



## TOXIC TREES & PLANTS

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### TREES

Oaks are moderately toxic to horses. New young leaves and acorns, especially when green, are the toxic parts of the tree. The tannic acid in the acorns affects the intestinal lining and can cause portions of the lining to slough off. Symptoms of toxicity include poor appetite, weight loss, constipation followed by diarrhea, kidney failure and edema. In severe cases oak poisoning can lead to death. Our office has had several cases of poisoning by acorns with kidney failures.

It would be wise to remove all the trees from the pasture if possible. Allow some trees to grow around the perimeter of the pasture for shade. Horses will usually girdle trees that they have access to, which will eventually kill them anyway. Also, no pasture grasses will grow well in the shade created by the canopies of the trees.

Other trees that you need to be concerned with include:

- Cherries of all species
- Red maple
- Horse chestnut
- Black walnut
- Black locust
- Peach & Plum

Fortunately, plants with harmful toxins are designed to prevent animals from browsing and have a bitter taste that animals learn to avoid. Well-fed, healthy horses that have access to adequate forage, through pasture and/or hay, rarely consume toxic plants.

### PLANTS

Hungry horses do not listen to warnings to avoid poisonous weeds. There is widespread belief that instinct protects animals, but this cannot be relied on herefore, it is up to the horse owner to prevent pasture poisonings. The best way to do this is to become familiar with plants that are poisonous and by practicing good pasture management.

What makes a plant poisonous? There are several different chemical compounds capable of poisoning that can be found in a variety of plants. The chemicals range from the alkaloids, found in the nightshade family, to the glycosides, present in wild cherry and Sudan grass. The effects of poisoning can include mild irritation, sickness, or possibly death. Plant poisoning can often be difficult to diagnose, as it can resemble other physiological problems. Depending on the degree of plant toxicity, poisoning can occur due to a single contact or long term repeated contact with a plant.

The degree of danger a poisonous weed represents is a function of the plant's prevalence,

toxicity, and desirability. Frequently, if good quality forage is plentiful in the pasture, horses will likely avoid poisonous plants. In the absence of good quality forage during periods of drought or when pastures are overgrazed, however, animals may begin to investigate undesirable plants available in the pasture. Fortunately, many poisonous plants are not palatable and horses will not readily eat them unless adequate forage is not available. On the other hand, some poisonous plants are highly palatable and should be identified and removed.

#### **Poisonous Plants of Concern to Horse Owners:**

The following list contains some of the more common poisonous weeds that may be of concern to horse owners. Note: this list does not necessarily include every poisonous plant that might be found. In our area, some common plants that may be harmful to plants also include Azaleas, Canna Lillies, & Rhododendrons. We recommend you buy a book that might be more comprehensive as well as maintain proper pasture maintenance.

- Algae
- Black (Deadly) Nightshade (*Solanum nigrum*)
- Black Locust (*Robinia pseudoaccia*)
- Bouncing Bet (*Saponaria officinalis*)
- Brackenfern (*Pteridium aquilinum*)
- Buttercups (*Ranunculus* spp.)
- Cocklebur (*Xanthium strumarium*)
- European Bittersweet (*Solanum dulcamara*)
- Ground Ivy (*Glechoma hederacea*)
- Horsenettle (*Solanum carolinense*)
- Horsetail (*Equisetum arvense*)
- Jimson Weed (*Datura stramonium*)
- Larkspur (*Delphinium* spp.)
- Mayapple (*Podophyllum peltatum*)
- Milkweeds (*Asclepias* spp.)
- Mountain Laurel, Rhododendron, Azalea (*Ericaceae* spp.)
- Nightshades (*Solanum* spp.)
- Poison Hemlock (*Conium maculatum*)
- Pokeweed (*Phytolacca americana*)
- Skunk Cabbage (*Symplocarpus foetidus*)
- Sorghum/Sudan Grass (*Sorghum* spp.)
- St. Johns-wort (*Hypericum perforatum*)
- Star-of-Bethlehem (*Ornithogalum umbellatum*)
- Tall Fescue (*Festuca arundinacea*) [endophyte containing varieties]
- Water Hemlock (*Cicuta maculata*)
- White Snakeroot (*Eupatorium rugosum*)
- Yellow sweet Clover (*Melilotus officinalis*)
- Yew (*Taxus* spp.)

**Contact our office to set up a feeding and vaccination program for your equine family!**