

Fronds collected from
wild populations have
been grown in
cultivation at the Royal
Botanical Gardens in
Kew, England. Spores
from the Aleutian Shield
Fern have been
germinated at the
University of Alaska at
Fairbanks (Georgeson
Botanical Garden),
producing over 1500
immature plants.

## Aleutian Shield Fern

Polystichum aleuticum

A fern in the Dryopteridaceae family Known from only three populations on Adak Island off the southwest coast of Alaska

FEDERALLY ENDANGERED



uite possibly the rarest fern in all of North America, the tiny treasure has a history of being discovered, lost, and rediscovered again. The Aleutian Shield Fern was originally found on Atka Island in 1932 by members of a Swedish plant collecting expedition, but all subsequent attempts to relocate the plant there failed. When it was finally discovered again in the central Aleutian Island district of Alaska in 1975, it was found on the neighboring Adak Island. But when botanists returned to Adak in the mid-eighties, this second population was also nowhere to be found!

"Have you seen this plant?" read the posters that were circulated among local island residents. Botanists combed the island searching for the tiny ferns, with fronds no more than six inches long. Their efforts paid off in 1989, when two populations were located on Adak, both on Mount Reed. A third population was later found in 1993, bringing the total known number of Aleutian Shield Ferns to 125. The ferns grow only in grottos on steep, rocky, windswept outcrops that are shrouded in fog for most of the growing season.

Not only is this species extremely rare and elusive, but its existence in North America is also intriguing. Its closest relative is believed to be another shield fern that grows in the Himalayan Mountains of western China. Researchers have speculated that this plant's rarity may result from its being a relict species that flourished thousands of years ago and is gradually dying out. However, there is also speculation that this fern's rarity may be caused by reindeer introduced onto Atka in 1914 and caribou introduced onto Adak in 1958, which may have trampled the plants and caused erosion of their fragile habitat. Caribou continue to pose a threat to the remaining plants, which are closely monitored by U.S. Fish and Wildlife Service personnel to ensure that Alaska's only endangered plant species does not disappear.