing time gradually -- too much pasture can cause serious problems, especially in the spring when grasses are green and lush. Begin pasture grazing time with your horse gradually, starting with about an hour at a time, and work up to several hours over a period of weeks. If you have any questions on this consult your veterinarian for their recommendations.

By utilizing a sacrifice area you will be creating a healthier pasture. Healthier pastures means more pasture productivity, which means less money spent on supplemental feed. Healthy pastures have the added benefit of making happier, healthier horses, a prettier picture for you and your neighbors -- and a cleaner environment for all.

Good horsekeeping to you!

## Check Out Your Resources!

If you are interested in additional information on sacrifice areas, designing roof runoff systems, manure composting or pasture management these resources are available to horseowners:

- Natural Resource Conservation Service (NRCS) works with farmers and ranchers on issues relating to wise use of the natural resources, such as pasture, manure and mud management. You can find the number for your NRCS office listed in the phone book under federal government, US Department of Agriculture, Natural Resource Conservation Service.
- Conservation Districts (CDs) also work with farmers and livestock owners, often for smaller, noncommercial places on similar land management practices. You can contact your local Conservation District by calling the NRCS office. The NRCS will be able to tell you the name, location and phone number of your Conservation District.
- Cooperative Extension -- contact your county cooperative extension office to get more information on pasture and manure management for horses, as well as composting. They can be located in the phone book under your state land-grant university (if you have trouble locating them ask for help from your public library's reference librarian).
- Horsekeeping on a Small Acreage, by Cherry Hill is an excellent book, which contains information on horse facility design and management. Check your library for availability.
- Horses for Clean Water, a program run and supported by horseowners promoting environmentally sensitive horsekeeping. Offering classes, workshops and farm tours on topics such as mud, manure and pasture management, composting, wildlife enhancement, horse health, preparing your horse farm for winter, and more! HCW also offers educational materials and products for sale and individual farm consultations. For more on HCW educational opportunities, or to be on listserv to be contacted about future educational events contact Program Director Alayne Blickle at 425-432-6116, by email at Alayne@horsesforcleanwater.com. Visit the HCW website at www.horsesforcleanwater.com.

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