

**Common Name: SILVER BUCKTHORN** 

Scientific Name: Sideroxylon alachuense L.C. Anderson

Other Commonly Used Names: Alachua bully, Clark's buckthorn, silver bully

Previously Used Scientific Names: Bumelia anomala (Sargent) R.B. Clark, Bumelia

lanuginosa (Michaux) Persoon var. anomala Sargent

Family: Sapotaceae (sapodilla)

**Rarity Ranks:** G1/S1?

State Legal Status: Special Concern

Federal Legal Status: none

Federal Wetland Status: none

**Description:** Shrub up to 30 feet (9.2 m) tall, though usually about 10 feet (3 m), with crooked, thorny branches. Current season twigs are light colored, silvery or green; mature branches are nearly hairless, with sharp, green thorns that become short spur-shoots. Leaves  $1\frac{1}{2} - 2\frac{3}{8}$  inches (4 - 6 cm) long and  $\frac{5}{8} - 1\frac{3}{16}$  inch (1.6 - 3 cm) wide, simple, alternate; leaf tips blunt, rounded, or notched; upper surface dark green and heavily veined, lower surface silvery (shiny white) due to smooth, dense covering of hairs; drought-stressed plants have tawny hairs on the lower surface. **Flowers** with 5 - 6 white petals, each with a stamen and appendage on the inner surface; 10 - 20 flowers are clustered on **spur-shoots**. **Fruits** about  $\frac{1}{2}$  inch (1.2 cm) long, shiny black, oblong.

**Similar Species:** Wooly buckthorn (*Sideroxylon lanuginosa*) and the common form of tough buckthorn (*S. tenax*) have brown, hairy twigs and leaves with scruffy, rusty-brown hairs on lower surfaces. Tough buckthorn plants growing on shell middens may have silvery twigs and leaves; they closely resemble and may be intermediate forms of silver buckthorn or hybrids between the two. Tough buckthorn flowers have 4 - 5 petals and flowers in June.

**Related Rare Species:** See big-fruited buckthorn (*Sideroxylon macrocarpum*) and Thorne's buckthorn (*S. thornei*) on this website.

Habitat: Sandy hammocks, calcareous bluffs, and shell middens on barrier islands.

**Life History:** Silver buckthorn reproduces both sexually as well as vegetatively, by the spread of horizontal rhizomes that send up shoots. Its flowers are mildly fragrant and probably 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 large fruit is fleshy and attractive to animals, especially birds, which disperse the seeds. Silver 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.

**Survey Recommendations:** Surveys are best conducted during flowering (mid-late July) and fruiting (late summer). The most distinctive feature of silver buckthorn – the silvery hairs on the lower leaf surface – may be altered by drought conditions which seem to result in leaves with grayish or tawny hairs.

Range: Georgia and Florida.

**Threats:** Development and clearing of coastal hammocks and maritime forests.

**Georgia Conservation Status:** There are about 8 populations of plants that may be silver buckthorn in Georgia, but additional work is needed to confirm their identity. Most of these plants occur on publicly owned lands.

**Conservation and Management Recommendations:** Protect coastal habitats from clearing and development.

## **Selected References:**

Anderson, L.C. 1997. *Sideroxylon alachuense*, a new name for *Bumelia anomala* (Sapotaceae). Sida 17(3): 565-567.

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

NatureServe. 2008. NatureServe Explorer. Arlington, Virginia. <a href="http://www.natureserve.org/explorer">http://www.natureserve.org/explorer</a>

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

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## **Date Compiled or Updated:**

L. Chafin, Aug. 2008: original account K. Owers, Feb. 2010: added pictures

