## Locations of Rare Plants are Carefully Guarded Secrets by Eugene Reimer, 2001-Nov

## (as published in the New Zealand Native Orchid Journal, 2005-February; in NOCI newsletter, 2001-December)

Organizations, such as ours, frequently face a difficult issue: we wish to raise public awareness and appreciation of rare orchids in order to improve the chances of their continued existence; and yet we are reluctant to publish the precise locations of such rare orchids for fear that poachers will go dig them up.

Many botanists hold the view that locations of rare or endangered plants should be carefully guarded secrets, and should only be given out on a "need to know" basis - only to a fellow botanist doing research that provides a legitimate reason for knowing those locations.

David Fleshler in an article for the South Florida Sun-Sentinel [1] describes several unusual examples of the "protection through secrecy" approach. The following is an excerpt:

Few places have suffered more plant poaching than the Fakahatchee Strand State Preserve, a dark and swampy forest about 80 miles west of Fort Lauderdale. Guarded by snakes, alligators and clouds of mosquitoes, the preserve is home to the elusive ghost orchid, whose graceful white flowers bloom only in deep shade.

It was here that John Laroche ran the poaching operation depicted in the bestseller The Orchid Thief. Caught by the preserve's manager as he lugged garbage bags and pillow cases of orchids into a truck, Laroche paid the maximum fine of \$500 and agreed to stay out of the preserve for six months.

Today, staff biologist Mike Owen imposes security measures worthy of an intelligence service. When he takes visitors to see the preserve's remaining ghost orchids, he avoids the most direct route. He leads them in circles. He goes north. He goes south. By the time they arrive at the rare white flowers, visitors haven't the faintest idea where they are. That means they can't come back and snatch the orchids.

Owen is careful. He makes no maps, except during his time off, when he would argue that the document is not covered by the state's open-records law. When examining a rare plant near a road, he keeps an eye out for cars and stops working until the vehicle passes out of sight.

The book mentioned by Fleshler is The Orchid Thief: a True Story of Beauty and Obsession by Susan Orlean (the first chapter is online at [2]). The book is soon to be a movie called Adaptation, said to be the first movie ever to deal with orchidelirium or the obsession with collecting rare orchids.

Taxacom is an on-line discussion group [3] where taxonomists have been discussing similar issues for years. The liveliest discussion, in May of 1994, deals with the online publication of collection-records housed in natural-history museums. The participants in this discussion present arguments on both sides of the issue. What I find interesting is that many who argue strongly in favour of open disclosure, add something like: "except for rare orchids". Apparently even the strongest believers in the basic goodness of mankind, have doubts about orchid-fanatics.

The U.S. Fish and Wildlife Service article [4] deals with the species Virginia sneezeweed (isn't that a delightful common name). It argues in favour of designating this species as threatened, but it goes on to argue against designating the twenty-five sites as critical habitat. The reason for this surprising argument: "the publication of precise maps, as required in a proposal for critical habitat, would make this plant vulnerable to incidents of collection". The same website contains other proposals making the same argument for other species and the sites where found.

Many writers advocate that imprecision or "fuzziness" be used when publishing locations of rare species. Bob Makinson, of the Australian National Botanic Gardens, in a 1994-May24 Taxacom posting [5], advocates "fuzzed geocode data for 0.5° grid cells, or ... 6 km grid cells". Another Taxacom contributor suggests 7.5' or 0.125° precision. Others want nothing more precise than mentioning the county (and this leads to a discussion about whether Texas counties are bigger than New Mexico counties).

The best argument against excessive secrecy, is that it sometimes leads to exactly the sort of habitat-destruction that it seeks to prevent. An example happened right here in Manitoba in September of 1999, near Kleefeld, where hundreds of the endangered Small white lady-slippers were destroyed when a farmer scraped their ditch habitat with a large machine during a fence-building project [6] [7]. The provincial botanists had never notified the municipality, the utilities, nor the residents, although they had known about the site and had been monitoring it for fourteen years! This disaster could have been prevented by telling people about the very special attributes of that site.

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