



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** ½ - 2¾ 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.

Selected References:

Anderson, L.C. 1996. New geographical and morphological data for *Sideroxylon thornei* (Sapotaceae). Sida 17(2): 343-348.

Chafin, L.G. 2000. Field guide to the rare plants of Florida. Florida Natural Areas Inventory, Tallahassee.

Chafin, L.G. 2007. Field guide to the rare plants of Georgia. State Botanical Garden of Georgia and University of Georgia Press, Athens.

Godfrey, R.K. 1988. Trees, shrubs, and woody vines of northern Florida and adjacent Georgia and Alabama. University of Georgia Press, Athens.

Huegel, C. 1992. *Bumelias*. The Palmetto 12(3): 1 - 3.
<http://www.fnps.org/palmetto/v12i3p6hugel.pdf>

Nelson, G. 1996. Shrubs and woody vines of Florida. Pineapple Press, Sarasota, Florida.

Patrick, T.S., J.R. Allison, and G.A. Krakow. 1995. Protected plants of Georgia. Georgia Department of Natural Resources, Natural Heritage Program, Social Circle.

Pennington, T.D. 1991. The genera of Sapotaceae. Royal Botanic Gardens, Kew and New York Botanical Gardens, Bronx, New York.

Weakley, A.S. 2008. Flora of the Carolinas, Virginia, Georgia, northern Florida, and surrounding areas. University of North Carolina Herbarium, Chapel Hill.
<http://www.herbarium.unc.edu/flora.htm>

Author of Species Account: Linda G. Chafin

Date Compiled or Updated:

L. Chafin, Aug. 2008: original account

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