

Pistolgrip *Tritogonia verrucosa*

Habitat Preference: Found in medium to large rivers with gravel or sandy substrates.

Threats:

- Dredging is particularly detrimental in that it kills individuals currently using the area and creates an inhospitable environment that limits recolonization.
- River pollution
 - Industrial discharge
 - Residential discharge
 - Siltation
 - Herbicide runoff
 - Fertilizer runoff
- Alterations of the natural flow of rivers due to dam construction.
- Invasion by non-native species, especially zebra mussels.



Habitat Improvement Guidelines:

- Implement proper upland management such as contour farming and other soil erosion control methods.
 - Establish large shade trees such as oaks and cottonwoods along stream corridors.
 - Limit grazing, cows and pigs can destabilize banks and directly crush mussels.
- Install riffles or other fish habitat components.
- Limit new construction or remove dams whenever possible.
- Create fish passageways over existing dams.
- Limit dredging to previously disturbed areas or to areas of unsuitable habitat.