

Illegal Collection of Plants In Units of the National Park System

By Jenness Coffey

Fueled by the international market, the trade in medicinal plants has flourished over the last decade. According to a 1991 report by the World Wildlife Fund, (*Medicine from the Wild, an Overview of the U.S. Native Medicinal Plant Trade and Its Conservation Implications*, by Douglas O. Fuller) some 600 medicinal herb species are commonly traded in the U.S. market, and a preference for wild-harvested over cultivated or artificially propagated plants has led to extensive collection from the wild. Incidents of illegal collection of plants in parks show that plants in the national parks are not immune to illegal collection for commercial gain.

Examples of the financial rewards for plant poachers include the following incidents:

- In the fall of 1990, organized groups illegally harvested mushrooms at Crater Lake NP. They were then air-shipped to Japan, where they sell for as much as \$100 per pound.
- One of several illegal timbering operations inside New River Gorge National River in 1991 removed at least 10,500 board feet of hardwood timber with an estimated value of \$6,000.
- Between Aug. 16 and Sept. 27, 1991, rangers made seven separate cases against poachers who were illegally taking ginseng from Great Smoky Mountains NP. The rangers recovered more than 800 roots that had been dug up illegally. Ginseng, valued in the oriental market as an aphrodisiac, sells in the U.S. for approximately \$200 per pound and the price increases overseas.

A Native Plant Protection questionnaire was sent to the parks in 1992 to assess the extent and magnitude of illegal collection of native plants in units of the NP System. Since resource protection involves both law enforcement and natural resource aspects, the questionnaire was issued jointly by the Associate Director for Operations and the Associate Director for Natural Resources. Replies from 9 of the 10 NPS regions, showed that 99 species of native plants were known to have been illegally collected in 37 NPS units in 1990, and 88 species were poached in 41 NPS units in 1991.

Because plant collecting activities are driven by both the national and international markets, some species of plants are more intensively collected than others. The individual species reported by the most parks as

being illegally taken was ginseng; seven parks reported such collections from inside park boundaries both in 1990 and 1991.

In addition to ginseng, other plants that were most often reported poached from parks in the eastern U.S. included the land's slipper orchid, rhododendron, iris, and jack-in-the-pulpit. In the Pacific northwest, various species of trees and ferns are taken illegally most often. In the southwest, yuccas and cacti top the list, with at least 13 different species of cacti being reported as illegally collected in parks in 1990 and 1991.

Replies to the Native Plant Protection questionnaire indicate that collection represents a threat to some species of native plants in NPS units. Acadia NP reported that plant poaching most likely has resulted in extirpation of *Cypripedium reginae*, the showy lady's slipper orchid. Moores Creek National Battlefield reported that the Venus fly-trap, a plant popular in the wild plant trade, has virtually disappeared from the park, although the cause is unknown. And monitoring of *Zephyranthes atamasco*, the Atamasco or Easter lily, at Congaree Swamp National Monument has shown a decline in numbers. Like the Venus fly-trap, the Easter lily also is very popular in the wild plant trade.

Of the plants reported by the parks as being illegally collected, at least 20 are federally listed as endangered, threatened, candidate species, and/or are species protected by state law.

A survey of wildlife poaching in units of the National Park System conducted in the spring of 1991 showed 105 species of wildlife being poached in 153 parks in 1990. Although plant poaching is occurring in fewer parks than wildlife poaching, the number of species of native plants being poached is not significantly lower than the numbers for wildlife poaching in parks.

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