

Common Name: HARPERELLA

Scientific Name: Ptilimnium nodosum (Rose) Mathias

Other Commonly Used Names: Harper's bishopweed

Previously Used Scientific Names: Harperella nodosa Rose

Family: Apiaceae/Umbelliferae (carrot)

Rarity Ranks: G2/S1

State Legal Status: Endangered

Federal Legal Status: Endangered

Federal Wetland Status: OBL

Description: Annual **herb** with erect stems up to 3 feet (1 m) tall; size of plants varies greatly depending on rainfall. **Leaves** up to 12 inches (30 cm) long near the base of the plant, becoming shorter up the stem, round in cross-section and hollow except for cross-partitions, tapering to a point, alternate. **Flowers** in flat-topped clusters (**umbels**) composed of 5 - 15 smaller umbels. Flowers with 5 tiny, white **petals**, curving up and strongly inward; tips of the stamens (**anthers**) are dark pink. **Fruits** are oval with 6 - 10 ribs. All parts of the plant smell faintly of dill.

Similar Species: Harperella grows with common bishop-weed (*Ptilimnium capillaceum*), a similar species with rounded, rather than flat-topped, flower clusters and flat leaves divided into 3 very narrow segments.

Related Rare Species: Eastern bishopweed (*Ptilimnium costatum*, Special Concern) occurs in the Coosa Valley Prairies and calcareous flatwoods in Floyd County. It has flat, crowded leaves divided into many, very narrow segments, and 20 - 24 small flower clusters per umbel. Also see mock bishopweed (*P. ahlesii*) on this website.

Habitat: In Georgia, harperella occurs in a wet savanna and on the edge of a cypress pond in the Coastal Plain, and in seeps on a granite outcrop in the Piedmont. In other states, it grows in the flooded margins of rocky streams.

Life History: Harperella is an annual herb that reproduces sexually and produces seed only from cross-pollination. (In cultivation, plants persist for two years and produce large amounts of seed that readily germinate.) As with other members of the umbel family, its flowers are probably pollinated by a variety of insects. Its seeds are dispersed by gravity, water, and small animals.

Survey Recommendations: Surveys are best conducted during flowering (late May–early July) and fruiting (fruits July–August); plants disintegrate soon after fruiting.

Range: Georgia, Alabama, South Carolina, North Carolina, Arkansas, Virginia, and West Virginia.

Threats: Quarrying, trash dumping, mulching, and off-road vehicle traffic on granite outcrops; ditching, draining, and filling wetlands; fire suppression in uplands surrounding ponds.

Georgia Conservation Status: Only 2 sites are currently known; neither are protected.

Conservation and Management Recommendations: Protect granite outcrops from quarrying, trash dumping, vehicle traffic, and other disturbance. Avoid draining wetlands. Allow fires in uplands to burn into edges of cypress ponds.

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