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Common Name: VIRGINIA SPIRAEA

Scientific Name: *Spiraea virginiana* Britton

Other Commonly Used Names: Appalachian spiraea

Previously Used Scientific Names: none

Family: Rosaceae (rose)

Rarity Ranks: G2/S1

State Legal Status: Threatened

Federal Legal Status: Threatened

Federal Wetland Status: FACW

Description: **Shrub** 3 - 13 feet (1 - 4 meters) tall with erect or arching stems forming dense thickets. **Leaves** 1 - 6 inches (3 - 15 cm) long, alternate, lance-shaped, oval, or oblong, and tapering to a short leaf stalk; tips rounded to angled, always with a tiny, sharp point; edges smooth or toothed only above the middle; lower surfaces powdery white. **Flower clusters** showy, branched, rounded or flat-topped, 2 - 3 inches (5 - 7 cm) wide (sometimes up to 8 inches, 22 cm, wide). **Flowers** less than ¼ inch (2 - 6 mm) wide; petals 5, round, white, surrounding a greenish-yellow disk bearing many showy stamens. **Fruit** a small pod, borne in clusters.

Similar Species: An escaped ornamental shrub, Japanese spiraea (*Spiraea japonica*), has a similar growth form but has pink flowers in flat-topped clusters, 2 - 8 inches (5 - 22 cm) wide, and leaves with long-tapering tips. Several other shrub species have white, flat-topped flower clusters, including elderberry (*Sambucus canadensis*) and wild hydrangea (*Hydrangea arborescens*).

Related Rare Species: Broadleaf meadowsweet (*Spiraea latifolia*) and hardhack (*S. tomentosa*), both of Special Concern, are common northern species that reach their southern limits in bogs and wet meadows in north Georgia. Both are shrubs up to 6 feet (2 meters) tall with elongated flower clusters and toothed leaves. Leaves of hardhack are densely white-hairy beneath.

Habitat: Rocky streams over sandstone, including bouldery stream banks, edges of waterfalls, and rock ledges. Plants require occasional scouring floods to reduce competition from other shrubs.

Life History: Virginia spiraea is adapted for life in the high-disturbance zone of frequently flooded stream banks and stream beds. It reproduces vegetatively by layering, and by growth and fragmentation of underground stems (rhizomes); the fragments are swept downstream to new habitat. It may also reproduce sexually since flowers set fruit and produce seeds, but seedlings have never been seen in the wild. Virginia spiraea is dependent on scouring of river banks and sand and cobble bars which removes competition by other shrubs and may promote seed germination – seeds grown in cultivation germinate best on bare mineral soils. If seeds are produced, they would likely be dispersed by flooding.

Survey Recommendations: Surveys are best conducted during flowering (late May–July) and fruiting (August–October).

Range: Fewer than 30 populations are known in Georgia, Alabama, North Carolina, Tennessee, Virginia, West Virginia, Kentucky, and Ohio; plants in Pennsylvania have been destroyed.

Threats: Altering stream flow by damming or otherwise obstructing streams. Off-road vehicle use in stream beds and on banks. Invasion by exotic pest plants.

Georgia Conservation Status: Three populations are known, two are protected on state and private conservation lands.

Conservation and Management Recommendations: Avoid changes to stream flow from damming and road construction. Prevent off-road vehicle access. Eradicate exotic pest plants.

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