In most circumstances livestock rarely directly consume toxic plants. Poisonings are most likely to occur through consuming large quantities of contaminated hay or silage in the early spring and during a drought when forage quality is low. In these circumstances, livestock are either unable to detect dried plants or are so hungry that even toxic plants become a potential source of food.

Invasive plants or weeds compete with desirable vegetation and adversely affect native and domestic forage production and quality. They are highly destructive and difficult to control allowing infestations to persist for many years and spread to new areas. Weeds also steal critical water supplies and negatively impact water quality by undermining riparian vegetation and accelerating stream sedimentation and soil erosion. When established, weeds not only reduce the aesthetic appeal of the landscape, they also create fire and traffic hazards and lower property values.

Invasive plants may also directly impact livestock health. Some plants have sharp spines and burs that puncture and scratch animals, increasing stress and veterinarian costs. Others may lead to animal fatalities, either through direct poisoning, or through an accumulation of nitrates and soluble oxalates. However, the majority of toxic weed poisonings result from animals feeding on contaminated hay; most livestock are unable to selectively avoid toxic plant material when dried.

This brochure is intended to assist landowners in protecting their livestock from toxic invasive plants in the Okanagan-Similkameen region. Although some native plants are poisonous, only introduced species will be discussed.

**NOTES ON TOXICITY**

Toxins may occur in some or all plant parts including leaves, roots, stems, flowers and seeds, at varying degrees of concentration. Often these toxins are only poisonous during certain stages of growth or seasons of the year and therefore may provide good forage if feed at the right time.

**SYMPTOMS OF POISONING**

Livestock poisonings are often undiagnosed as symptoms can be as general as a decreased appetite, weight loss or unhealthy appearance. Symptoms can also be as severe as liver or nervous system damage and death. If livestock are experiencing unusual symptoms it is important to contact your veterinarian for proper diagnosis and treatment. If you suspect a poisonous plant, carefully take a specimen to your local Weed Coordinator or District Agrologist. In the case of fatal poisoning, it is sometimes possible to determine the cause of death from samples of stomach content.

When consulting with your veterinarian, inform them of any changes to your pasture or range, including:

- Sparse forage due to heavy grazing, drought or poor early season growth
- Recently moving livestock to a new pasture
- Recently fertilizing pasture with nitrogen followed by cool weather and slow growth
- Feeding livestock hay from a new source

**WHAT YOU CAN DO**

- Learn to identify toxic weeds and the most effective control options
- Examine pastures, hay fields, roadsides and fence lines regularly for toxic plants
- Check your hay and forage
- Prepare a grazing strategy to avoid livestock concentrating and overgrazing
- Fence off areas in pastures where poisonous plants occur or range an alternative livestock that is not impacted by that specific plant
- Share your knowledge with your livestock association or club members
- Support provincial biological control programs and work with your regional weed coordinator
- Consult your veterinarian to correctly identify a suspected poisoning from plants

**RESOURCES**

For further information on toxic weeds check out the links listed on the Provincial Weed Website at [www.weedsbc.ca](http://www.weedsbc.ca) or the Animal Health Centre at [http://www.agf.gov.bc.ca/ahc/index.htm](http://www.agf.gov.bc.ca/ahc/index.htm).

You may also contact the Ministry of Agriculture and Lands Office in Kelowna at 1-888-332-3352 or in Kamloops at 1-888-823-3355.

For more information about the Regional District of Okanagan-Similkameen Weed Education Program contact the Regional District at 250-492-0237 or toll free at 1-877-610-3737. Information is also available on our website at [www.rdos.bc.ca](http://www.rdos.bc.ca).

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Reproduction is through seed but primarily from lateral roots. A large mature plant may produce up to 130,000 seeds.

The milky latex contains 5-deoxyingenol, a compound that is toxic and may lead to death in cattle and horses. The toxin may also produce inflammation and loss of hair on the feet of horses when freshly mowed or during haying. Other symptoms include irritation to the gastrointestinal tract, dermal and eye irritation and lack of performance and weakness. Although sheep and goats may be used as a form of biological control of this weed when consuming as a portion of their diet, deaths have resulted where animals are restricted to leafy spurge only.

Hoary Alyssum (Berteroa incana) is a perennial, biennial or annual growing up to 70 cm tall. It has white flowers on long slender stalks with grayish-green leaves. The upper leaves clasp close to the stem and the entire plant is covered in star-shaped hairs.

This plant can be toxic to horses, causing swollen legs and severe lameness. Consumption of large quantities can also cause diarrhea, leading to dehydration and miscarriage. The plant remains toxic after it is dried, and most poisonings are due to contaminated hay.