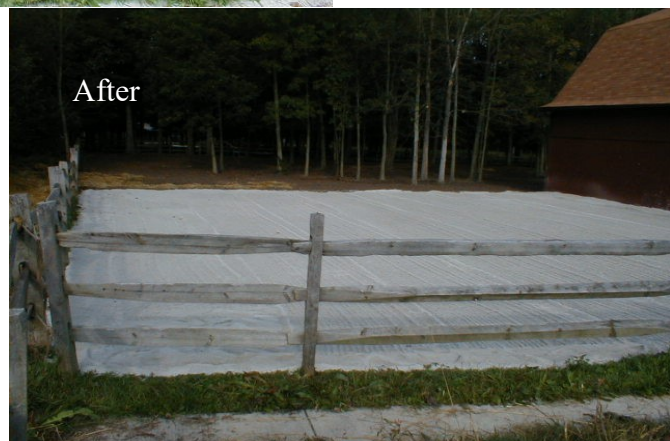
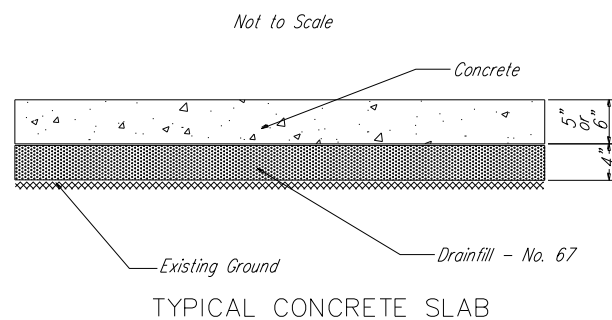
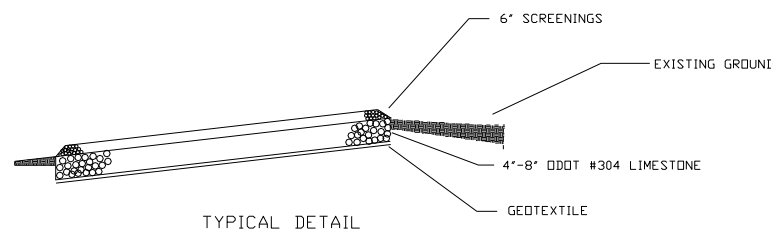


HEAVY USE AREAS

A heavy use pad protects areas used heavily for livestock feeding and watering, loafing, exercising, or temporary confinement by surfacing with suitable materials. For the full brochure on this best management practice, go to <https://fairfieldswcd.org/wp-content/uploads/2017/05/Fairfield-SWCD-Heavy-Use-Pads-for-Horses-brochure.pdf>. Below are 2 options: gravel and concrete.



AGRICULTURAL POLLUTION ABATEMENT PROGRAM

The Ohio Department of Agriculture - Division of Soil and Water Conservation has the authority to establish standards for a level of management and conservation practices in farming and animal feeding operations to reduce pollution of waters of the state by soil sediment, animal manure and residual farm products. This authority is granted through [Ohio Revised Code Chapter 939](#) which applies to all farming operations other than those permitted through ODA's Division of Livestock Environmental Permitting or Ohio EPA. The statewide standards for farming and animal feeding operations are found in [Ohio Administrative Code Chapter 901:13-1](#).

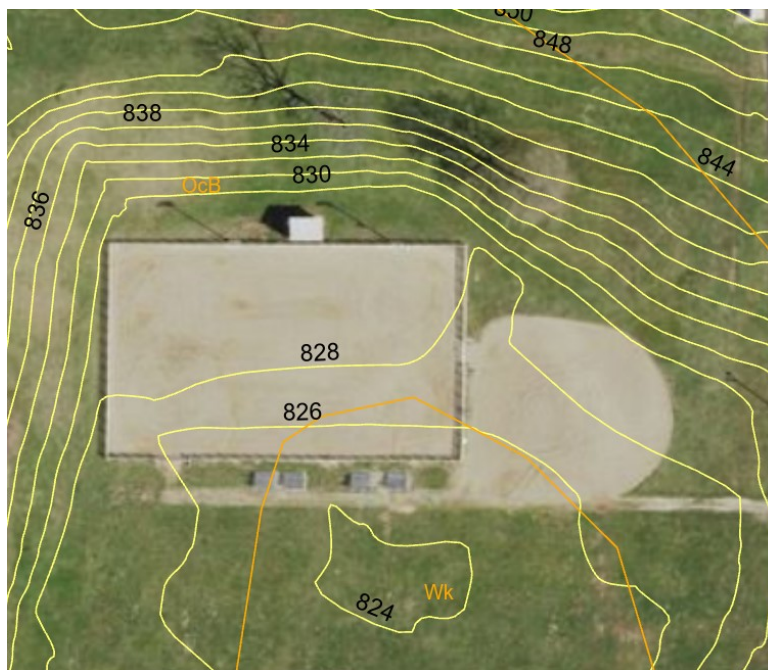
Ag pollution regulations are typically enforced through a complaint process. If a complaint alleging non-compliance is received, then the Division will investigate the alleged violation(s). If the Division of Soil and Water Conservation determines that the agricultural operation is in violation of the law, then the Division will seek to find a cooperative solution to return the operation to compliance. ODA may require corrective actions and has the authority to issue a civil penalty of up to \$10,000. Other agencies may also get involved (Division of Wildlife, Ohio EPA, etc.). DOW and EPA also have the ability to assess fines and penalties. Private property owners who experience property damage may also bring civil suit.

ODA has entered into agreements with local Soil and Water Conservation Districts (SWCDs) to implement these rules. These agreements give the SWCDs authority to investigate complaints, identify violations, and require corrective actions. SWCDs also assist ODA by providing landowners and farm operators technical assistance, advice and expertise and informing them of the level of conservation necessary to comply with the rules and standards.

TECHNICAL ASSISTANCE

Contact Fairfield SWCD/NRCS for assistance. Staff will visit any Fairfield Co. property upon request to provide technical assistance on proper manure storage, disposal, and paddock management. Some practices that are often needed are heavy use pad, roof run off, diversion, access road, fencing, and composting or manure storage facilities.

We can also provide soil/topographic maps for compliance checking on the setbacks recommended in the NRCS Nutrient Management Standard (590).



Created 4/2022

Horse Info



Fairfield Soil & Water Conservation District



831 College Avenue, Suite B
Lancaster, OH 43130
740-653-8154

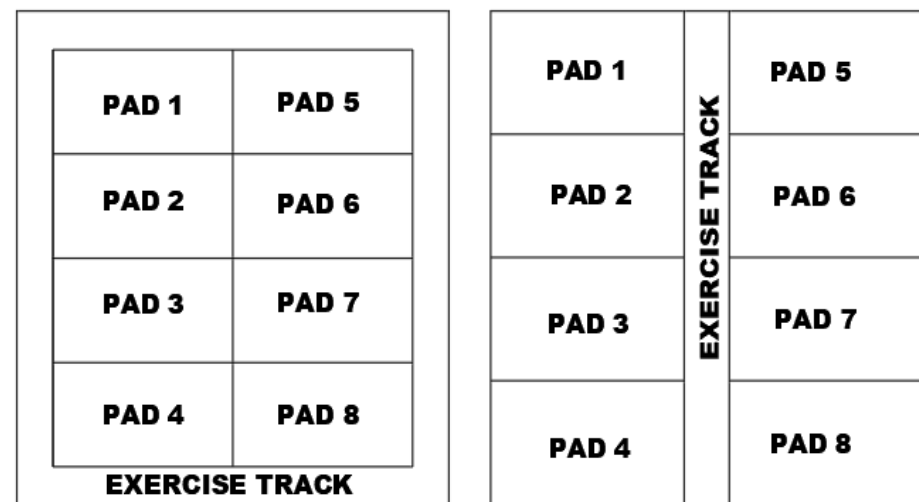
www.fairfieldswcd.org

PASTURE MANAGEMENT

We recommend 2-3 acres of pasture per horse depending on site conditions and management. Horses typically graze in spots. Unless frequently rotated to new pasture paddocks, they will damage desired forage species in some areas and avoid forages in other areas. Rotational grazing is a good practice to reduce spot grazing and maintain the forage stand. Rotationally grazing 5-7 paddocks increases forage health, nutrition and yearly production. The link below will allow you to view some resources regarding paddock paradise systems for horses. There is a tremendous amount of other information on design, layout and management of these systems online as well, but this is a good starting point.

<https://extension.psu.edu/how-to-make-rotational-grazing-work-on-your-horse-farm>

The best seeding recommendation for a heavily used horse pasture would be the novel endophyte tall fescue which would not have any health impacts on the grazing animals yet provides excellent ground cover to reduce erosion potential. Adding some Kentucky bluegrass (forage type) to the mix would help make a thicker sod. A higher seeding rate is preferable than the minimum NRCS specifications 25 to 30 lbs./acre tall fescue and 5 to 10 lbs./acre of the Kentucky bluegrass. An endophyte free tall fescue could be substituted for the novel tall fescue but would have a shorter life.



Above are 2 examples how a pasture can be designed to incorporate multiple paddocks that can be rotationally grazed.

SOIL TESTING

Fairfield SWCD encourages all landowners to have their soils tested before making management decisions. Fairfield County OSU Extension can obtain soil nutrient testing results. Soil bags, input forms and instructions are available at their office (in our building). For more details go to <https://fairfield.osu.edu/program-areas/agriculture-and-natural-resources/soil-testing> or call 740-653-5419. Upon receipt of the soil analysis results from the lab, Extension staff will work with you to develop soil nutrient recommendations based on the results. Test every 3-4 years, unless more analysis is needed.



Photo by Joe Boggs, Ohio State University

MANURE MANAGEMENT

One horse generates approximately 9.1 tons of manure per year. Include bedding and you could have 11 tons of waste per year per horse. Managing it is often a problem due to lack of land to spread, storage, and the use of wood byproducts as bedding causes resource problems. Manure or leachate should not leave the property through rainfall. Proper management promotes good neighbor relations, protects water quality, and protects horse health.

MANURE STOCKPILING (do not exceed 6 months)

When done properly stockpiling can provide an effective **temporary** solution to resolve or prevent pollution. Stay away from water patterns or tiles to prevent manure laden runoff from leaching to waterways. Maintain at least 75' of vegetative buffer and comply with the Standard 590 setbacks in this document. https://efotg.sc.egov.usda.gov/api/CPSFile/27107/318_OH_CPS_Short_Term_Storage_of_Animal_Waste_and_Byproducts_2019



Pros for proper stockpiling = reduces energy use, provides flexibility, protects resources

Possible Cons = odor issues, pest problems, contaminated runoff, drinking water contamination

COMPOSTING

Composting can add value back to the soil, reduce storage volume and help prevent pollution, if you have the space for windrows and equipment to turn it. However, flies and odors can pose problems. Horse manure with shavings paired with carbon sources like wood chips or sawdust is slow reacting. If compost is sold, follow OEPA requirements (<https://epa.ohio.gov/monitor-pollution/maps-and-advisories/composting-facilities>).

Animal mortality is also regulated in Ohio. Best management practices should be utilized to manage dead livestock in accordance with Ohio law (OAC rule 901:10-2-15, Sections 941.14, 953.26, 1511.022, and 3734.02 of ORC). Acceptable methods to dispose of mortality losses include incineration, burial, composting, rendering, and transport to an approved landfill per ODA Division of Livestock Environmental Permitting. Do not discard dead animals in a water pattern or near a waterway.



ANIMAL WASTE STORAGE FACILITY

Storage facilities (wooden or concrete, under roof) should be designed to have enough capacity to hold waste until weather/ground conditions permit spreading, usually up to 6 months. Roll off containers can be rented; however, we recommend keeping the manure covered to prevent runoff. Tarping can be done, but would need to be secured as such that rainwater won't get through. Some companies will also provide dumpsters, but avoid leakage.



OFF-SITE DISPOSAL

There are 2 landfills in Fairfield County that will take manure for a fee:

- Republic Services, 5131 Drinkle Rd, Amanda OH 43102 740-969-4487
- Micro, 8675 Lanc-Newark Rd (St Rt 37), Baltimore OH 43105 740-862-0751

SPREADING

Spreading of manure should follow the 4Rs:

RIGHT SOURCE Matches fertilizer type to crop needs.	RIGHT RATE Matches amount of fertilizer type crop needs.	RIGHT TIME Makes nutrients available when crops needs them.	RIGHT PLACE Keep nutrients where crops can use them.
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If you don't have adequate acreage to spread on, a local farmer may be interested in the manure as a fertilizer source; however, they may want to test it to determine whether bedding used could negatively affect their planned crop.

Overapplication of manure should be avoided where soils are already nutrient rich and more likely to pollute water when eroded away. Carefully follow soil test recommendations to avoid overapplication.

Don't surface apply manure/nutrients when there is a risk of runoff, including when:

- soils are frozen or snow-covered
- the top 2 inches of soil are saturated
- there is a greater than 50% chance of rainfall of more than 0.5" within 24 hours of the application of manure.

If conditions are favorable, but you don't have a spreader, contact local ag equipment dealers to inquire whether they have any to rent.

Minimum Setback Distances and Vegetative Treatment Requirements for the Application of Manure and other Organic By-Products.

These setbacks and vegetative treatment requirements were primarily established to reduce loss risk associated with pathogens. CAFO's must additionally follow the setbacks defined in the Ohio Department of Agriculture (ODA) rules regarding manure application (Ohio Administrative Code 901:10-2-14). Additional setbacks may apply to sludge that is regulated by the Ohio Environmental Protection Agency (OEPA) and septage regulated by the Ohio Department of Health.

Type of Sensitive - Setback Area	Manure Surface Application	Manure Incorporation or Direct Injection
Residences / Private Wells down slope from the application area	100 ft	100 ft
Sinkholes	300 ft	100 ft
Pond or Lake	100 ft. at a minimum 35 ft of the 100 must be Vegetative Barrier ²	35ft. Vegetative Barrier
	Or 300 ft	
<ul style="list-style-type: none"> • Streams¹ • Ditches¹ • Surface Inlets 	35 ft Vegetative Barrier	None
	Or 35 ft with 50% residue cover at time of application	
	Or 100 ft	
Grassed Waterway	35 ft	None
Field Surface Drains	35 ft	None
Public Wells	300 ft	100 ft
Developed Springs down slope from the application area.	300 ft	300 ft
Public Surface Drinking Water Intake	300 ft	300 ft

1. All listed measurements are from top of bank.
2. Vegetative Barriers are permanent vegetation consisting of grass, grass/legume mix, trees/shrubs, or trees/shrubs and grass/legumes.
3. Setback requirement for field surface drains are only required if the criteria listed Nutrient application Timing and Placement section are not met. When this criterion is not met the applications of manure must abide by this 35 ft setback distance.

https://efotg.sc.egov.usda.gov/api/CPSFile/28548/590_OH_CPS_Nutrient_Management_2020