Common Name: FLORIDA TORREYA

Scientific Name: *Torreya taxifolia* Arnott

Other Commonly Used Names: stinking-cedar, gopherwood

Previously Used Scientific Names: *Tumion taxifolium* (Arnott) Greene

Family: Taxaceae (yew)

Rarity Ranks: G1/S1

State Legal Status: Endangered

Federal Legal Status: Endangered

Federal Wetland Status: none

Description: Evergreen **tree** with whorled branches and shredding bark, formerly to 60 feet (18 meters) tall, now seen in the wild only as sprouts of trees top-killed by a lethal fungus, usually less than 15 feet (5 meters) tall. **Needles** 1 - 1½ inches (2.4 - 4 cm) long, flat, stiff, and sharply pointed; bright green above and light green below with two gray stripes paralleling the midvein; needles held in two parallel rows along the twig. Both **twigs and needles** emit a strong, unpleasant odor when crushed. **Female and male cones** are on separate plants, but are now rarely seen in the wild because maturing trees are killed by a fungal blight. **Female cones** 1 - 1 ¼ inch (2.5 - 3.2 cm) long, green, oval, berry-like (see photos), produced singly at the base of a few needles on current season's twigs. **Male cones** less than ⅜ inch (1 cm) long, scaly, held in rows along the previous season's twigs at the base of the needles.

Similar Species: No other native tree or shrub in south Georgia has long, stiff, sharp, evergreen needles. China fir (*Cunninghamia lanceolata*), an introduced ornamental tree frequently seen at old home sites, has similar bark and needles but its needles are spirally arranged on the twigs and lack the unpleasant odor; old brown needles usually cling to the twigs. It does not occur in natural habitats.

Related Rare Species: Florida yew (*Taxus floridana*) is also in the yew family; it occurs in ravines in north Florida, often near Florida torreya, but has never been found in Georgia. It is a small tree or shrub with purplish-brown, scaly bark and soft, aromatic needles that have pale stripes below.

Habitat: Rich, deciduous forests with beech and southern magnolia on mid-slopes of ravines and steepheads along the east side of Lake Seminole.

Life History: Before the advent of the blight in the 1950s, Florida torreya trees lived to be many years old and became sexually mature at around 20 years. Florida torreya is dioecious – female cones and male cones are produced on separate plants in the spring – and pollen is dispersed by the wind. Each female cone initially contains 2 seeds but only 1 matures; seeds take 2 years to mature. Cones are no longer seen in the wild due to the blight. Florida torreya sends up sprouts from the roots, stump, and root crown that grow several years before being killed; the ability to sprout has allowed the species to persist in spite of the blight and may allow for recovery.

Survey Recommendations: Florida torreya is evergreen and recognizable all year, but is more easily seen during winter when leaves are off deciduous trees.

Range: Endemic to a small area in southwest Georgia and adjacent areas along the Apalachicola River in north Florida.

Threats: Logging, conversion of habitat to pine plantations, fungal blight.

Georgia Conservation Status: Florida torreya is nearly extinct in the wild due to fungal blight and destruction of habitat. Several populations occur on conservation lands, but they are vulnerable to blight. Florida torreya is the focus of considerable conservation effort.

Conservation and Management Recommendations: Continue monitoring wild populations for blight. Avoid logging and other disturbances in ravine forests. Purchase or protect with conservation easements all remaining populations on private lands. Fund research toward a cure for the fungal blight.

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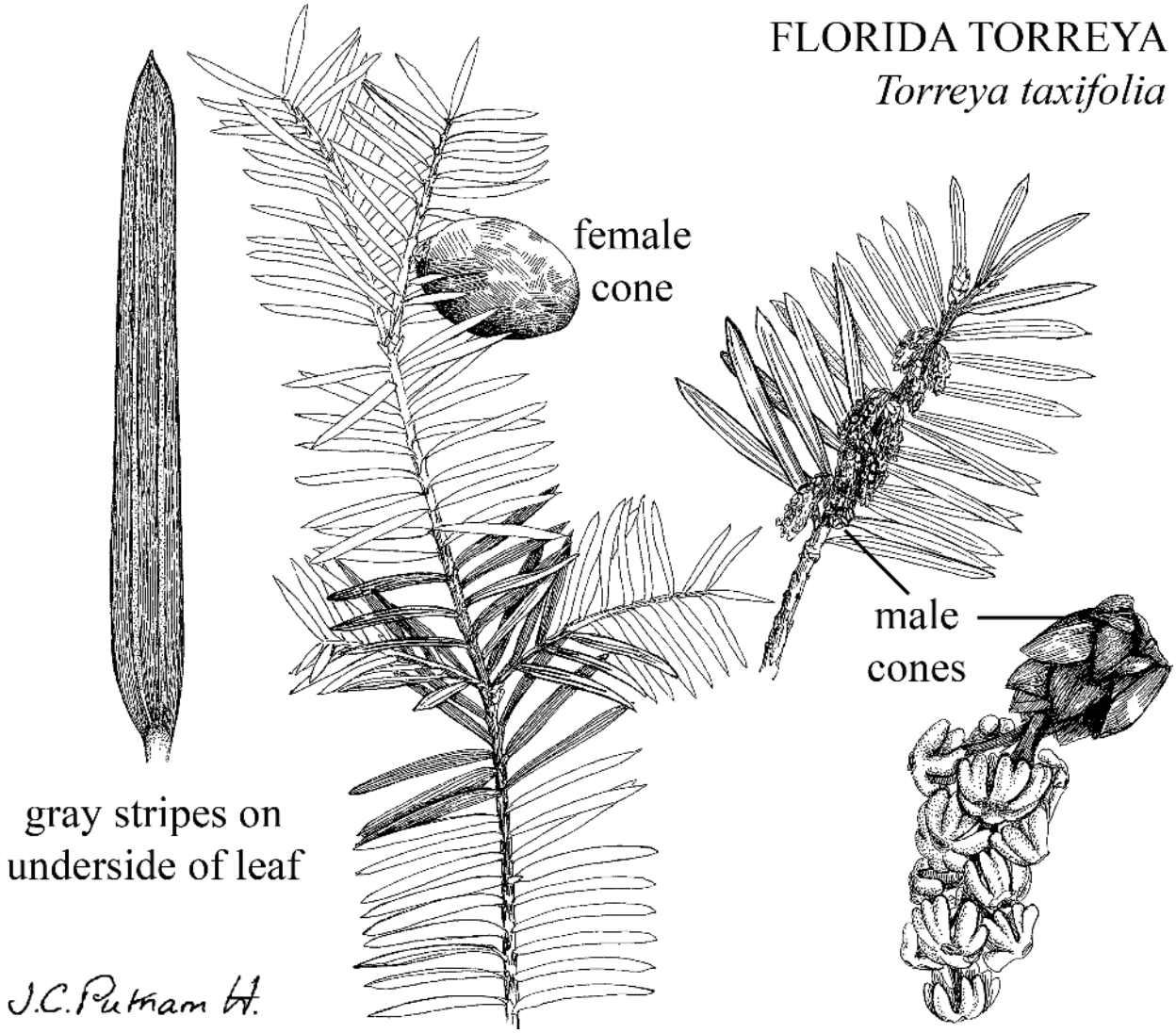


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