Florida

Common public opinion is that a goat can eat anything; like tin cans, plastic, weeds, brush and trees.

Too often new goat owners lose important livestock because of this misconception. Like all livestock, goats can die from parasites, diseases, genetic issues, but the least understood of these matters is toxic plants.

Goats have the ability to browse, that is, eat leaves from woody plants. This is because their mobile lips allow them to pick and choose what they ingest. Also, similar to a deer, their gut is able to digest these plants although this ability is limited. This way of feeding has caused owners to commonly use their goats to clear land. This can, however, expose the goats to very toxic plants that can poison them. Although uncommon, deer can be poisoned this way to many peoples surprise.

Observational Study

Most common ways goats are poisoned:

- When they are used in clearing woodlands or wetlands.
- When they are fed clippings from brush or trees by their owners.
- When they are nearing starvation and they consume plants they would otherwise not eat.
- When they consume hay containing dried toxic weeds.
- When they are allowed to feed on landscape or garden plants.

Here are some reasons goats often don’t die when toxic plants are eaten:

- Low dose or insufficient quantity eaten.
- Toxic plants eaten at a time of year when low toxicity occurs.
- Toxic plants eaten with large quantities of edible forage.
- Seemingly high resistance to the toxicity by particular goats.
- Animals with larger body weights are able to eat without reaching toxic levels.
- Some toxic plants are more serious when wilted while others become more toxic when dry and in hay.
- Certain animal’s “strong desire to live” or courage to go on when ill.

There are two general types of poisonings; acute and chronic. The first puts animals in immediate life-threatening danger while the second builds up toxic levels, accumulating over time. Plants usually fall in one category or the other while a few are dangerous both ways.

There are hundreds of poisonous plants from nearly a score of major toxic plant groups. These include alkaloids, oxalates, nitrates, cyanides, glycosides, resinoids, exalates, and minerals. It is alarming that more than 700 species of plants in the United States are known to have caused illness at one time or another. All livestock are at risk, as well as humans, if allowed to consume toxic plants.
Fortunately the goat farmer only needs to learn the plants in their pastures. After over a decade of helping goat farmers locate plants that have killed or are capable of killing their goats, I have found that the average farmer has only 8 to 14 toxic plants to learn to recognize on their property.

Many toxic plants, however, are opportunistic annuals, so a good guide is important to own. This will assist goat farmers in the ongoing protection of their herd.

It is my opinion, as a forerunner in the science of toxic plant locations and diagnosis, that often animals that die and are otherwise healthy, are misdiagnosed because so many different symptoms are caused by toxic plants. These secondary conditions often bring additional problems and infections.

Proximity to toxic plants can be key in prevention, but management is a far more important issue.

**Important Management Practices**

- Fence out certain areas, i.e., wetlands, wooded areas.
- Greatly limit frequent exposure to these areas.
- Clearing land and planting of improved pastures.
- Sale of particular animals who frequently eat known toxic plants.
- Eliminate the practice of cutting browse from brush or trees to use as goat feed.
- Frequently observe your goats feeding habits in order to avoid dangerous situations.
- Find the true cause of any dead goat.
- Use less valuable animals to clear land.
- Examine hay for toxic weeds.
- Stable a goat at the first sign of illness to see if toxic plants are the cause. Observe the goat when released for returned consumption of a toxic plant.

**Mechanical Injury**

Plants that have spiny coverings or fine hairs can cause mechanical injury. Upon ingestion they may cause injury to the gut. Landscaping plants that have alkalis can also bring injury or eventual infection by small crystals that damage the goat’s mouth or gut. A few examples are rhododendrons, elephant ear, philodendron, and crotalaria. Certain weeds can cause problems abrasively in the gut by causing a hair ball. Sandspur and cocklebur are examples.
Each year Livestock/Natural Resources Agent Dennis Mudge makes over 200 farm visits helping farmers avoid toxic plant problems.

**More Observations**

**Toxic Plants This Agent Has Witnessed in Florida Affecting Goats**

### Death

- Crotolaria
- Nightshade
- Poison Hemlock
- Spotted Water Hemlock
- Cherry Laurel
- Oleander
- Sicklepod
- Bracken Fern
- Yellow Jessamine
- Cherry Tree
- Chinese Tallow

### Illness

- Pokeweed
- Chokecherry
- Elderberry
- Lantana
- Coffee senna
- Cassia
- Bladderpod
- Lilies
- Croton
- Milkweed
Other Plants Known to Kill Goats

- Crowfoot
- Ivy
- Goatweed
- Cocklebur
- Oaks
- Pines
- Mountain Laurel
- Horse Nettle
- Tomato
- Potato
- Johnson Grass
- Lily of the Valley
- Sago Palm
- Rhododendron
- Chinaberry
- Jimsonweed
- Rosary Pea
- May Apple
- Philodendron
- Boxwood
- Coral Ardesia

Toxic Weeds In Northern Hay

- Bur Dock
- Mustard
- Lambs Quarter
- Milkweed
- Poison Hemlock
- Red Root