





GEORGIA PLANT CONSERVATION ALLIANCE

Conservation through propagation and restoration

"In the end we will *conserve* what we love."



Pitcherplant Bogs

These wetland habitats were once found throughout Georgia. As a result of human activities, they have been eradicated from the Piedmont and nearly eradicated from Georgia's Blue Ridge Mountains. Our Natural Heritage Program botanists know of only two remaining mountain pitcherplant bogs in the state; the rest have been converted to agricultural land. The Nature Conservancy considers mountain pitcherplant bogs to be the most endangered habitat in the Blue Ridge Mountains.

Propagating

One way botanical gardens in the Georgia Plant Conservation Alliance (GPCA) conserve plant species is by studying the needs of rare plants in cultivation and then applying the resulting horticultural knowledge to recovery of these species in their natural habitats. Many rare wetland plants can be propagated from seed or cuttings; in extreme cases where seeds are hard to come by, tissue culture may be an option.

Restoring

Using machetes and chainsaws, GPCA scientists and volunteers remove woody plants that are creating too much shade and hand-pull invasive species that are out-competing the native vegetation. Restoring the original hydrology of the bog may require significant mechanical restoration, such as repairing ditched streams or removing spoil piles and drainage tiles, to create a slow and spreading flow of water across the bog.

Safeguarding

After propagating plants from wild-collected seeds, GPCA returns the documented offspring to protected sites. This increases the number of individuals in the wild and safeguards the genetic diversity of the original populations. Offspring may be returned to augment their original populations, or they may be used to restore abandoned agricultural lands that were originally wetland sites.

Mountain Purple Pitcherplant (*Sarracenia purpurea* subsp. *venosa* var. *montana*)

Ten years ago, only two populations of this mountain form of the purple pitcherplant were left in Georgia. Unethical plant collectors then removed all the pitcherplants from one of these two remaining sites; the location of the surviving natural population is a closely-guarded secret. The remaining site has been slowly restored over the last 15 years. In 2003, a GPCA work party observed seedlings of Mountain Purple Pitcherplants for the first time in over twenty years, an encouraging sign that the remaining wild population was making a comeback.



Swamp Pink (*Helianthus bullata*)

Only one natural population of the beautiful Swamp Pink remains in Georgia. This site has been decimated by plant collectors and disturbed by erosion caused by cattle crossing the creek upstream. Offspring of the Georgia population have been propagated and planted at three restored safeguarding sites.

Bog Turtle (*Clemmys muhlenbergii*)

This is the smallest freshwater turtle in North America, and it is highly prized in the illegal pet trade. Black market sales and loss of habitat are leading causes for this federally threatened species' decline over the past several decades. Bog Turtles are known from only four extant populations in Georgia. A team led by the Georgia Department of Natural Resources is collecting eggs from gravid females in the wild and rearing hatchlings in captivity. These are destined for later release within restored habitat on federally owned conservation lands in Georgia. These habitats are also GPCA mountain bog plant safeguarding sites.



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