



Common Name: CUTHBERT'S TURTLEHEAD

Scientific Name: *Chelone cuthbertii* Small

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Scrophulariaceae (snapdragon) or Plantaginaceae (plantain)

Rarity Ranks: G3/S1

State Legal Status: Threatened

Federal Legal Status: none

Federal Wetland Status: OBL

Description: Perennial **herb** 16 - 39 inches (40 - 100 cm) tall. **Leaves** 2 - 5 inches (5 - 12 cm) long and $\frac{3}{8}$ - 2 inch (1 - 5 cm) wide, lance-shaped with rounded bases, slightly toothed edges, and no **leaf stalks**; hairless except along veins, pale green on the lower surface. **Flower spikes** distinctly 4-sided when viewed from above. **Flowers** $\frac{3}{4}$ - 1 $\frac{1}{4}$ inches (2 - 3 cm) long, pinkish-purple, tubular, inflated, two-lipped and nearly closed at the tip; inside the flower is a tuft of yellow hairs, 4 fertile stamens, and a short, purple, sterile stamen. **Fruit** about $\frac{3}{8}$ inch (1 cm) long, oval, with many flat, round, winged seeds.

Similar Species: Smooth turtlehead (*Chelone glabra*) flowers are white with pink or purple tips; its leaves have tapered bases, sometimes with short leaf stalks; the sterile stamen is green. Purple turtlehead (*C. obliqua*) has purple flowers; its leaves have tapered bases and the leaf stalks are up to $\frac{1}{2}$ inch long.

Related Rare Species: None in Georgia.

Habitat: Mountain bogs, wet meadows, sphagnum seeps, and swamps.

Life History: Little is known about the life history of this species, but all members of this genus in our area are perennial herbs that sexually reproduce. Turtlehead flowers are cross-pollinated by bees that are large enough to push the nearly closed lips of the flower open. The flowers produce large amounts of nectar which could potentially interest a wide array of insects; however, the nearly closed flowers exclude insects except for large bees which have specialized in entering these unusual flowers. The short sterile stamen inside the flower may play a role in pollination, perhaps by slowing the bee's access to the nectar and forcing it to remain longer in the flower, thus increasing the chances of the bee both picking up and leaving with pollen.

Survey Recommendations: Surveys are best conducted during flowering (late July–September).

Range: Georgia, South Carolina, North Carolina, and Virginia.

Threats: Draining of and sedimentation into mountain bogs. Conversion of mountain bogs and wetlands to agriculture. Fire suppression. Invasion by exotic pest plants.

Georgia Conservation Status: Two populations have been observed, both in the Chattahoochee National Forest; one has not been seen since 1948.

Conservation and Management Recommendations: Protect mountain bogs and streams from draining, filling, and other mechanical disturbances. Remove woody vegetation by hand or occasional prescribed fire. Eradicate exotic pest plants.

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Date Compiled or Updated:

L. Chafin, Nov. 2007: original account

K. Owers, Jan. 2010: updated status and ranks, added pictures

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Inflorescence