



Manage That Manure

A 1,000 pound horse produces 40-50 pounds of manure every day! Everyone who owns horses has a responsibility to protect local streams from manure runoff. Here are some best management practices that all horse operations—*large and small*—can use to keep manure and its nutrients out of waterways.

STORE HORSE MANURE PROPERLY

Do not store piles of manure in places where runoff or floodwaters may wash it away. Place a cover or tarp over the pile to keep out rainwater. Consider building a manure storage structure. These structures protect stockpiled manure from rainwater

runoff until it can be used safely as a fertilizer.

Manure storage structures usually consist of a concrete pad to protect groundwater and a wall on three sides to make handling easier. Soil conservation districts provide free technical assistance to design manure storage structures. Depending on the size of your operation, cost-share funding may also be available. Contact your local soil conservation district to find out about federal and state cost-share programs.

TRY COMPOSTING

There are many benefits to setting up a small composting facility for your horse manure. Composting reduces the size of your manure pile by up

to 50%, kills weed seeds, fly larvae, and other pathogens, and makes an excellent pasture and garden fertilizer as long as it's not spread too heavily. Unlike raw manure, which consumes plant nutrients while decomposing, composted manure immediately provides plants and pasture grasses with essential nutrients.

TIPS FOR SUCCESSFUL COMPOSTING

- Begin by building a pile of manure and stall waste that is at least 3 ft. x 3 ft. x 3 ft.
- Cover the pile with a roof, tarp, or sheet of plastic. A cover keeps the pile from getting too wet in the winter and too dry in the summer.



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Composting is a great way to recycle manure resources.

- Keep the pile as damp as a wrung out sponge—no wetter or drier!
- Add air to the pile. Turn by pitchfork, with a tractor, or by inserting a few PVC pipes into the center of the pile like chimneys to increase airflow.
- When the pile gets as big as you can manage comfortably, start a second pile and allow the first to continue composting.
- Add garden waste and lawn clippings to your compost. Don't let grass clippings clump together—spread clippings out to allow airflow.
- Use only herbivore manure in your composting system. Do not use dog and cat feces that may contain pathogens.
- Don't place your composting structure where surface water can reach it.

Is it Finished?

Your compost should be ready to use in two to three months in warm weather. It will take longer to decompose in winter. Your compost is ready when the pile is half its original size and the material looks and feels like fertile garden soil.

Remember...

Compost should smell earthy, not unpleasant. It should be moist and crumbly. Properly composted manure kills parasites. Once manure is composting, odors and flies should not be present. If your compost is not heating up or has a bad odor, check to see if it is too wet or too dry and turn the pile more frequently.

BEST PRACTICES FOR COMPOSTED MANURE AND STALL WASTE

- Collect raw manure from sacrifice lots and stalls every 1-2 days.
- Apply the compost according to your nutrient management plan or University of Maryland Extension recommendations.
- Do not apply fresh, uncomposted stall waste directly to your fields. The microbes in raw manure draw nitrogen from the soil and can stunt plant or pasture growth until the manure composts naturally.
- Any bedding material, including sawdust/shavings, can be composted. Your local Extension office can provide the correct recipe.
- Don't let that manure become a mountain!

MORE REASONS TO MANAGE MANURE PROPERLY

- Be a good neighbor—manure problems can be very unpleasant for neighbors.
- Manure creates a breeding ground for insects, especially filth flies.
- Internal parasites hatch from manure as often as every three days.
- Manure left on the ground and in the loafing area creates conditions that may cause health problems for horses.
- Runoff from manure piles is a major source of nutrient pollution entering the Bay and its tributaries.



Manure storage structure with Jersey walls and concrete floor.



LEARN MORE...

Go to: mda.maryland.gov/HOW or call your local soil conservation district or Extension office listed on the back of this booklet for FREE help from the experts.