



Cattle Producer's Handbook

Animal Health Section

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Halogeton Poisoning

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Halogeton glomeratus, an annual weed poisonous to sheep and cattle, was first observed in the United States near Wells, Nevada, in 1934. Halogeton now covers millions of acres in the United States. Cattle and sheep are susceptible to intoxication and death from consumption of halogeton, but cases of large scale poisoning of cattle are rare compared to sheep.

Most losses occur when hungry and thirsty animals are allowed to consume large amounts of halogeton. The toxic substance in halogeton is sodium oxalate, which is contained in leaves and other above ground parts of the plant. Halogeton is dangerous at all times. It becomes more toxic as the growing season advances, reaching a peak of toxicity at maturity. Livestock readily graze halogeton.

Grazing management for halogeton involves procedures to prevent accidental poisoning of the grazing animals, and management to encourage the density and vigor of competing perennial vegetation to biologically suppress halogeton.

Where and When It Grows

Halogeton often grows along railroad beds, roads, trails, and in other places where the soil has been disturbed. Dense stands are found on burned-over areas, overgrazed ranges, dry lakebeds, and abandoned dry farms. It thrives in the saline soils of colder semiarid regions—especially where native plant cover is sparse. Halogeton, however, lacks the capacity to compete with vigorous perennial plants and the more aggressive annuals.

Halogeton is a prolific seed producer. Wind, water, animals, and vehicles spread seed. New plants established

from February to mid-August produce a seed crop before the growing season ends in November. Moisture and warm temperatures cause the seeds to germinate. Seeds may remain viable in the soil for 10 years or longer.

How It Affects Livestock

Halogeton is actually more toxic to cattle than sheep, but because of the free roaming behavior of cattle they seldom consume enough to become intoxicated (James 1971). Symptoms of toxic consumption of halogeton on winter ranges are cattle become stiff and walk with extreme difficulty when driven. Some cattle lay down and stay down for several days.

Given the right conditions, halogeton can be a sudden and important factor in cattle management. In 1962, ranchers in Elko County, Nevada, lost about 150 cows in one day to halogeton poisoning (Young et al. 1999). The cows were driven down an old sheep trail where there were moderate to high concentrations of halogeton. The presence of hoarfrost on the halogeton probably contributed to the consumption of the toxic weed by thirsty cattle.

Sheep can tolerate large amounts of halogeton if they eat other forage at the same time and if they have been acclimated to halogeton in their diet. About 12 ounces of halogeton dry matter will kill a sheep that has been without feed for a day or longer; 18 ounces are required to kill a sheep that has been feeding on other forage. The first signs of halogeton poisoning occur two to six hours after an animal eats a fatal amount; death usually occurs in nine to 11 hours.