Green pitcher plant
Sarracenia oreophila

Green pitcher plant, USFWS

Status: Endangered, September 21, 1979

Description: Green pitcher plant is a carnivorous perennial herb with yellowish-green, hollow, pitcher-shaped leaves. The hollow leaves contain liquid and enzymes. When insects fall into the pitchers, they're digested and the nutrients in the bodies are incorporated into the plant's tissues. The evolutionary role of carnivory in such plants is not fully understood, but some evidence indicates that absorption of minerals from insect prey may allow carnivorous species to compete in nutrient-poor habitats.

The green pitcher plant's unusual yellow flowers appear from mid-April to early June and are borne singly on long stems. Flowering plants grow up to 28 inches tall. Green pitcher plants reproduce both sexually (by seed) and asexually (by root extensions); however, the asexual mode of reproduction appears to be the principal one. The rhizomes of this species are extremely long-lived (decades), so natural mortality is low. Green pitcher plants are pollinated by queen bumblebees, and since bumblebees have a flight radius of no more than one mile, most green pitcher plan populations are essentially genetically isolated by distance. Changes in flowering and growth appear to be related primarily to weather conditions, particularly rainfall. Seedlings require high soil moisture, open mineral soil, and high light intensity for growth during the first year. These conditions are not met at most sites due to past hydrological alterations, which have made the soils unnaturally dry, and the absence of fire, which has allowed other plants to encroach upon and shade out habitat.

Habitat: The habitat of this plant varies somewhat, from moist upland areas and seepage bogs to boggy stream banks. Historically, naturally occurring fire appears to have played a major role in the maintenance of populations in the upland sites.

Range: Green pitcher plant is known from a handful of counties in northeast Georgia, southwest North Carolina, and northeast Alabama.

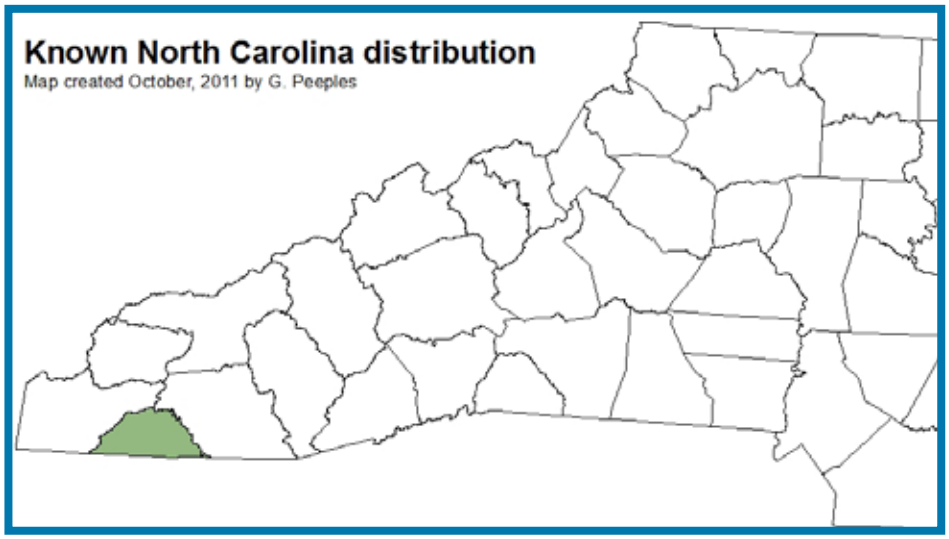
Listing: Endangered, September 21, 1979. 44 FR 54922 54923

Critical habitat: None designated

Threats: Green pitcher plant populations have been destroyed by increased residential and agricultural development; shrub and tree encroachment due to fire suppression; commercial and amateur collecting of live plants; and drainage and impoundment of wetland habitat.

Why should we be concerned about the loss of species? Extinction is a natural process that has been occurring since long before the appearance of humans. Normally, new species develop through a process known as speciation, at about the same rate other species become extinct. However, because of air and water pollution, forest clearing, loss of wetlands, and other man-induced environmental changes, extinctions are now occurring at a rate that far exceeds the speciation rate.

All living things are part of a complex and interconnected network. We depend on the diversity of plant and animal life for our recreation, nourishment, many of our lifesaving medicines, and the ecological functions



they provide. One-quarter of all the prescriptions written in the United States today contain chemicals that were originally discovered in plants and animals. Industry and agriculture are increasingly making use of wild plants, seeking out the remaining wild strain of many common crops, such as wheat and corn, to produce new hybrids that are more resistant to disease, pests, and marginal climatic conditions. Our food crops depend on insects and other animals for pollination. Healthy forests clean the air and provide oxygen for us to breathe. Wetlands clean water and help minimize the impacts of floods. These services are the foundation of life and depend on a diversity of plants and animals working in concert. Each time a species disappears, we lose not only those benefits we know it provided but other benefits that we have yet to realize.

What you can do to help
Tread lightly and stay on designated trails.

Visit arboretums, botanical gardens, and parks and learn all you can about endangered plants and the causes of their declines.

Don't collect or buy plants collected from wild populations.

Participate in the protection of our remaining wild lands and the restoration of damaged ecosystems.

Support wetland protection efforts at local, state, and national levels.

Establish and maintain forested stream-side buffers. Several federal, state, and private programs are available to assist landowners, both technically and financially, with restoring and protecting stream-side buffers and eroding streams.

Implement and maintain measures for controlling erosion and storm water during and after land-clearing and disturbance activities. Excess soil in our streams from erosion is one of the greatest water pollution problems we have today.

Be careful with the use and disposal of fertilizers, pesticides, and other chemicals. Remember, what you put on your land or dump down the drain may eventually wind up in nearby water.

Support local, state and national clean water legislation.

Report illegal dumping activities, erosion, and sedimentation problems. These activities affect the quality of our water, for drinking, fishing, and swimming.

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