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Common Name: GEORGIA ALDER

Scientific Name: *Alnus maritima* (Marshall) Muhlenberg ex Nuttall ssp. *georgiensis* Schrader & Graves

Other Commonly Used Names: seaside alder

Previously Used Scientific Names: *Alnus metoporina* Furlow

Family: Betulaceae (birch)

Rarity Ranks: G3/S1

State Legal Status: Threatened

Federal Legal Status: none

Federal Wetland Status: OBL

Description: **Shrub** up to 33 feet (10 m) tall with a narrow crown and many, erect trunks with smooth bark. **Twigs** green and hairy when young, smooth and reddish-gray when older. **Leaves** 1¾ - 3½ inches long, ¾ - 2 inches wide (4.5 - 9 cm long, 2 - 5 cm wide), alternate, deciduous, with toothed edges, rounded or tapering bases, and 6 - 10 parallel veins on each side of the midvein; upper surface dark green and shiny; lower surface pale green with dark gland dots and yellowish hairs on the veins. **Female flowers** in small catkins, maturing in late summer to solitary, woody, oval **fruiting cones** about 1 inch (1.2 - 2.8 cm) long and ¾ inch (1.2 - 2.2 cm) wide, on stalks in the angle between leaf stalk and twig; cones last for a year or more. **Male flowers** tiny, in drooping clusters of elongated catkins. **Female and male flowers** occur on the same plant.

Similar Species: Tag alder (*Alnus serrulata*) leaves are dark green on the lower surface and have 8 - 14 parallel veins on each side of the midvein. Fruiting cones are smaller, about ¾ inch (1 - 2.2 cm) long and ⅜ inch (0.6 - 1.2 cm) wide, in clusters of 3 - 5 cones with very short or no stalks. Tag alder flowers only in the spring.

Related Rare Species: None in Georgia.

Habitat: Sunny areas in ponds and spring-fed swamps.

Life History: *Alnus maritima* occurs in 3 widely disjunct populations, with each population considered a separate subspecies. The populations on the Delmarva Peninsula of Delaware and Maryland are named after the seaside location of the first observed plants – ssp. *maritima*. The plants in Oklahoma and Georgia are also named for their locations – ssp. *oklahomensis* and ssp. *georgiensis*, respectively. Georgia's plants occur more than 700 miles from both the Oklahoma and Delmarva Peninsula populations. Botanists believe that *Alnus maritima* was once widely distributed across North America and that changing environmental conditions eliminated the species from all but its 3 currently known locations. Once isolated from each other, the populations diverged genetically to a degree that warrants recognizing each disjunct group of plants as separate subspecies. Oklahoma plants have longer, narrower leaves and cones and a rounder growth form than either the Georgia or the Delmarva plants; Georgia plants have narrower leaves than the Delmarva plants as well as smaller, rounder cones and a taller, narrower growth form.

Survey Recommendations: Plants flower and develop new cones in the late summer–fall. Leaves can be identified throughout the growing season and cones are present year-round.

Range: Northwestern Georgia, southeastern Oklahoma, and the Delmarva Peninsula of Delaware and Maryland.

Threats: Disruption of natural hydrology in springs and spring runs. Shoreline clearing and development. Ditching, draining, and filling wetlands. Polluted runoff and siltation into ponds and springs from adjacent uplands.

Georgia Conservation Status: One population is known, it occurs on private land. This is the only population of Georgia alder known in the world.

Conservation and Management Recommendations: Avoid ditching, draining, and otherwise altering hydrology of ponds and spring-runs. Protect ponds and spring-runs from sedimentation and pollution. Protect shorelines from development.

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Date Compiled or Updated:

L. Chafin, Sept. 2007: original account

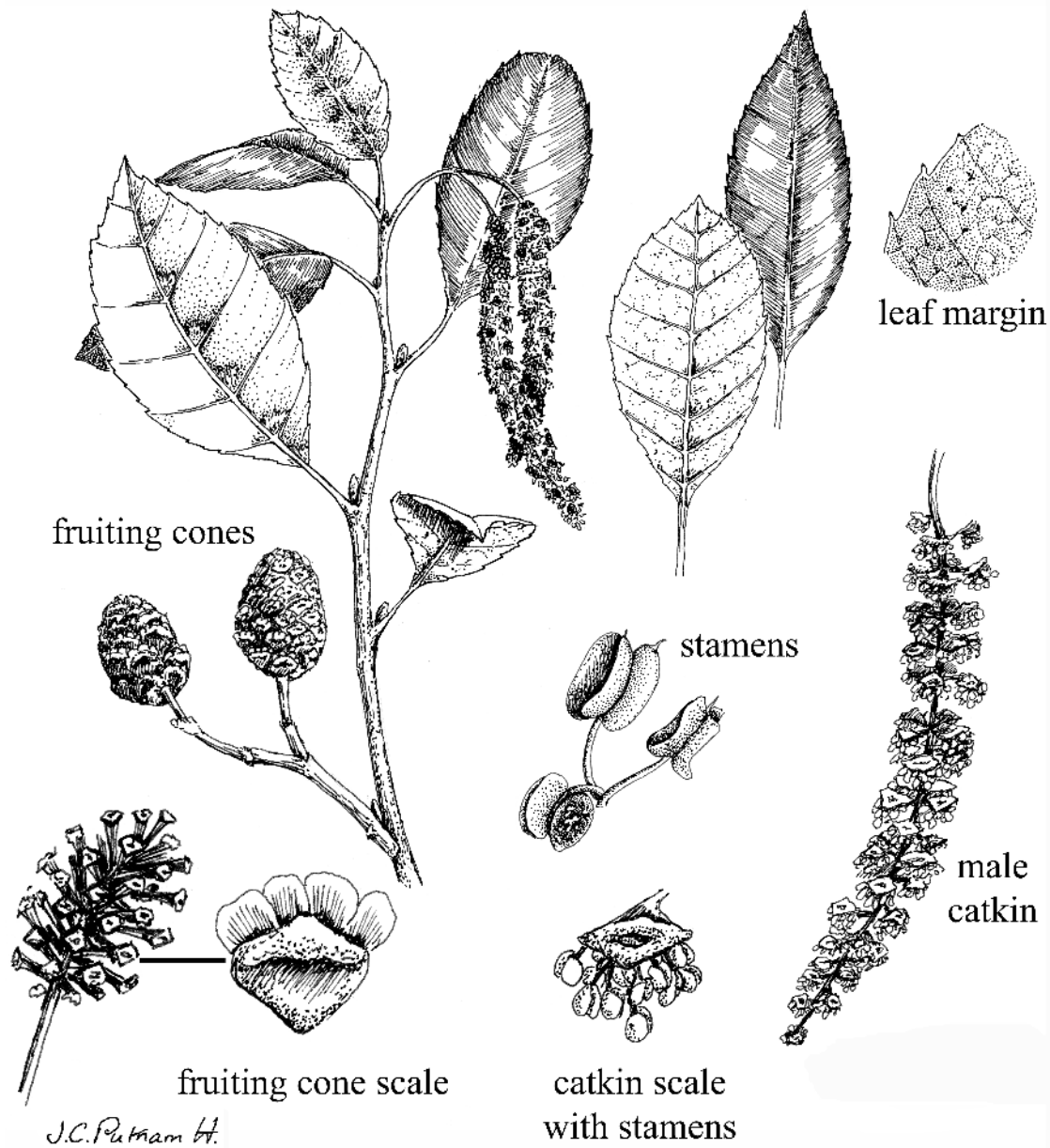
K. Owers, Jan. 2010: updated status and ranks, added pictures



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