



Manure Management

Introduction – A 1000 pound horse = at least 9 tons of manure each year.

Without a well-thought out plan for collection, storage and disposal of manure, you could be faced with many issues such as: parasites, bacteria-harboring mud, water pollution, odour problems, flies and a host of health care concerns.

Some Considerations

1. Certain species of worm eggs hatch as often as every three days. Regular removal of manure from stalls and paddocks helps prevent worm re-infestation in horses.
2. If you use stalls, your bedding adds approximately another 4 tonnes of material to your manure disposal. Select bedding with your disposal method in mind. e.g. wood chips or shavings are not ideal if you are composting or spreading raw fertilizer as it will reduce the nitrogen content of the manure/compost.
3. Storage methods employing concrete pads and 3-sided roofed structures combat mud, disease and runoff of pathogens and nutrients into waterways.
4. Planting a buffer strip of vegetation down slope from your manure storage can also help filter that run off, which would be greater if you do not store manure on a concrete pad or covered container.
5. If you are using a manure broker, a covered storage container increases the ease of removal, makes the manure more dense (decreases the volume to be taken away decreasing your cost of removal) and helps retain more nutrients making it appealing for use on crops.
6. Situate manure storage downwind of any residences and in a visually remote location.



Conclusions

Check in with your local stewardship councils, conservation authorities and extension services to learn of incentive programs and grants available to help land owners protect natural resources and improve the health and productivity of their land.

For more details on manure management and best management practices on composting and more, check out Equine Guelph's [online course offerings](#) including [Management of the Equine Environment](#) and [Stewardship of the Equine Environment](#).

Equine Guelph is the horse owner and caregiver's Centre at the University of Guelph, supported and overseen by equine industry groups, dedicated to improving the health and well-being of horses

For More Information

The Centre for Land and Water Stewardship.

Website: <http://www.uoguelph.ca/~claws/Home.html>

Equine Guelph:

Website: www.equineguelph.ca

Conservation Authorities:

Provide programs and monetary aid to landowners that plan to protect natural resources. They offer grants to help landowners protect natural resources and improve the health and productivity of their lands.

Website: <http://conservation-ontario.on.ca/find/index.html>

Ontario Ministry of Agriculture, Food & Rural Affairs (OMAFRA):

Offers numerous fact sheets regarding best management practices for farms and how to protect and improve our natural resources. On their website they have a section of fact sheets dedicated to just horse farms.

Websites: - http://www.omafra.gov.on.ca/english/environment/bmp_books.htm

-<http://www.omafra.gov.on.ca/english/livestock/index.html#horses>

Ministry of Natural Resources (MNR):

Offers programs such as the Conservation Land Tax Incentive Program (CLTIP) and the Managed Forest Tax Incentive Program (MFTIP) that provide monetary aid to landowners.

Website: <https://www.ontario.ca/page/ministry-natural-resources-and-forestry>

Stewardship Councils:

Website: <http://stewardshipnetwork.ca/resources/directory-of-ontario-stewardship-councils/>

References:

Blickle A.R. 2003. A guide to Environmentally Friendly Horsekeeping for Whatcom County Horse Owners.

Fraser, H.W. 2007. Manure Storages for Small- to Medium- Sized Horse Farms. Online at

<http://www.omafra.gov.on.ca/english/engineer/facts/07-045.htm>.

Hugh M. 2008. Agricultural Composting Basics. Ontario Ministry of Agriculture Food and Rural Affairs.

Infosheet # 17 Manure Use and Management. 2008. Ontario Ministry of Agriculture Food & Rural Affairs. Queen's Printer for Ontario.

Krogmann U. and M. Westendorf. Rutgers Cooperative Research and Extension. 2006. Horse Manure Management:: Bedding Use. The State University of New Jersey.

Krogmann, U., M. Westendorf, and B. F. Rogers. 2006. Best Management Practices for Horse Manure Composting on Small Farms.. Rutgers Cooperative Research & Extension. State University of New Jersey.

Pennsylvania State University. 2002. Horse Stable Manure Management

Smith C. and C. Swanson. Horse Manure Management. Virginia State University. Available online at

<https://pubs.ext.vt.edu/406/406-208/406-208.html> .

University of Minnesota Extension. 2008. Manure and Pasture Management for Recreational Horse Owners. Communication and Educational Technology Services,