



# Buttercup

*Ranunculus* spp.

There are 18 species of *Ranunculus* in Texas. These are perennial or annual herbs with a sharp, bitter taste.

The stem leaves are alternate, with palmlike veins, and are deeply lobed or dissected. The basal leaves usually have a distinctly different shape.

Flowers are arranged in fan-shaped clusters. They usually have five glossy yellow petals and give rise to a small, dry fruit.

## Distribution and habitat

There are two or more species of buttercup in every vegetational region of Texas. However, significant populations are usually found only in the eastern third of the state.

Virtually all of the species require ample water and are found in seeps, mud flats, along ditches or in standing, shallow water. Regions: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

## Toxic agent

All species are thought to contain a glycoside at various concentrations that is converted to protoanemonin, which acts as a blistering agent. The levels of glycoside increases greatly as the plants mature and reach the flowering stage.

Because protoanemonin is not stable, the plant is not a problem in hay. Although the toxin content varies widely within and among species of buttercup, a large amount of plant material is usually required to cause clinical signs with the species growing in Texas.

## Livestock signs

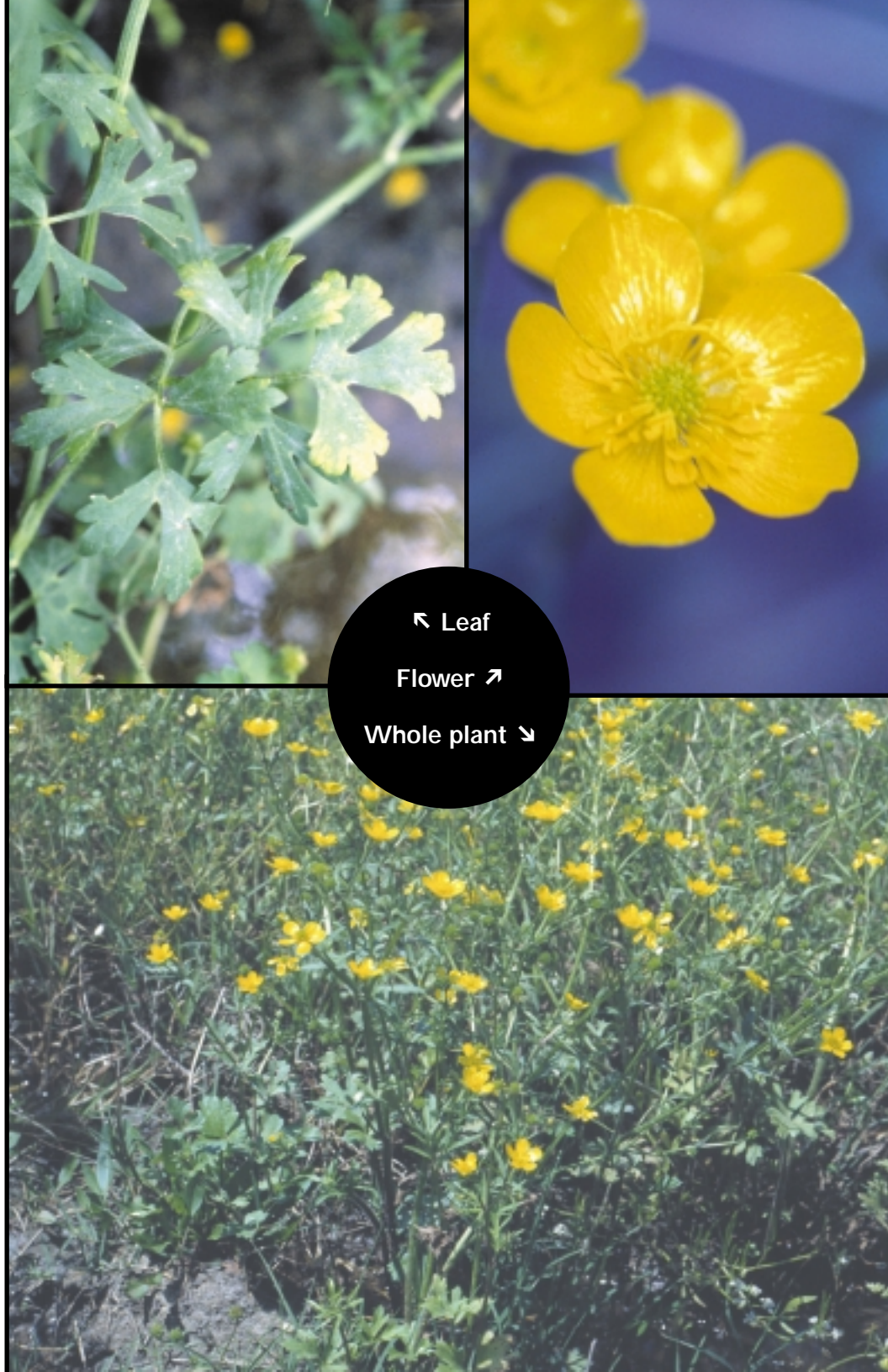
The signs of poisoning are those of severe gastrointestinal irritation and include:

- Red and/or ulcerated oral tissues
- Salivation
- Blood-tinged milk
- Diarrhea
- Abdominal pain
- Depression or excitation
- Convulsions
- Death

Most cases of buttercup poisoning in Texas are not life threatening. Horses consuming buttercup can die from colic.

## Integrated management strategies

Poisoning can usually be prevented by not forcing animals to consume buttercup at flowering. Some pastures must be vacated to prevent diarrhea. These may be used for hay if enough forage such as ryegrass is mixed with the buttercup.



↖ Leaf

Flower ↗

Whole plant ↘