Cleaner Streams
Pastures and A Horse That You Can Use

To Greener Owner's Guide to keep nutrients and soil out of waterways.

Manure and
Protecting Water Quality

If you have eight or more horses or gross $2,500 a year or more from farm income, you are required by law to file a nutrient management plan with the Maryland Department of Agriculture (MDA). Contact MDA, your county University of Maryland Extension (UME) office or soil conservation district (SCD) for assistance in setting up a compost system that works for you.

Establish Vegetative Covers
A vegetative cover placed around buildings or on steeper slopes can help minimize erosion and absorb nutrients while improving the appearance of your property. Examples of commonly used covers include a combination of grasses, vinca (periwinkle) and shrubbery.

Keep Horses Out of Streams
Crossings provide a safe, easy way for horses to ford streams. Fencing encourages horses to use the crossing instead of the streambed to navigate the water. This allows vegetation to stabilize streambanks and reduces sediment pollution. Beginning January 1, 2014, Maryland’s nutrient management regulations require horse owners to install pasture management practices to minimize the guidance of CTDs to prevent loss of manure and horse impacts. Contact your local SCD for assistance in designing crossings, alternative water sources or other protection measures for your stream.

Additional Assistance
For more information on best management practices for horse owners, contact your UME office or local SCD. A technical expert will visit your farm and offer recommendations on ways to help improve water quality in your local stream and the Chesapeake Bay. You will also receive information on ways to help improve water quality in your local stream and the Chesapeake Bay. You will also receive information on ways to help improve water quality in your local stream and the Chesapeake Bay.
Keep Your Pasture Green

Paddocks, riding rings, trails and pastures are continuously disturbed areas, under constant physical stress from horses’ hooves. Overgrazed pastures, in particular, lead to exposed bare soil that can easily erode. Here are several best management practices that can help minimize overgrazing in your pasture and reduce soil erosion.

Select Pasture Sites Carefully
If you are establishing a new pasture, select a site that is well drained and located on high ground. Avoid flood plains, drainage areas, and tracts with long, steep slopes. Remember, it is illegal to alter wetlands or streams in any way without proper authorization. Contact your local soil conservation district (SCD) for assistance in selecting an appropriate site. Your SCD can help you determine the soil type. Pasture grasses and legumes must be matched to the soil’s pH and fertility as well as its ability to hold moisture. These factors are critical to a long-lived and productive stand.

Test Your Soil
Establishing and maintaining a dense, vigorous pasture/grass that will withstand the constant trampling of horses is no easy task. An inexpensive soil test can help you determine the type and amount of fertilizer needed for good pasture growth. This will also help prevent nutrient runoff from over-fertilized pastures and can improve your horse’s nutrition. Soil should be tested a minimum of once every three years to determine fertilizer and lime needs. With the results of a soil test in hand, a comprehensive fertilizer program can be developed to encourage growth of legumes such as white clover, as well as a range of hearty pasture grasses. Call your University of Maryland Extension (UME) office or SCD for a list of soil testing labs and sampling instructions. Beginning January 1, 2014, MDA will require a 10 to 35 ft. “no fertilizer application zone” adjacent to surface waters and streams. Contact MDA’s Nutrient Management Program for guidance.

Periodic dragging can break up manure and minimize spotty growth.

Inspect Established Pastures for Problems
There are many ways to improve the performance of established pastures. Conduct a visual inspection to pinpoint any existing or potential problems. Correcting erosion problems can sometimes be as simple as stabilizing a hillside with railroad ties or moving a gate. Here are some common problems to look for:
- Areas of bare ground
- Small rills and gullies
- Sediment accumulations at the bottom of a slope

Reseed Bare Ground, Rills and Gullies
Bare areas are usually sites that have been damaged by heavy animal traffic, surface water runoff or both. These areas should be leveled and smoothed before seeding. The best time to reseed is either late winter/early spring or late summer (end of August/early September). Consult your UME office or SCD for specifics.

Minimize Spotty Growth
Manure clumps are a major cause of spotty pasture growth. Horses will not graze in areas where manure is present. On small parcels, manure should be picked up and removed daily. Manure can also be broken up by dragging. In addition to helping your pasture, breaking up manure piles on a regular basis can reduce parasite problems.

Clip Pastures to the Proper Height
Horses graze selectively, consuming nutritious young pasture grasses while leaving mature grasses and weeds to produce seed and spread. Proper mowing is the best way to control weeds and minimize spotty growth. Pasture grasses do best at a height of about six inches.

Switch to Rotational Grazing
Heavily overgrazed pastures offer little feed for horses and may cause colic if soil is ingested while grazing. Moving horses from one pasture to another during the growing season can help reduce overgrazing and increase pasture productivity. In small pastures, horses should be rotated to another pasture or paddock about every two weeks or when growth is three inches or less. As a rule, one or two acres of well-managed pasture can support one mature horse during the grazing season with rotation, while four or five acres without rotation will support only one mature horse for the entire grazing season.

Establish a Sacrifice Lot
When pastures are stressed from too much rain, extended dry weather, overgrazing or renovation activities, it is time to move your horses to a sacrifice lot. A sacrifice lot is an exercise paddock or riding ring that you don’t expect to keep grassy. The area may have grass, wood chips, stone dust or just plain dirt. The intent is to “sacrifice” a small area of your property in order to give your pastures time to recover. Locate sacrifice lots on high ground, as far away from waterways as possible. Sacrifice lots near streams will need to comply with MDA setback requirements. Install buffers or other erosion control measures to prevent runoff. Consider adding a packed-down layer of bluestone to keep the area from becoming muddy and to help prevent injuries caused by slippery conditions.