Of interest this week at Beal...

White Snakeroot
Eupatorium rugosum

Family: the Sunflower family, Asteraceae.
Also called Milk-Fever Plant, Fall Poison, White Sanicle

This powerfully toxic herb of forests, stream banks, and meadow edges is native to the eastern two-thirds of the United States and southern Canada. Our specimen is in bed 61. It has opposite leaves with toothed margins and loose clusters of fluffy white flowers. The genus *Eupatorium* also contains boneset (*Eupatorium perfoliatum*) and Joe-Pye weed (*Eupatorium purpureum*), both of which have a history of being used to treat fever. This is not so for white snakeroot. All parts of this plant have been shown to be potentially fatal when ingested by every mammal species yet tested.

The most threatening aspect of this plant’s toxins was its chemistry for generating the symptoms of milk fever. This disease affected the health of both the settlers and their livestock, and its cause was a mystery until the early twentieth century.

When stock animals feed on white snakeroot they show symptoms of trembles—muscular tremors, weakness, and constipation often leading to death. The poisonous principle is named tremetol, a fat-soluble, high molecular weight alcohol. Nursing females are shielded from some of the effects of tremetol because of the high rate at which it is excreted into their milk. This can be a death sentence for their nursing young however. For people consuming the milk of their animals, the resulting sickness was misinterpreted as a dangerous infectious epidemic of late autumn.

In 1818, nine-year old Abraham Lincoln, lost his mother to milk sickness. Her death was reputedly the impetus for the family’s exodus to the new state of Illinois. Thought to be a better bet against catching milk fever, than locations where it was already well known. Today, our milk supply is protected by the competence of the dairy stockowners in pasture management, but also by the modern economics of pooling milk supplies from many producers to satisfy the milk market.
The name *Ageratina altissima* (L.) King & H.E. Robins is actually a synonym of *Eupatorium rugosum*. Which ever of these two names you choose, white snakeroot is in the subfamily Eupatorieae of the sunflower family, Asteraceae.

Generations of folks have grown up since this plant struck fear into Midwest American families. It is taken for a passably attractive wildflower. Some have brought white snakeroot into the garden and found it attractive to butterflies. A horticultural variety, *Eupatorium rugosum* ‘Chocolate’ is being marketed by several growers. This variety displays brownish-bronze foliage and late appearing flowers, and is promoted as a more controllable alternative to the more wild Joe-Pye weeds.

White snakeroot may be distinguished from its relative, and often neighbor in the field, boneset, *Eupatorium perfoliatum*, by white snakeroot’s petiole-attached leaves in contrast to boneset’s perfoliate (meeting across the intervening stem) arrangement of leaf pairs.