



Common Name: MOUNTAIN WITCH-ALDER

Scientific Name: *Fothergilla major* (Sims) Loddiges

Other Commonly Used Names: mountain witchhazel, large witchhazel

Previously Used Scientific Names: *Fothergilla monticola* Ashe

Family: Hamamelidaceae (witch hazel)

Rarity Ranks: G3/S1

State Legal Status: Special Concern

Federal Legal Status: none

Federal Wetland Status: none

Description: Shrub up to 21 feet tall (6.5 meters), typically about 6 feet (2 meters), densely branched; **twigs** with naked terminal buds. **Leaves** 1 - 5 $\frac{3}{8}$ inches (2.5 - 13.5 cm) long and 1 $\frac{5}{8}$ - 5 inches (4.2 - 12.5 cm) wide; leathery, with blunt teeth on the upper $\frac{2}{3}$ of the leaf margin; base rounded or broadly wedge-shaped with unequal sides; nearly hairless on the upper surface, but with star-shaped hairs on the lower surface; the lowest pair of leaf veins extend for a short length as part of the margin of the leaf; some plants have leaves with a waxy coating on the lower surface. White **flowers** with many, showy, white stamens and no petals are held in dense “bottlebrush” spikes at the tips of twigs. **Fruit** a beaked capsule $\frac{1}{4}$ - $\frac{1}{2}$ inch (0.5 - 1.3 cm) long, splitting open to expel 2 shiny, black seeds. Lower surfaces of leaves, twigs, buds, and flowers are covered with **star-shaped hairs**.

Similar Species: Witch hazel (*Hamamelis virginiana*) is a large shrub, up to 20 feet tall, less densely branched than witch-alder. It occurs in moist, upland hardwood forests. It has similarly shaped, but fully toothed, leaves; the lowest pair of leaf veins are included within the margin of the leaf blade. Witch hazel produces yellow flowers in the late autumn. Dwarf witch-alder (*Fothergilla gardenii*)[[click here to go to web page](#)], a similar species found in Georgia’s Coastal Plain, is listed as Threatened.

Habitat: Mixed hardwood-pine forests on dry, rocky (sandstone or granite) slopes and bluffs, often with Virginia pine, scarlet oak, and black oak; occasionally, moist forests with tulip poplar, silverbell, and cucumber tree along rocky stream banks. Prefers acidic soils.

Life History: Mountain witch-alder reproduces sexually as well as vegetatively by the spread of stolons. Its flowers usually emerge before the leaves, in early spring, and are held in showy spikes. The numerous, white stamens and sweet fragrance attract bees and other insect pollinators (there are no petals). The fragrant flowers are a rich nectar source. The fruits of mountain witch alder are capsules that shrink as they dry, placing the seeds under pressure. When the seeds are mature, the capsule snaps open and flings the seed up to 15 feet away, out of the reach of competition with the parent plant. Mountain witch alder leaves are brilliantly colored in the fall.

Survey Recommendations: Surveys are best conducted during flowering (February–May) and fruiting (spring –early summer).

Range: Georgia, South Carolina, North Carolina, Alabama, Tennessee, and Arkansas.

Threats: Logging and other clearing, development, exotic invasive species.

Georgia Conservation Status: Three populations have been seen in the last 30 years, two on conservation lands: Zahnd Natural Area in Walker County and Chattahoochee River National Recreation Area in Fulton County.

Conservation and Management Recommendations: Protect wooded slopes and bluffs from clearing and development.

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Author of species account: Linda G. Chafin

Date Compiled or Updated:

L. Chafin, May 2008: original account

K. Owers, Jan. 2010: added pictures



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Inflorescence



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