



FACT SHEET 5.3

MUD MANAGEMENT

At one time or another almost every hobby farm with animals has had to deal with mud. Soil mixed with water, and in many cases manure, creates mud. Similar to manure, mud can harbor pathogens and become breeding grounds for pests.

Mud can create unsanitary conditions for both animals and humans while becoming a significant threat to water quality. Mud management is a must and requires a solid commitment to managing your pasture, livestock yard, animal manure, erosion control and water supply activities.

In addition to small pastures, hobby farms that support livestock often have a livestock yard (sometimes also referred to as an exercise area, riding ring, feedlot, pen, corral or paddock although there are sometimes slight differences among each of these terms). Unlike pastures, these smaller areas do not provide forage for animals but instead are often spaces used daily for feeding, handling, exercising and loafing. Generally located near the barn or covered animal shelter, these high-traffic areas tend to have bare ground making them a source of mud and concentrated animal waste that can pose a risk to animal health and water quality.

Mud can be a persistent problem for a hobby farmer, but it doesn't have to be with proper planning and management. Mud is not just an annoyance, it can create a number of serious problems for the hobby farmer including:

- Creating unsafe footing for animals and humans
- Harboring disease causing pathogens
- Producing a breeding ground for insects
- Damaging animal hooves and harm digestive systems
- Being a source of concentrated manure
- Compromising nearby water resources through stormwater runoff



REGULATORY CHECK

Massachusetts drinking water regulations (310 CMR 22.00) prohibit the stabling, hitching, standing, feeding or grazing of livestock or other domestic animals within 100 feet of the bank of a surface water source or tributary and prohibit people from allowing or causing any animal to go into, or upon, any surface water source or tributary thereto.



HOW TO MANAGE MUD

REMOVE MANURE	Areas should be cleaned of manure every 1-3 days depending on weather and accumulation rates to maintain a healthy environment. Manure holds moisture, a key component to mud. Removing it regularly can help reduce the production of mud.
APPLY FOOTING MATERIAL	Problem areas should be cleared of mud and replaced with suitable footing material such as gravel, chipped wood products or a combination of both.
DIVERT RAINWATER	Runoff from nearby slopes, roofs, driveways or other impervious areas should be directed away from pastures, animal yards and anywhere else manure accumulates. Easy to install solutions such as gutters and downspouts with flexible extensions from roofs, or strategically located ditches and berms located up-slope from animal yards can help redirect water away from mud prone areas.
PROVIDE COVER	Portions of small livestock areas can often be covered and water diverted away from problem areas. Covering these areas can help prevent rainwater from mixing with manure and soil.
PLANT A TREE	Trees require a lot of water and since water is a major ingredient of mud, then adding trees near your problem area can help alleviate mud concerns. Trees are able to not only take in water through root systems, they can actually intercept rainwater on leaves and stems during a storm. Both of these actions can help reduce the amount of water that reaches pastures and livestock yards.
RESTRICT RESOURCE AREA ACCESS	Animals with direct access to wetlands, streams, ponds, floodplains and other resource areas can damage natural vegetated buffers and create bare areas. Combine these naturally wet areas with the addition of manure and disturbed soils and the making of mud is inevitable. Measures should be taken to prevent animals from gaining access to water resources.

CONSIDER ASSESSING YOUR HOBBY FARM FOR VULNERABLE AREAS SUSCEPTIBLE TO MUD AND DEVELOP A MUD MANAGEMENT PLAN. REMEMBER THAT YOUR MUD MANAGEMENT PLAN MAY VARY DEPENDING ON THE TIME OF YEAR.



WATER QUALITY BENEFIT

Managing mud significantly reduces the chances of runoff contamination from reaching nearby waterways and helps to maintain a healthy environment for both humans and animals.