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Common Name: SWAMP BUCKTHORN

Scientific Name: *Sideroxylon thornei* (Cronquist) T.D. Pennington

Other Commonly Used Names: Thorne's buckthorn, swamp bumelia

Previously Used Scientific Names: *Bumelia thornei* Cronquist

Family: Sapotaceae (sapodilla)

Rarity Ranks: G2/S2

State Legal Status: Rare

Federal Legal Status: none

Federal Wetland Status: none

Description: **Shrub** up to 8 feet (2.5 meters) tall, usually spindly with a few main branches, some plants up to 20 feet (6 meters) tall with many branches. **Twigs** with milky sap, thorns, and short spur-shoots that produce clusters of leaves and flowers; hairy early in the spring, later becoming smooth and dark brown. **Leaves** $\frac{1}{2}$ - $2\frac{3}{4}$ inches (1 - 7 cm) long, varying in size and

shape, with rounded or bluntly pointed tips and smooth or slightly wavy margins; alternate except on spur-shoots; upper leaf surface smooth or with a few pale hairs along the midvein; lower surface with dense patches of tawny, gray, or rust-colored hairs; **leaf stalks** hairy. **Flowers** small, white with 5 petals, often in clusters on spur-shoots. Mature **fruit** about $\frac{3}{8}$ inch (8 - 10 mm) long and wide, round, black (green immature fruit shown in photo); sepals and style remain attached to the fruit.

Similar Species: Smooth buckthorn (*Sideroxylon reclinatum*) is a much-branched shrub with small leaves and small round or oval fruits less than $\frac{3}{8}$ inch (8 mm) long and $\frac{1}{4}$ inch (4 - 6 mm) in diameter; the upper leaf surface has raised veins, and its leaves and leaf stalks are hairless by mid-summer. Woolly buckthorn (*S. lanuginosum*) is a small, upland tree with densely hairy twigs and leaves.

Related Rare Species: See big-fruited buckthorn (*Sideroxylon macrocarpum*) and silver buckthorn (*S. alachuense*) on this website.

Habitat: Forested limesink depressions and swamps over limestone.

Life History: Swamp buckthorn is tardily deciduous, dropping its leaves in late winter and then quickly leafing out again. As with all buckthorns, it has two types of growth: rapid primary growth producing long shoots with relatively large leaves, and slower-growing spur shoots which produce short stems crowded with nodes, smaller leaves, and flower clusters. Alternating periods of slow and rapid growth result in a crooked branch system. It flowers in late spring; the flowers are mildly fragrant and attract a variety of insect pollinators. Although pollination studies have not been conducted for this species, most buckthorns are capable of both cross- and self-pollination. The fruit is fleshy and attractive to animals, which disperse the seeds.

Survey Recommendations: Surveys are best conducted during fruiting, August–early October; look for berry size and patches of hairs on lower surface of leaves. Flowers May–June.

Range: Georgia, Alabama, and Florida.

Threats: Ditching, draining, and filling in wetlands. Clearcutting in floodplains and swamps. Lowering of the water table by excessive withdrawal from the aquifer.

Georgia Conservation Status: Thirty-three populations are known, 9 on conservation lands.

Conservation and Management Recommendations: Avoid ditching, draining, and filling in wetlands. Avoid clearcutting in wetlands and floodplains. Limit withdrawal of water from the aquifer.

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Author of Species Account: Linda G. Chafin

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