

Poisonous Plants in Pastures

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It is the season when cattle are finally out on pasture and calves are growing. It has been a dry spring in the Peace Country although the recent rains have certainly helped. Along with dry conditions or higher grazing pressure of animals on pasture, comes higher risk of grazing animals eating toxic or poisonous plants. Fortunately there are not high numbers of these plants in our area but there are some that ranchers should be aware of.

Tall Larkspur is one. Tall larkspur has spurred blue flowers that grow on the top third or a single and unbranched stem. It appears similar to delphinium that people grow in their perennial gardens. It usually grows in mountain meadows or on grassy hillsides. These plants contain toxic alkaloids which can cause neuro-muscular paralysis which leads to respiratory failure, bloat and death in cattle. Affected animals may appear nervous, have a staggery gait, salivate, have muscle twitching, be in respiratory distress or bloat. The toxicity can be difficult to treat and minimizing excitement in affected animals and providing supportive care is important.



Western Water Hemlock is another very poisonous plant. It is found in sloughs and other wet areas in pastures. The root is the most poisonous part of this plant and it is very toxic. It can be easily confused with Cow Parsnip which is not usually toxic. There is an excellent description of these plants on the BC Government website <http://www.agf.gov.bc.ca/cropprot/whemlock.htm>. This plant contains cicutoxin which is a toxin which affects the central nervous system and causes seizures. Animals usually



die within 15 minutes to 8 hours after ingestion of the toxin.

Every year we treat horses for alsike clover poisoning. It can be a very serious toxicosis and depending on the amount eaten can lead to the death of a horse. Not every horse on a pasture will be affected as some will selectively eat alsike clover over other forages.

Alsike clover contains a pyrrolizidine alkaloid that causes liver damage. Alsike can have a white, pink or red flower. It can be differentiated from red or white clover as alsike clover leaves do not usually have a white water mark and the flower stem originates from the main stem off the main stalk as separate leaflet stems. Unfortunately most of the clover you see in the peace area is alsike clover.

The most common symptoms that people see and are aware of are the sunburn or “photosensitization”. Often people think their horses have “scratches” as they get scabs and sores on the backs of their heels. The scabs are actually a result of sunburn and usually are seen on white feet. Sometimes white faces and noses will scab and peel and in severe cases, we have seen white patches on paints bodies burn and peel. Unfortunately this is just the surface and what is going on inside your horse as a result of the clover poisoning is much worse. The symptoms are actually a result of liver damage. It is less common but cattle can be affected by alsike clover as well.



Sweet clover which is often seen growing in our ditches (a tall plant with yellow flowers), can become toxic in the right circumstances. The plant contains a compound called coumarin that can be converted into a toxic substance called dicoumarin when the plants become moldy or are spoiled. The dicoumarin interferes with vitamin K synthesis. The end result of this toxicity is that the animal’s blood doesn’t clot properly. This can result in internal hemorrhaging. Sometimes blood can be seen in urine, stool, milk or respiratory secretions. Animals can have excessive bleeding as a result of trauma, surgery or during calving.



There are several plants in our pastures that can cause mechanical damage to grazing animals. These include foxtail and thistles. Foxtail can be particularly bad because the awns are barbed and can become lodged in the gums or tongue in animal's mouths and cause infections. This can result in Woody Tongue or Lump Jaw in cattle. Sores in animal's mouths can also result in them not wanting to eat and poor performance.

If you have questions about these plants or about other health concerns with your livestock, you can contact one of our veterinarians at the Dawson Creek Veterinary Clinic. www.dcvet.ca