



**Common Name:** RELICT TRILLIUM

**Scientific Name:** *Trillium reliquum* J.D. Freeman

**Other Commonly Used Names:** none

**Previously Used Scientific Names:** none

**Family:** Trilliaceae (Trillium) or Melanthiaceae (bunchflower)

**Rarity Ranks:** G3/S3

**State Legal Status:** Endangered

**Federal Legal Status:** Endangered

**Federal Wetland Status:** none

**Description:** Perennial **herb** with a hairless stem  $2\frac{3}{8}$  - 7 inches (6 - 18 cm) long, curving, leaning, or resting on the ground. **Leaves** 2 -  $4\frac{3}{4}$  inches (5 - 12 cm) long and  $2\frac{3}{8}$  - 4 inches (6 - 10 cm) wide, in a whorl of 3 leaves at the top of the stem; mottled with 5 shades of green and a

silvery streak along the midvein; leaves of older plants are rounded, nearly as wide as long, and overlapping at the base. **Flower** at the center of the whorl of leaves has no flower stalk, smells of rotten meat. **Sepals** 3 per flower, spreading, green to maroon. **Petals** 1 - 2 inches (2.5 - 5.5 cm) long, 3 per flower; maroon, green, or yellow. **Stamens** 6, dark purple, with vertical pollen sacs (**anthers**) opening along both sides to release the yellow pollen; tips of the anthers with pointed beaks. **Fruit** a fleshy capsule, about  $\frac{3}{8}$  inch (1 cm) long, maroon, oval, 6-angled.

**Similar Species:** Decumbent trillium (*Trillium decumbens*) rests on the ground and the flower smells like rotten meat, but it has twisted petals and a hairy stem. Underwood's trillium (*T. underwoodii*) leaves have 3 - 5 shades of green, pointed anthers, and erect stems with the leaves longer than or about the same length as the stem (leaf tips often touch the ground).

**Related Rare Species:** There are at least 22 species of trillium in Georgia, nine of which are of Special Concern. Five of these are included on this website: Chattahoochee trillium (*Trillium decipiens*), pale yellow trillium (*T. discolor*), Edna's trillium (*T. persistens*), least trillium (*T. pusillum*), and relict trillium (*T. reliquum*).

**Habitat:** Mature hardwood forests in rich ravines and on stream terraces; over calcium-rich bedrock such as amphibolite or limestone.

**Life History:** Trilliums are perennial herbs that send up stems, leaves, and flowers in early spring, after temperatures have risen but before the forest canopy has leafed out. After flowering and fruiting, the aboveground plant disappears, persisting through the late summer, fall, and winter as an underground rhizome. Seeds shed in the summer germinate the following spring and, within a year or two, send up a single, spatula-shaped seed leaf (cotyledon) for one year's growing season. The next year, a true leaf is produced and, in subsequent years, three-leaved plants appear. After 5 - 7 years (possibly fewer in the Coastal Plain), the plant produces a flowering stalk. Trillium seeds have small, fat-rich appendages called elaiosomes that are appealing to ants, yellow jackets, and other wasps, which carry the seed back to their nests, inadvertently dispersing the trillium seeds. Seeds are dispersed longer distances when the fruits are eaten by other animals such as deer and woodchucks. Mature trillium plants are very long-lived, perhaps living hundreds of years, since the rhizome continues to lengthen and produce shoots on one end, while the other end decays.

**Survey Recommendations:** Surveys are best conducted during flowering (mid-March–April).

**Range:** Georgia, Alabama, and South Carolina.

**Threats:** Logging and clearing of hardwood slope forests, competition from exotic pest plants, overbrowsing by deer.

**Georgia Conservation Status:** About 40 populations are known, 4 on state conservation lands, 3 on a military base, and one on national forest land.

**Conservation and Management Recommendations:** Protect hardwood slope forests from logging and clearing. Eradicate exotic pest plants, especially Japanese honeysuckle and kudzu. Reduce the size of Georgia's deer population.

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