Orchid Conservation

By Cynthia Boesse, *Photos by* Dr. Donald Leopold Thanks to **The Roosevelt Wild Life Station:** http://www.esf.edu/resorg/rooseveltwildlife/

The importance of biodiversity

Biodiversity refers to the natural species composition of organisms (both plants and animals) in a given ecosystem. If all these species are present in a given ecosystem, this indicates conditions are optimal for the healthy functioning of the ecosystem.

All life on earth is dependent on these ecosystem processes, therefore, maintenance of biodiversity is an essential and worthwhile endeavor.



Cyp reginae var alba

Why conserve orchids?

According to the New York Natural Heritage Program, when rare plants are protected, distinctive populations of species are preserved along with their genetic variation within their natural habitat.

Because orchids are the most evolved of all flowering plants, they are very site-specific and need optimum conditions to thrive in a given ecosystem.

If orchids are present in an ecosystem, this is a good indicator of a healthy, functioning ecosystem.

Additionally, many orchid flowers and their habitats are beautiful, and provide pleasure to those who seek out these unique members of the plant kingdom.

Visiting orchid sites

Discovering an orchid growing in the wild is an exciting experience.

Once discovered, the places where these rare, beautiful plants grow can become popular sites for naturalists, photographers, and unfortunately, poachers.

As stated in the page on the orchid family, these plants are sensitive to disturbance. Just visiting and admiring these plants in the wild could potentially harm their chances of success. When visiting a site, tread lightly! Remember some orchids can remain underground for several years, so you may be disturbing the habitat of one plant while stooping to photograph another. Year after year of this abuse may eventually destroy some of the population.



Spiranthes romanzoffiana (Hooded Ladies Tress) in a graminoid fen, a peat accumulating wetland that receives groundwater input from surrounding or underlying mineral soil. Fens have a higher nutrient content than bogs, and contain significant amounts of calcium, magnesium and other nutrients. Fens support a high diversity of plant species. Fens are pH circumneutral to basic due to groundwater inputs. You can learn about more orchid habitats on The Roosevelt Wild Life Station website.

Photography

While photographers are typically innocent admirers of orchids, some will remove "spent" flowers to get that perfect picture. While this doesn't hurt the individual plant, it has lost its chance to form seeds and expand its population. Some photographers will go so far as to remove and kill the plant, assuring that no one else has the chance to photograph it! Not only is this illegal, the consequences to the plant are obvious.

Poaching

The worst crime against orchids is poaching. Some are dissatisfied with seeking orchids to view in their natural environment and transplant these plants to their yards or sell them to nurseries for a high price. Primarily, this is illegal according to the NY Environmental Law, although the fines are small for those obsessed with possessing a rare plant. According to Keenan (1998), poaching has extirpated all of the beautiful showy lady's-slippers (Cypripedium reginae) from Acadia National Park in Maine. Obviously, poaching destroys natural populations of orchids, but other detrimental effects may be less obvious. First of all, removing plants from their natural habitat doesn't allow anyone else to enjoy their beauty. Secondly, since orchid habitats are so sensitive, they typically die several years after being transplanted into a garden. Not only does this kill the individual plant, it also destroys its chances for reproduction.

Collecting and buying orchids

The NY Environmental Conservation law ensures protection for all orchids in NY. All of these plants are considered exploitatively vulnerable, while some are afforded protection as threatened or endangered species.

Increasingly more nurseries are offering native orchids, and although most are very challenging to grow, some are relatively easy. Reputable nurseries can gain permission to collect orchids from sites destined for destruction, such as a new construction site. Also, new propagation techniques and patience with growing from seeds have allowed some species to be offered on the market. As more nurseries offer native orchids, this will hopefully decrease the amount of poaching.

For more information

http://www.esf.edu/ResOrg/RooseveltWildlife/Research/Orchid/Orchid.htm http://www.orchidconservationcoalition.org