TREES AND PLANTS

HARPERELLA

ABOUT

Harperella (Ptilimnium nodosum), also known as Bishop's Weed, is an annual plant from the Carrot family. It grows 6-36 inches (0.15-1 m) in height and has weak-looking stems with hollow, quill-like leaves. This delicate wildflower is aromatic (scented) and smells like Dill herb. It produces flat clusters of small white flowers at the top of the stems and blooms intermittently from May until first frost. This plant is found in rocky or gravelly shoals of clear, swift-flowing streams and along the edges of shallow, intermittently flooded ponds and wet meadows. Seeds are oval and flat, and although the pollination process has not been studied, seed dispersal seems to be profuse since populations can achieve high density in localized areas, especially along rivers. Harperella tolerates – and may need – a very specific water regime, which includes moderately intensive spring floods. After floodwaters recede, seeds germinate in shallow rocky crevices and complete their life cycle with root systems that are submerged or saturated.

DID YOU KNOW?

Harperella is a rare and endangered wildflower that is found in only 10 sites in Alabama, Arkansas, Georgia, Maryland, North Carolina, South Carolina, and West Virginia. It was named after Dr. Ronald Harper, who discovered it in 1902. Because Harperella's life cycle depends on water levels fluctuating at certain times in the growth cycle, it can easily be destroyed by minor disturbances. The greatest threats to its survival are polluting and loss of habitat, silting of water from construction and mining activities, and excessive nutrients entering the streams where it is found. River bank stabilization for boat access also destroys plants and habitats. Over half of the historically known populations have been destroyed by such factors.

For more detailed information visit: <u>www.sleepycreekwatershedassociation.org</u> or <u>www.fws.gov</u> or <u>www.centerforplantconservation.org</u>.

TEST YOUR KNOWLEDGE

What does the Harperella's life cycle depend on?

- a) Water levels fluctuating
- b) Excessive nutrients
- c) River bank stabilization
- d) Silting up of streams

