

Can you ever have too many horses?



Yes, it is possible to have too many horses if you have limited land.

We all want to keep our horses safe and healthy. Turnout is vital for horses' fitness and spirit. But you need enough land - or another plan - to naturally process your horses' manure and urine and to keep your paddocks or pastures from becoming bare and being environmental or health risks.

Healthy land and healthy horses

Manage your paddock, turnout, or pasture to maintain green cover

Green cover reduces nutrient losses, and drains and dries soil more quickly, preventing mud.

- **Control** total animal hours on every area of land.
- **Subdivide** your turnout or pasture into several smaller areas.
- **Limit** horse's access to each small area based on green growth/cover.
- **Rest** your land. Plants and soil need days off to recover and regrow, whether you have a paddock with a "run-in" shed or if you use daily turnout for only part of the day. Try 1 week access, then 2 weeks rest for each small area.
- **Manage grazing for your horses nutrition.** Pasture is a natural environment for horses. Good grazing can reduce hay and grain costs. Pasturing allows for the natural processing of horse manure and urine and keeps the landscape open.

Prevent horse wastes from reaching wet, swampy, boggy areas or streams

Horse manure and urine can contribute to soil fertility, but if mismanaged they can pose environmental and health risks. Urine contains high concentrations of nitrogen, about 400 parts-per-million (ppm). Drinking water should have concentrations below 10 ppm.

Nitrogen from urine and manure can drain through the soil to the groundwater that fills local wells and reservoirs. In addition, bacteria, parasites, and nitrogen in manure can flow across the soil surface into wetlands and streams with rainfall and snowmelt making them unsafe for pets, wildlife, fish, and people.

- Cover your manure pile with a plastic sheet or permanent roof.
- Fence animals out of streams and wetlands.
- Limit runoff to streams and wetlands by diverting water from paddocks and piles.
- Maintain green filters as buffers between paddocks and streams or wetlands.
- Limit pasture access during muddy seasons, this protects your pasture plants.

Avoid concentration of wastes

Concentrated wastes are more likely to cause water quality problems. Proper spreading or composting of horse wastes allows insects and microorganisms to naturally break down and recycle manure and urine into compounds that are good for plants.

- Allow 1-to-2 fenced acres for each horse with a run-in shed.
- Stabled horses that are turned out for only part of the day may share an acre.
- Keep bare, high use, compacted areas (stress or sacrifice lots) to a minimum.
- Clean turnouts frequently to limit waste build-up.
- Spread the wastes of each horse over an acre or more area (daily, weekly, or monthly.)

To learn about Comprehensive Nutrient Management Plans Contact NRCS: 413-585-1000 or UMASS: 413-545-1843

DON'T HAVE ENOUGH LAND?

- Capture urine and manure (in the barn or lined paddock) and manage properly.
- Pay for manure removal.
- Give your manure to someone to compost; you might arrange with a local hay producer or landscaper.
- Move your animals to another property for part of the year to reduce overall amounts of waste deposited per acre annually.
- Ask about open fields in your area; offer to graze to keep fields open.
- Talk with a local Land Trust or other landowners about leasing land for grazing.



Stocking Rate Guidelines

Pastures cannot process high amounts of animal wastes day-after-day year round. Grasses will not regrow if they are grazed every day.

Generally:

To naturally and safely absorb, breakdown, and utilize the manure and urine produced by an average horse during one year, wastes should be distributed over an acre of land.

To maintain green cover and provide quality grazing:

Minimum of 1 acre per animal

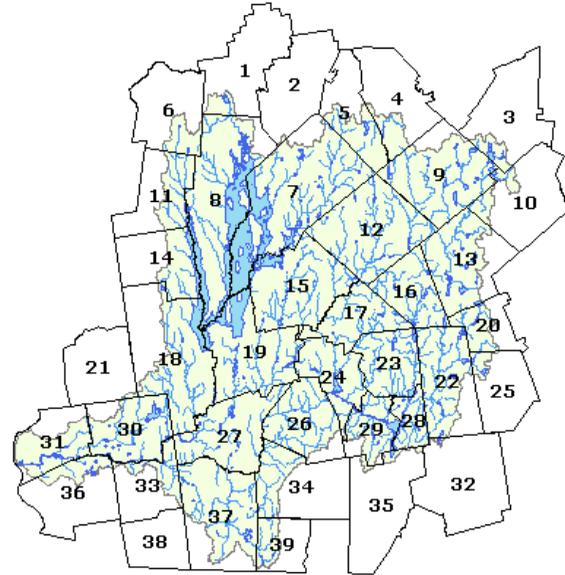
To prevent overgrown pastures:

Maximum of 2 acres per animal

The actual area needed for good pasture and waste processing depends on the size and number of horses, your land and soil characteristics, and your management and rest periods.

PROTECT WATER QUALITY in the CHICOPEE BASIN

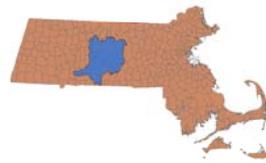
Your farm management can affect natural water sources and their safe use for drinking, swimming, and wildlife. Protecting water quality is important in the Chicopee River Basin. Our basin is laced with streams and wetlands and includes the Swift, Ware, and Quaboag Rivers, their tributaries, and the Quabbin Reservoir.



Chicopee Basin Towns

Athol	2	Palmer	27
Barre	12	Paxton	20
Belchertown	18	Pelham	14
Brimfield	34	Petersham	7
Brookfield	29	Phillipston	5
Charlton	32	Princeton	10
Chicopee	31	Rutland	13
East Brookfield	28	Shutesbury	11
Granby	21	Spencer	22
Hampden	38	Springfield	36
Hardwick	15	Sturbridge	35
Hubbardston	9	Templeton	4
Leicester	25	Wales	39
Ludlow	30	Ware	19
Monson	37	Warren	26
New Braintree	17	Wendell	6
New Salem	8	West Brookfield	24
North Brookfield	23	Westminster	3
Oakham	16	Wilbraham	33
Orange	1		

The Conservation Partnership for Grazing in the Chicopee Basin is a group of professionals, organizations and enterprises working together to assure good grazing, livestock husbandry, and land management. For more information contact the Conservation Partnership for Grazing c/o the **New England Small Farm Institute 413-323-4531** or **www.smallfarm.org**. Ask for a listing of partners, services and materials to improve pastures and grazing.

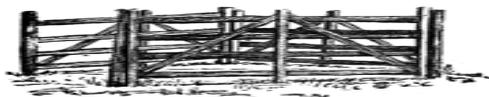


Pasture overgrown and overgrazed?

Try Rotational Grazing!

To keep grass, not weeds, growing:

- *Subdivide your grazing area into 6 or more paddocks.*
- *Rotate your horses among the paddocks.*
- *When **grass** is more than 4 inches, but less than 8 inches tall, graze down each paddock for a few days.*
- *Stop grazing when the **grass** is 2-3 inches tall.*
- *Let the grass regrow for at least 2 weeks after grazing.*
- *Clip weeds before they make seeds (and more weeds!)*
- *If your horses keep nibbling the same area within a pasture: Put up a temporary fence for a few weeks so the area can recover.*



See the Resource Notebook at your local library or town hall for more advice on stocking rates and land management.

