



Common Name: COOLEY'S MEADOWRUE

Scientific Name: *Thalictrum cooleyi* Ahles

Other Commonly Used Names: savanna meadowrue

Previously Used Scientific Names: none

Family: Ranunculaceae (buttercup)

Rarity Ranks: G2/S1

State Legal Status: Endangered

Federal Legal Status: Endangered

Federal Wetland Status: FACW+

Description: Perennial **herb** with smooth stems usually not more than 3 feet (1 meter) tall (some plants are up to 6½ feet or 200 cm tall); shade-grown plants may have sprawling stems. **Leaves** alternate, divided into many narrow, stalked leaflets. **Leaflets** up to 2½ inches (1.2 - 6.8 cm) long and ½ inch (1.2 cm) wide, with slightly inrolled margins, sometimes with 2 - 3 teeth at the tip. Lower surface of leaflets whitish, with no hairs or only a few short-stalked, knob-tipped hairs. **Female and male flowers** on separate plants, in loose, open clusters. **Female flowers** have green sepals, no petals, and many small, spindle-shaped fruits. **Male flowers** have yellow sepals, no petals, and long, pinkish-purple stamens. **Fruits** about ¼ inch (4.5 - 6 mm) long, oval, ribbed.

Similar Species: Cooley's meadowrue has the narrowest leaves of any of Georgia's meadowrues. Skunk meadowrue (*Thalictrum revolutum*) and small-leaved meadowrue (*T. macrostylum*, synonym: *T. subrotundum*) are erect plants usually taller than 4 feet, with round or oval, often lobed leaflets; both have white stamens.

Related Rare Species: See trailing meadowrue (*Thalictrum debile*) on this web site.

Habitat: Wet savannas and flatwoods over basic soils, also roadsides and powerlines through these habitats.

Life History: Cooley's meadowrue is a perennial herb that reproduces sexually and, occasionally, vegetatively by the spread of rhizomes. Female and male flowers are usually borne on separate plants (a few plants may have perfect flowers with both female and male parts). The flowers are wind-pollinated. Few seeds are produced and seedlings are rarely seen in the field, probably because the number of female plants is low – many populations have 3 times as many male plants as female and some have no female plants at all. Some populations are reproducing entirely by the spread of short rhizomes.

Survey Recommendations: Surveys are best conducted during flowering (mid-May–early July, possibly earlier when burned); narrow leaflets are distinctive throughout the growing season.

Range: Georgia, Florida, and North Carolina.

Threats: Conversion of habitat to pine plantations or agriculture, fire suppression and encroachment by woody species, invasion by exotic pest plants such as Japanese honeysuckle.

Georgia Conservation Status: The seven populations in Georgia differ from North Carolina and Florida plants in several ways and may be a new species, endemic to Georgia. Only one population is protected.

Conservation and Management Recommendations: Burn every 2 - 3 years, or mow early in the growing season, before flowering, to control woody plants. Eradicate invasive species such

as Japanese honeysuckle. Prevent disturbances to soil and hydrology. Protect sites from conversion to pine plantations and other development.

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L. Chafin, Sept. 2008: original account

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Female flowers



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Male flowers



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