



Common Name: CAROLINA BOG LAUREL

Scientific Name: *Kalmia carolina* Small

Other Commonly Used Names: Carolina bog myrtle, Carolina wicky, Carolina lamb-kill, Carolina sheep-laurel

Previously Used Scientific Names: *Kalmia angustifolia* var. *carolina* (Small) Fernald

Family: Ericaceae (heath)

Rarity Ranks: G4/S1

State Legal Status: Threatened

Federal Legal Status: none

Federal Wetland Status: FACW-

Description: Evergreen **shrub** 3 - 5 feet (1 - 1.5 meters) tall, with nearly hairless twigs, forming colonies. **Leaves** $\frac{3}{4}$ - 3 inches (2 - 8 cm) long, usually in whorls of three, oval; upper surface blue-green, hairless, and shiny; lower surface covered with minute, fine hairs. **Flower clusters** in the angles between the stem and last year's leaves. **Flowers** about $\frac{1}{4}$ inch (0.5 cm) wide; white, pink, or rose; bowl-shaped with 5 shallow lobes and a ring of dark pink dots near the throat; tips of the stamens tucked into 10 tiny pockets around the inside of the "bowl." **Sepals** finely hairy and lacking glands. A pair of small leafy **bracts**, with few or no glands, lies between the flower and the nearest set of leaves. **Fruit** a round, 5-lobed capsule, about $\frac{1}{8}$ inch (0.25 - 0.35 cm) wide.

Similar Species: Mountain laurel (*Kalmia latifolia*) is a tall shrub with glossy, dark green leaves up to 4 inches (10 inches) long; reddish, shredding bark; and sticky, white flowers up to 1 inch wide. Wicky (*K. hirsuta*) is a low shrub of the Coastal Plain, with alternate leaves and hairy twigs, leaves, and flowers.

Related Rare Species: None in Georgia.

Habitat: Mountain bogs; seepage slopes and boggy streamsides in Fall Line sandhills, often with Atlantic white cedar and sweet pitcherplant.

Life History: Carolina bog laurel flowers have an unusual pollination mechanism in common with other members of this genus: the pollen-bearing tips (anthers) of the stamens are tucked into 10 tiny pockets on the inner surface of the flower; the stamens are under tension, and, once the pollen is ripe, the weight of a visiting insect – usually a bee – triggers the stamen. The anther pops out of the pocket and dusts the bee with pollen. The pollen is then carried to the flowers of other bog laurel plants where cross-pollination occurs (bog laurel will also set fruit as a result of self-pollination). Its abundant seeds are minute but winged, and are dispersed by gravity and wind.

Survey Recommendations: Surveys are best conducted during flowering (April–May).

Range: Georgia, South Carolina, North Carolina, and Virginia. In Virginia, this species' range overlaps with a related northern species, sheep-kill (*Kalmia angustifolia*).

Threats: Conversion of bog habitat to pasture and farmland; invasion of habitat by competing shrubs and trees in the absence of fire; draining and ditching of wetlands.

Georgia Conservation Status: Plants occur in one mountain bog in the Chattahoochee National Forest, and along one stream on private property in the Fall Line.

Conservation and Management Recommendations: Protect habitat from draining, ditching, and conversion to other land uses. Use prescribed fire or hand-clearing to reduce competition and create gaps in the canopy.

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Date Compiled or Updated:

L. Chafin, Apr. 2007: original account

K. Owers, Feb. 2010: added pictures

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