Monthly Farm Planner

January

- Restrict livestock from wet pastures and surface waters.
- Collect manure daily from confinement areas and store it covered.
- Hang nest boxes now for orchard mason bees and birds, and be sure birds have water available during freezes.
- Check with the District at the end of the month for T-Sum 200 status.

What is T-Sum 200?

T-sum is an indicator of when existing grass will begin to grow in the spring. It is based on each day's high and low temperature, starting on January 1.

Soil temperature mirrors air temperature so instead of putting a thermometer in the ground, you use the "T-sum 200" formula. *Find out more by reading Alan's article in the winter 2010 Nexus on-line at:* http://www.skagitcd.org/newsletters

February

Even though grass begins to grow now, February is a bit early to be grazing. Wait until the grass is at least six inches tall. It's also too cold to seed now. Continue to restrict animals from wet pastures and surface waters. Keep collecting manure daily from confinement areas.

- Test your soil to determine fertility needs for the year.
    - Buy a Soil Sample test kit, available for $5.00 to $20.00 from your local nursery or garden store. You can also purchase a soil test from the University of Massachusetts. To learn more, go to www.umass.edu/soiltest.
- Make sure you have portable electric fencing to divide your pasture into smaller paddocks when the fields are ready to be grazed.
- Order plants for windbreaks, buffers, wildlife habitat and restoring streams.

If your manure pile is getting large, contact the Skagit Conservation District's Manure Exchange Program at 360-428-4313 to be added to the manure provider list and connected with a local gardener/ landscaper who would like to pick up your manure to improve their soil.

March

Begin grazing in March when your grass is at least six inches tall and soil is no longer saturated. If it is saturated, exclude animal traffic on the grass. Introduce horses gradually to grass to prevent laminitis.
Once you start grazing, it's wise to practice rotational grazing, moving animals from one area to the next after they've grazed the grass down to three or four inches. This maximizes the use and production of grass and helps it recover.

- Begin rotational grazing if warranted (if your grass is higher than six inches).
- Plant native trees and shrubs.
- Exclude livestock access to surface water, wells, and septic drain fields.
- Cut or mow weeds when buds appear.
- Continue to exclude animals from wet pastures and surface waters. Keep collecting manure daily from confinement areas.
- Get a manure test before applying.
- Review your farm plan for fertilizer and lime needs for the upcoming season.

Skagit Conservation District can work with you free of charge to develop a farm plan! For more information, go to: http://www.skagitcd.org/small_farm

Benefits of Rotational Grazing

Do You Have Problems With.....

- Low pasture yields
- Low quality pasture
- Weeds... everywhere
- Poor livestock condition
- Supplementing hay in summer pastures?
- Large bare spots in the pasture
- Numerous livestock paths across the pasture

Rotational Grazing Can Help With:

- Increased pasture yields
- Better quality pastures
- Carrying more animals on the same acreage
- Feeding with less hay
- Better distribution of manure nutrients throughout the pasture
- Healthier livestock
- Improved income!
- Weed control

April

If you are planning to reseed or broadcast seed over an established pasture, try to do it around April 1st, and no later than mid-April. New seedlings will need moisture to sustain them. Planting in May could require irrigation to keep the grass viable, depending on precipitation. If you're tilling up an old pasture stand, now is a good time to spread lime and till it into the soil.

- April 1st, clip weeds and tall grasses, harrow manure.
  - Reseed or overseed pastures if needed.
  - Reseed confinement areas.
  - Pull emerging weeds.
  - Begin rotational grazing of pastures, if soil and weather conditions allow.
- April 15th, apply 35% of total amount of fertilizer recommended by soil tests.
- Apply fertilizer or spread compost if soil isn't saturated.

TIP: It's best to keep livestock off a newly seeded pasture until fall or next spring. Use the "pull test" to determine if grass is ready to graze. If the grass blade breaks rather than pulling up the roots, you can start grazing. Be sure not to graze new seedlings too frequently, and don't let them get below four inches tall.

Creating A Confinement Area

A confinement area is an area surfaced with durable footing like gravel that is used to contain animals and keep them off pasture from fall through early spring (October through March). During the rainy months, soils become soggy and easily compacted by the weight of livestock. This causes plant roots to suffocate and reduces the soil's capacity for holding water. Keeping livestock off pastures during the wet winter months will keep grass healthy and prevent mud.

May- Watch that grass grow!

- May 1st, clip weeds and tall grasses, harrow (drag) manure in grazed pastures after moving livestock to new one.
- Rotate animals off pastures when grass height is down to three inches.
- Mow pastures after grazing to ensure all plants are three inches tall and to prevent weeds from going to seed.
- Don't allow the livestock back on pasture until grass is six inches tall.
- Apply up to 40% of annual compost or commercial fertilizer needs if there is no forecast for rain.

Why Harrow?

A harrow is an implement for spreading manure to renovate pastures by breaking up and leveling heavy soil. Applying manure back to pastures creates a natural nutrient cycle; one horse's manure represents about $150 in fertilizer value/year. Use of a harrow can help to remove dead grass and lightly rooted weeds. You can make your own harrow by using an old chain link fence and cinder blocks!

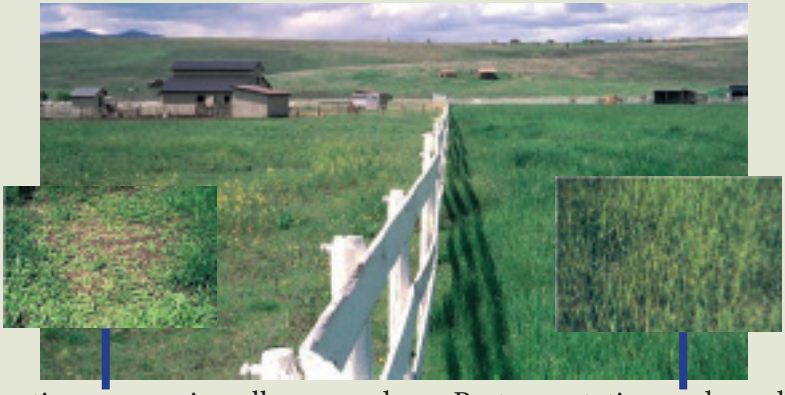
Store Bought

DIY Harrow

June

- Avoid under-grazing - don't allow grass to "get ahead of livestock".
- Mow pastures to prevent them from going to seed and losing nutritional value, or set aside some pasture to grow hay.
- Continue weed pulling or treatment, mowing, and dragging.

Grazing Management Produces More Grass!



Continuous grazing allows weeds to grow where grass roots have been weakened. A less dense leaf canopy allows sunlight to reach invading weeds.

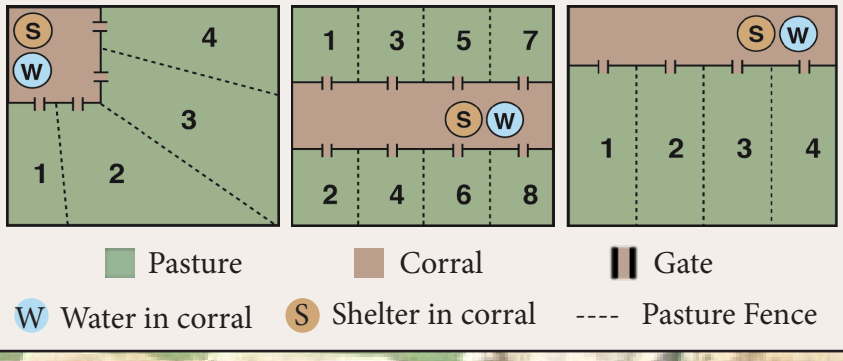
Pasture rotation and good grazing management produces more grass, fewer weeds, and a minimum of bare ground.

Tips on Rotational Grazing

- Subdivide large pastures into smaller pastures and develop a rotation grazing system.
- Move livestock out of pasture when grass is 3 to 4 inches. Grazing below that will damage root health and reduce leaf growth.
- Allow long rest periods or use a high-intensity, short-duration grazing system to rejuvenate poor-condition pasture.
- Provide a water source that is accessible from each pasture.
- Irrigate each pasture immediately after grazing to get plants growing again. Do not graze on wet soils.
- Plan for about 1 acre per 1000lb livestock.
- Generally 20-30 days are needed to rest pastures during rapid growth periods and 40 or more days during slow growth periods.

Number of Pasture Fields	Grazing Days per Field
2	20 - 40
3	10 - 20
4	7 - 13
5	5 - 10

Sample Designs for Multiple Pasture Grazing



July

July and August are generally dry months, when grass is dormant. Don't let animals graze grass below three inches in height. If your pasture is small, take your animals off entirely until the grass begins to grow in September.

- Continue to rotate, drag, and clip pastures.
- Check for erosion where livestock congregate. Move feed, water and mineral blocks away from gates and shade to more evenly distribute your animals.
- Repair or construct winter confinement area and footings.
- Stay vigilant on weed control. It's imperative to keep weeds from going to seed. Pull tansy, wearing gloves for protection.
- Purchase additional feed (hay) now.

Weed Control

- Weeds thrive when there are bare spots and grasses aren't healthy enough to compete.
- It is important to be able to identify common pasture weeds and remove them when they first appear. This includes:


Buttercup


Tansy Ragwort


Bull Thistle


Scotch Broom

August

- August 1st, continue to clip weeds and tall grasses, harrow manure in grazed pastures after moving livestock.
- Repair or construct manure storage bins.
- Do not feed animals hay or grain on the ground when the soil is dry (they will create bare spots where weeds can invade; horses can get sand colic from ingesting dirt in their feed).
- Avoid overgrazing as grass growth slows. Plan to reseed- order seed, lime and fertilizer and reserve equipment now (remember, total renovations should be done only as a last resort when pastures are unproductive or unhealthy for your animals).
- Purchase additional feed (hay) now.
- August 15th, apply remaining 25% of annual fertilizer needs.

Late August/September

- Spread composted manure and seed new grass or broadcast seed over established grass.
- Spread seed just before predictions of a light rain. *You have until about October 15th to seed before the soil becomes too cold and daylight too short for seeds to germinate.*
- Add lime as recommended by results from your soil test analysis to increase the pH of your soil. You can lime any time of year but fall is the best time. Lime takes time to react with soil chemistry. If you haven't already, apply the remaining fertilizer for the year.
- Install or check existing gutters, downspouts, and outlets adjacent to livestock pens. Clean gutters.
- Purchase additional hay if you haven't yet. Make sure your sacrifice areas are ready for your animals. Order footing material before paddocks get muddy.

Why Manage Livestock Manure

- Manure problems create an unhealthy environment for horses and livestock. Poor health may mean more vet bills and increased feed bills.
- Internal parasites hatch from manure as often as every 3 days and can reinfest animals as soon as 24 hours after. Use a good deworming program. If manure is properly composted, the heat generated (ca. 140°F) can kill parasites, worm eggs and weed seeds.
- Nutrient runoff from manure can have a negative impact on surface water, groundwater, and drinking water sources.

Managing and Using Manure

- Collect raw manure and stall waste from stalls, paddocks and barnyard areas every 1 to 3 days.
- Store manure in a covered area. A roof or tarp over your manure pile will prevent rain from leaching away valuable nutrients and control moisture for ideal composting conditions.
- Store manure in a location that makes it easy for equipment to turn, haul and load compost or non-composted manure.
- If you want to *compost your manure*, begin by building a bin or pile of manure and stall waste at least 3'x3'x3', and place the bin or pile where surface water flow cannot reach it.
  - Keep the pile as damp as a wrung out sponge.
  - Add air to pile by turning by hand or with a tractor.
  - When pile gets as big as you want, start a second pile to allow the first to continue composting.

October

The rain begins! It's time for livestock to be removed from the pasture. This rest also gives lime time to alter the soil while the pasture is not in use.

- Restrict livestock from pastures when soil is saturated.
- Prevent manure nutrient run-off into groundwater with buffers and grass filter strips around animal areas (size of buffer will vary).
- Store manure covered and at least 100 feet from any well to prevent contamination.

November

- Continue to keep animals off pastures when saturated.
- Make sure manure stays covered- have extra tarps handy if necessary.
- Use fallen limbs and branches from winter storms to create brush piles for wildlife.
- Keep water troughs/tanks from freezing (clear ice if needed).

December

Prepare for winter storms and the damage they can cause. Do you have all you need to keep your family and your animals fed and warm? Stock up on batteries, feed, supplements, pet food, and anything else you may need if you can't get into town for a couple of days. Make sure propane, diesel and gas tanks are full. Is the chain saw ready in case a winter storm causes tree or limb damage?

- Continue to restrict livestock from pastures when soil is saturated.
- Protect wetlands from livestock access to prevent damage to wetland functions and habitat.
- Store manure covered.
- Make sure birds and other wildlife have access to water during freezing weather.

Additional Resources

- **Western Oregon and Washington Pasture Calendar-** Oregon State University, Washington State University, and University of Idaho
  (Free to Download)
  https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/pnw699.pdf

- **Forages/Pasture-** Washington State University Extension
  https://extension.wsu.edu/animalag/resources/forages/

- **Pasture Management: Understanding Plant and Root Growth in the Fall** - Oregon State University Extension and Washington State University
  http://extension.oregonstate.edu/yamhill/pdf/late_summer_fall_pasture_ver2.pdf

Adapted from:

- Snohomish Conservation District's Monthly Farm Planner
- Tips on Land & Water Management for Puget Sound Rural Living by Puget Sound Conservation Districts
- Rotational Grazing: Small Scale Solutions for your Farm by the National Resources Conservation Service.
- Mud Management Overview by the King Conservation District

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