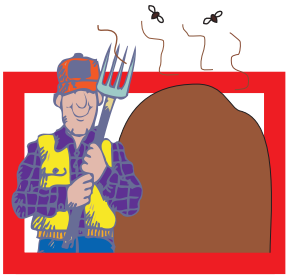
LEPS

Langley Environmental Partners Society



Horse Manure Composting Program

Weed Management Practices

Weeds in a pasture, especially weeds such as buttercup and horsetail, are a serious concern and should be dealt with as soon as possible!

Creeping buttercup (or Ranunculus repens for those science people out there) grows in acidic, boggy conditions such as what we experience on a daily basis here in the Fraser Valley. The flowers and stolons are bright yellow and the leaves are dark green with three lobes and white spots. Buttercup contains toxins that will cause serious inflammation in the digestive tract. Sap from the stems can also cause blistering on the skin or mucous membranes and even around the hooves of horses. In addition, some of the other symptoms that result from the ingestion of buttercup include: mouth blisters, colic, bloody urine or diarrhea, twitching of the eyelids, loud breathing and a weak pulse. Horses have been known to consume buttercup when grass density and height are too low.

Another common weed in this region is field horsetail (Equisetum arvense), which is also found in poorly drained and acidic soils. Horsetail is especially poisonous for young horses and can cause symptoms such as: jaundice, loss of appetite, weakness, staggering gait, excitability and paralysis. Horses will also consume this when grass is in short supply and when fields have been overgrazed.

Finally, Tansy ragwort (Senecio jacobeae) is another weed that is highly prevalent in the lower mainland and southern Vancouver Island. It also has bright yellow flowers and the leaves are ragged, dark green on top, and whitish underneath. Tansy ragwort contains liver-damaging alkaloids that can cause cells in the liver to expand and then eventually die. The symptoms of tansy ragwort poisoning include: weakness, liver failure, high temperature, incoordination, and yellow mucous membranes.

Weed Management Practices continued...

Practical Weed Management Strategies

Since there are no effective treatments for any of these plant poisonings the best mode of defense is preventative pasture management. If the pasture happens to be quite acidic (which you can determine through a simple soil test) then you should lime your fields to make them more alkaline. Dolomite lime is the most effective form for pastures and can be easily obtained at local garden centres. Do not use slow release lime as this can cause potential health problems for your horses. Also, let the pasture rest for one to two weeks after liming before turning your horses out.

Additionally, spreading finished horse manure compost and overseeding with a good grass mixture tailored to your region will go a long way to out-competing these nasty weeds. The more dense the grass, the less dense the weeds will be. Horses only graze weeds when there is not enough grass available in the field for them. Therefore, we need to ensure that the fields are not overgrazed and are left to rest when necessary.

A full weed management plan could include the following:

- Liming once in the spring and possibly again in the fall depending on the results of a pH test on your soil (pH should be no lower than 6.5)
- Aerating in the spring and again in the fall
- Thinly spreading a layer of horse manure compost each spring and fall (ensure that there is enough nitrogen in the compost). If your grass is longer than 2 inches you will need to mow it prior to spreading.
- Chain harrow the compost into the soil to break up any clumps left in the field
- Do a light broadcast over-seeding of the pasture with your pasture mix to ensure that grass density is maintained to discourage the presence of weeds.
- Hand pull or spot spray any weeds in the pasture prior to them going to seed.

Follow all spreading rates on containers/packages or fertilizer, herbicides, and pasture seeds. Your dealer will be able to best advise you of those rates.

Good luck and if you have any questions or concerns feel free to contact us.

www.manuremaiden.com

More information can be found at the BC Ministry of Agriculture and Lands or the Ontario Ministry of Agriculture, Food and Rural Affairs (MAFRA). All pictures courtesy of OMAFRA (http://www.omafra.gov.on.ca/english/livestock/horses/facts/poison.htm).