

ONE HORSE OR A HUNDRED



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MSUE Equine AoE Team

2 Perfect Planning Prevents Problems

Believe it or not, some people think horse manure stinks! People don't like to see it out their window or drink it in their water. By using some "perfect" planning suggestions, you can prevent water contamination, be a good neighbor and have healthy, happy horses (Figure 1).



Figure 1. Your horses can be part of your neighbor's landscape. Perfect planning is the first step in developing good

On Your Existing Farm

Let's start by asking a few questions: *Where is your manure pile located?* It may be easier to hide that manure pile behind the barn by the trees, but if that area is too close to a **water source**, then you will need to move it. Manure storage needs to be at least 150 feet away from water sources, including wetlands, streams, creeks, ponds, lakes and ditches. If your land is hilly, then you need to use your land contour to its best advantage to prevent water pollution. This may mean increasing the distance between storage and water sources. Other options might include storage containers such as cement pads with sides to contain runoff.

Water concerns don't end with the water that we can easily see. Manure piles can affect groundwater if left static for more than a year. To avoid runoff and groundwater contamination, move the location of your manure pile every year, if possible. If you have limited options or space, use cement or rubber pads or try to locate your manure on clay soil.

No water, no problem? You still need to consider your next-door neighbor. *Is your manure pile part of your neighbors' viewscape?* To keep in good standing with your neighbors and avoid problems or complaints, let common sense prevail. Keep your pile small and camouflage it by surrounding it with nontoxic shrubs or flowers or building a storage container. It's quite amazing, but neighbors usually don't smell what they can't see. Remember to think about manure runoff and make sure that manure and its nutrients don't leave your property.

So, you thought you were done — you now have clean water and happy neighbors. What about your horses? Manure can breed flies and provide a nice home for unwanted parasites and harmful bacteria. It may be easier to dump your wheelbarrow right out the backdoor. But don't forget that your horse now has to deal with additional pesky flies and increased risk of internal parasites and disease. Keep your manure away from where your horses live.

Manure doesn't just come in big piles — those small piles all over the turnout can lead to the same issues as the big manure piles. Make sure

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that your paddock manure is not running off to surface waters or your neighbor's property, or causing a fly or health problem. Small paddocks should be picked out to avoid these problems.

(Figure 2)



Figure 2. Manure in small paddocks, turnout lots or exercise pens may need to be picked out periodically.

If none of these options work, the last question to ask is, *Do I have too many horses on my farm?* On average, an adult horse needs at least 2 acres for quality grazing. It also takes about 2 acres per horse for spreading manure for proper nutrient use (this allows for both nutritional support for the horse and land to spread manure).

Planning Your New Farm

If you're in the position to start from scratch, survey your new property to find the best spot for your barn, manure storage and fence placement. Your township or county probably has guidelines or zoning ordinances for the number of horses per acre, barn location and size, and fencing procedures. You'll want to keep your horse operation as high and dry as possible and control horse access to surface water. For a manure pile location, make sure to follow the perfect planning strategies that were outlined above.

If you plan on building a new facility or expanding your old facility to house 25 or more horses, be sure to follow the Right-to-Farm Act's Generally Accepted Agricultural and Management Practices for Site Selection and Odor Control for New and Expanding Livestock Production Facilities (visit the Michigan Department of Agriculture Web site at www.michigan.gov/mda or call 877-632-1783).

Remember, a permanent mountain of manure is an environmental and health hazard as well as an eyesore. To make sure that you have the perfect plan, watch for the next article in the *One Horse or a Hundred* series to learn about manure management solutions.

For more information and materials online, visit these Web sites:

www.emdc.msue.msu.edu
www.msue.msu.edu/aoe/equine/



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