

Publication WSFNR-24-12C

## Endangered Species: FLORIDA TORREYA or FLORIDA NUTMEG <u>Torreya</u> <u>taxifolia</u> (Yew Family)

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The Florida torreya is a small to medium sized, evergreen tree with a pungent, aromatic odor. Trees have horizontal and spreading branches with drooping tips. Mature height is 10.6 meters (35 feet) tall and mature diameter is 18cm (1.5 feet). Needles are stiff, pointed, 2.5-4cm (1-1 1/2 inches) long and 3mm (0.13 inches) wide with the upper surface shiny dark green and lower surface pale green to silvery green with two distinct whitish bands. Periderm (bark) is brown to dark brown with an orange cast.

Male and female cones are on different trees (dioecious). Cones appear in March and April. Female cone (seed) is 2.5-3cm (1-1 1/4 inches) long, dark green in color, with a fleshy outer-layer with a purple cast and whitish bloom. Ripe seeds are similar in appearance to a large green olive.

A similar species is the Florida yew <u>Taxus floridana</u> which grows in the same area. The Florida yew has a low spreading crown and short, soft needles that are pale yellow-green below with no distinct white bands. The Florida yew has a female cone partially surrounded with a bright red cup.

The Florida torreya is found in rich, hardwood hammock forests along the Apalachicola River and its tributaries in western Florida and far southwest Georgia. Sites have rich, moist, sandy-loam soils. Figure 1 shows the general regional distribution. This species is only native in four counties: Georgia (1 county) and Florida (3 counties). This species is federally listed as endangered. There are no large mature trees left in the native range. A few large mature trees of both sexes exist outside the native range of the species. Figure 2 provides a county distribution for Georgia.

Burning, soil/site disturbance, thinning or clearing overstory vegetation can destroy habitat and stems. Wild hogs have destroyed many seedlings. In the early 1960s, a root-rot/needle blight pest complex began to destroy most of the older trees. Natural pest cycles, destruction of habitat, and stress patterns constraining ecological competitiveness have lead to the decline of <u>Torreya</u> and reduction of its range.

Several photographs of mature trees in Columbus, GA (i.e. outside native range of species) are shown.





Figure 1: General distribution in the Southeastern US.





Figure 2: General distribution in Georgia.







Male and female trees side-by-side in historic residential neighborhood (now dead).

(photographic credit = Dr. Kim D. Coder)







Upward view into crown base and periderm (bark) surface of main stem.

(photographic credit = Dr. Kim D. Coder)







## Foliage / needles.

(photographic credit = Dr. Kim D. Coder)









Young female cones, fallen mature female cones, and male cones on underside of needles.

(photographic credit = Dr. Kim D. Coder)





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