



Sacahuista

Nolina texana

Sacahuista is a perennial in the lily family. The plant forms a large, distinctive clump of many fibrous, narrow leaves up to 5 feet long.

The stems are woody and mostly buried. With adequate rainfall, the plant gives rise in the spring to several stems bearing many clustered flowers. The flower stalks usually are not apparent until the plant is in full bloom.

Distribution and habitat

Sacahuista is usually found on rocky range sites and mountain foothills from 3,000 to 7,000 feet in elevation. It is found in western Texas, Arizona, New Mexico and Mexico. Regions: 5, 6, 7, 8, 10.

Toxic agent

The flower buds, blooms and fruit contain **saponins** toxic to the liver. On the range, sheep, goats and cattle eat these plant parts avidly. Although livestock, particularly cattle, eat the foliage to some extent, it does not poison them.

Feeding experiments have found that a minimum toxic dose for sheep is about 1.0 percent of the animal's weight in buds or blooms. Ingesting sacahuista fruit, blooms or buds causes severe liver damage.

The minimum **toxic dose** is very close to the minimum **lethal dose**. Under range conditions, almost all animals developing signs will eventually die. Goats seem to be more susceptible to sacahuista than sheep.

Livestock signs

Sacahuista produces signs of:

- Generalized **jaundice**
- Loss of appetite
- Liver and kidney damage
- **Photosensitization**
- Progressive weakness

Dermatitis with itching may occur in early stages of photosensitization.

Integrated management strategies

Only the fruit, blooms and buds of the plant are toxic. Because these parts are available in the spring, restrict sheep and goats to pastures with the least density of sacahuista and graze cattle in the more dense pastures during this time.

The severity of loss correlates with abundance of bloom, which varies greatly from year to year. Heavy blooms occur only once every 5 or 6 years on average.

Individual plants may be controlled with 4 ounces of Spike 20P® pellets per plant or mechanical

grubbing. A few pastures might be made sacahuista-free and could be grazed when the plants are flowering in other pastures.

