

ONE HORSE OR A HUNDRED



WO 1018 (No. 1 in Series)

MSUE Equine AoE Team

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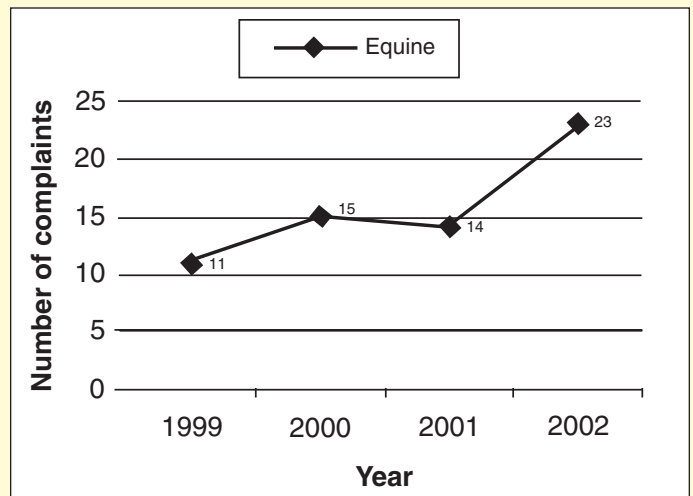
You are a farm

Do you consider yourself a farmer? According to Michigan's Right-to-Farm Act, if you have one horse or a hundred horses, you are a farmer. As a result, if you comply with manure management practices as outlined by the Michigan Department of Agriculture (MDA), the Right-to-Farm Act will protect you from nuisance lawsuits. This means that if your neighbor is offended by living next to horses and sues but you are following Michigan's manure management practices, it is unlikely that your case will make it to court, and even more unlikely that you will lose.

Many horse owners either don't know this or don't understand what it means, as the number of Right-to-Farm complaints MDA receives is increasing. The Michigan State University (MSU) Equine Area of Expertise Team and the MDA have worked together to develop a series of articles focusing on horse manure issues. They will cover water quality, zoning and management practices to help Michigan horse owners make the best decisions on manure management for their farms.

Traditionally, complaints lodged with the MDA have been against dairy, swine, beef and horse farms, in that order. Dairy farms have always had the highest percentage of complaints. In recent years, horse farm complaints rose from 8 to 16 percent, moving horse farm complaints from fourth in 2001 to second behind dairy in 2002. This is definitely not good news for the Michigan horse industry.

Table 1. Number of Right-to-Farm equine complaints involving manure management.



Complaints against horse facilities range from concern about surface water and groundwater contamination, to air quality issues such as odors and flies.

Impact on Horse Ownership

It is very important that horse owners develop and implement plans for handling and disposing of manure. To avoid or ignore the issue may be a long-term recipe for disaster to the Michigan horse industry.



Figure 1. Horses are part of the landscape of agriculture.

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Complaints about horse manure could ultimately result in increased regulation of horse ownership at the township level. If enough complaints about equine properties are received, a township may rezone, which affects people's ability to keep horses. This will have the greatest impact on new and expanding horse operations. Existing farms will maintain their current protection under the Right-to-Farm Act. Regardless of township ordinances, it is best for the industry that all horse owners strive to be good neighbors. Increased urban sprawl has resulted in more and more people living closer together (Figure 1). Boarding facilities generally cater to recreational riders and owners and are located near highly populated areas. These factors can result in increased complaints about odor, flies and/or the visual effect of manure piles.

Environmental Impact

Horse manure can be a beneficial land resource, but if it's poorly managed, it can have a negative impact on the environment. The phosphorus in manure is the primary concern. Soil needs phosphorus to be productive, but an overabundance can be detrimental to surface water quality if it runs off into surrounding ditches, streams and lakes.

Wood shavings in horse manure present another concern (Figure 2). Horse manure alone can provide a rich organic source of nitrogen to the soil, but wood shavings spread on a field can actually remove nitrogen from the soil. As a pasture or crop field becomes low in nitrogen, plant growth, quality and yield decrease while weed production increases.



Figure 2. Feedstock is a combination of manure and bedding material.

Finally, air quality can be affected by the anaerobic breakdown of manure and ammonia from urine. Most horse owners don't consider horse manure odors offensive, but Murphy's Law ensures a strong wind blowing from your manure pile to your neighbor's backyard barbecue.

Horse Health

Equine health issues are inherent in the problem of manure management. Horses shed parasite ova (eggs) in their manure. Spreading raw manure on grazing land allows parasites to find their way back into different equine hosts and continue their life cycle.

A second health consideration comes from diseases spread via manure. Organisms that affect the horse's gastrointestinal tract (such as equine-specific *Salmonella*) can be passed in the feces. Other diseases that can contaminate the soil (such as *Rhodococcus* sp. and strangles or *Strep equi*) can be spread in a similar fashion.

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Conclusion

Manure management is not simply a concern for livestock operations or large horse farms. Michigan's Right-to-Farm Act offers horse owners with guidelines for managing manure and protection if these guidelines are followed. Good manure management is a horse health issue, a water protection issue and a neighborhood har-

mony issue. Look for future articles on how you can better manage manure, improve your horse's health and be a good neighbor in the *One Horse or a Hundred* bulletin series. For more information on the Right-to-Farm Act, call 1-877-632-1783 or log onto www.michigan.gov/mda .

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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