

# Pasture Management For Small Acreage Animal Owners

Columbia Soil & Water Conservation District



2514 Sykes Road  
St. Helens, OR 97051  
503.397.4555

## Problem:

Inadequate pasture management can result in:

- ◆ Reduced forage production
- ◆ Excess Soil erosion
- ◆ Nutrient or manure runoff
- ◆ Soil compaction
- ◆ Increased weed populations
- ◆ Deep mud



In addition to problems directly on the pasture site, increased nutrients, manure, soil washed off the land and damage surface water quality.

## Benefits of appropriate pasture management may include:

- ◆ Increase forage production over 200%
- ◆ Reduce weed population.
- ◆ Prevent erosion.
- ◆ Reduce expense for feed, herbicides and fertilizers
- ◆ Prevent runoff of animal wastes.



## Requirements:

◆ Pasture and other lands shall be managed to prevent both gully and sheet erosion.

OAR 603-095-0140 (1) and (2).

◆ Pasture livestock shall be managed to prevent any manure or fertilizer from washing off the site.

OAR 603-095-0140 (5).

◆ Pasture near streams shall be managed to establish and maintain a well vegetated buffer extending at least 25 feet from the stream.

OAR 603-095-0140 (3)

For more information on laws you can visit the following website: <http://www.oregon.gov/ODA/NRD/>

## Objectives:

(A) To develop healthy pastures which will filter wastes from surface water run-off before it gets to streams and groundwater.

(B) To increase pasture quality, yield, and utilization.

(C) To protect the natural functions of wetlands and near-stream areas which serve to filter pollution, move surface water to ground water storage, and provide habitat for wildlife.

## W H A T C A N B E D O N E ?

### Grazing Management:

- ◆ **Respect your farm's animal carrying capacity:** the number of animals on your pasture should not exceed the capacity of the forage to re-grow. Minimum recommended area on non-irrigated pasture is 2-3 acres per horse, 1-2 acres per cow and calf, or 2-3 per sheep per acre.
- ◆ **Graze pastures to 3 inches in height:** rest the pasture until it has re-grown to 6-8 inches. Sufficient leafy material is necessary for rapid re-growth, increased nitrogen utilization and filtration of contaminants such as animal wastes and fertilizers.
- ◆ **Cross fence pastures and rotate animals:** to increase pasture growth and utilization. Divide large pastures into at least four smaller pastures or paddocks using temporary or permanent fencing. Rotate animals from one pasture to the next; while allowing pasture to grow.
- ◆ **Keep animals off saturated rain soaked pasture during November through March:** pastures cannot survive continuous grazing and trampling in winter when they are saturated with water.
- ◆ **Create a sacrifice area (winter paddock) for use in the rainy seasons:** this area should be on higher ground and well away from streams. It keeps animals from destroying pastures and confines waste to an area surrounded by healthy pasture that can filter contaminated run-off.
- ◆ **Feed animals hay until the pasture can support grazing:** buy and feed plenty of hay until pastures are 6-8 inches in height and are re-growing rapidly. This produces much more forage in the long run and saves money by keeping pasture plants more productive.
- ◆ **Clip pastures in late May or early June:** before seeds have a chance to form. Clipping prior to a rest period will promote uniform growth. Clipping reduces the number of weed seeds, removes older, less palatable leaves, and promotes new growth.



## Pasture Renovation:

- ◆ **Reseed and renovate as needed:** renovation is the improvement of pastures through aerating, liming, fertilizing, and perhaps, inter-seeding more desirable forage species with minimum tillage.
- ◆ **Test soil before reseeding or renovating pastures:** to determine lime, fertilizer, and manure application rates based on soil needs to avoid over or under application.
- ◆ **Test soil before fertilizing with phosphorus or potassium or manuring:** apply fertilizer and manure in calibrated rate according to soil test needs, avoiding stream sides.
- ◆ **Apply no more than 60 lb of nitrogen per acre:** when temperature in upper 2 inches of soil stays above 42°F, usually early February. Avoid stream banks.
- ◆ **Apply 20 to 30 lb sulfate per acre annually:** or 30 to 40 lb of sulfate every other year.
- ◆ **Spread 1 ton per acre of dolomite lime for grass pastures:** when soil pH is less than 5.4, or clover pastures with pH less than 5.8. This adds calcium, magnesium, and neutralizes acid soil.
- ◆ **Consider your soil drainage type and intended use to select seed species:** when establishing or renovating a pasture.
- ◆ **Include legumes such as white or sub clover in pasture reseeding programs:** legumes can naturally add adequate amounts of nitrogen to pastures so pasture growth and quality are improved to reduce or eliminate the need for nitrogen fertilization.
- ◆ **Spread fertilizers and manure only when soil is not saturated and when not raining:** this prevents fertilizers and manure from entering ditches and streams.
- ◆ **Do not apply manure to fields during plant dormancy (October-March):** plants will not use the nutrients and they will wash away in the rains.
- ◆ **Do not use manure as fill material:** it will remain saturated, it will not compact, and it will only grow weeds.
- ◆ **Do not put un-composted shavings on pastures:** Shavings can take over three years to break down in the field, compared to less than three months in functioning compost pile. (For more information on composting and manure management see our manure management flier.)



Land owners are encouraged to develop a voluntary water quality management plan.

Soil Type	Seeding Season	Species for Grazing Land Mixes	Seeding Rates	
All Soil Types	Sept. 1- Oct. 15 April 15- May 15	Tall Fescue, Red Clover, White Clover, Birdsfoot Trefoil	<u>Grasses</u>	<u>Rate</u>
Very dry in Summer Excessively drained	Sept. 1- Oct. 15	Same as above and/or Orchardgrass, Alfalfa	Tall Fescue	12-15 lbs./ acre
Well drained or shallow soil	Sept. 1- Oct. 10 April 15- May 15	Same as 1st and/or Orchardgrass, Alfalfa, Perennial Ryegrass	Orchardgrass	12-15 lbs./acre
Somewhat poorly Drained in winter and early spring	Sept.1- Oct. 15 May 1- June 15	Same as 1st and/or Alsike Clover, Big Trefoil, Perennial Ryegrass	Meadow Foxtail	12-15 lbs./acre
Mixed drainage, dry uplands, wet swales	Aug. 15- Sept. 30 May 1- June 15	Same as 1st and/or Orchardgrass, Alfalfa, Perennial Ryegrass, Alsike Clover, Big Trefoil	Perennial Ryegrass	12-15 lbs./acre
			<u>Legumes</u> < 50% of mix	
			White Clover	2-3 lbs./acre
			Other Clovers	4-6 lbs./acre
			Trefoils	4-6 lbs./acre
			Alfalfa in mix	10 lbs./acre

**For More Information:  
CSWCD/USDA- NRCS Offices**

**Columbia Soil and Water Conservation District  
Natural Resources Conservation Service  
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**The staff at the Columbia SWCD can help you develop a water quality plan for your land. Once advantage of the plans is that owners can ensure that their land practices are in compliance with new state laws.**

**Give us a call.  
We are not regulators.  
Our job is to help.**