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Editorial contributions and inquiries about publishing articles and requirements for manuscripts, illustrations, or photos for publication should be addressed to the Editor:

Dr. Jyotsna Sharma,
University of Florida
155 Research Road, Quincy, FL 32351; USA
jyotsna@ufl.edu

A New Preserve for *Cypripedium montanum* (Mountain Lady's Slipper)

Andrew G. Huber
La Grande, Oregon
ahuber@eou.edu

My hope is that private native orchid preserves will grow by the thousands across the country. To encourage the process, I'll tell you how the one called 'GROWISER' began.

In the Spring of 1992 I purchased 160 acres (65 ha.) of land, just because it was so beautiful. It overlooks the Grande Ronde Valley in northeastern Oregon (Fig. 1, page 12) and hosts a great array of native plants. I soon learned that among the 190 species, were eight species of native orchids: *Cypripedium montanum* (mountain lady's slipper; Fig. 2, front cover), *Calypso bulbosa* (fairyslippers; Fig. 3), *Piperia elegans* (elegant piperia; Figs. 4 and 5), *Spiranthes romanzoffiana* (hooded ladies'-tresses; Fig. 6), *Goodyera oblongifolia* (western rattlesnake plantain), *Corallorhiza maculata* (summer coralroot; Fig.

7), *Corallorhiza striata* (hooded coralroot; Fig. 8), and *Cephalanthera austiniiae* (phantom orchid).



Figure 3. *Calypso bulbosa*.

So many native species, in such a magnificent landscape! As soon as I viewed it, I knew the site had to be preserved. Because I am a teacher of crop and soil science, its value was obvious as an outdoor classroom for ecological education. It was also unique in its potential as a seed bank for conserving the genetic diversity of many plants.

In 1993 I created a non-profit corporation to own and manage the site: GROWISER (Grande Ronde Overlook Wild-



Figures 4 and 5. *Piperia elegans*.

flower Institute Serving Ecological Restoration). By being a privately owned charitable organization, the cost of managing the preserve could be tax deductible, and the future ownership and use of the land would not be in question.

Then the fun began. Because I am a seed scientist by training, I started replanting the seeds of many species. I remember the surprise I felt when first opening a mountain lady's slipper seed capsule. Inside was powder! I thought that an insect had burrowed in and chewed up all the seeds. After opening a few more, I suddenly realized that the "fluff" *was* the seeds! [Fig. 9, back cover.]

To widely distribute such small seeds, these needed to be mixed with a carrier. I tried sugar, corn meal, cracked corn, pure sand, and simply soil from the forest floor. At first, I just tossed the mixtures wherever it looked like slippers might like to grow.

After a few years, it seemed that orchid seedlings were growing where none had before been seen. The literature, however, said that slipper orchids took many years to emerge, growing parasitically on fungi (Fig. 10, page 12) under-

ground, before producing photosynthetic leaves (Curtis, 1943; Rasmussen, 1995). My enjoyable pastime now had become an enjoyable research project.

In the fall of 1998 I scattered seed from four capsules of *Cypripedium montanum* at each of the 154 sites where no observable orchids were growing. I marked the 1m plots with metal tags attached to rebar to dissuade the ever-curious deer and elk.

In the spring of 2000, a total of 33 new mountain lady's slipper seedlings (Fig. 11) emerged, at sites seeded in 1998. I published the findings (Huber, 2002) because these offered new hope that slipper orchids might not need as much developmental time underground as previously thought.

Continuing to seed new plots each year after 1998, I hoped to have the whole forest covered with slippers in a short time. They have minds of their own. And to my chagrin, they seemed to be in tune with their environment. Most years I would find a few new plants, but the numbers were disappointing; especially for an agronomist who expected most every seed to grow. By the fall of 2004 I had seeded several hundred plots in various light and moisture regimes. I had also adjusted techniques by adding manure to the soil carrier, hoeing the ground, covering the seeds lightly, and, importantly, seeding in spots where I had previously burned brush piles.

Finally, in 2005 the previous series of dry years was broken with abundant spring rains, and the orchids responded. In the plots that had been seeded in 2002, two and one-half years earlier, over 200 new *Cypripedium montanum* seedlings emerged.

If past experience holds, though, not all new plants will reach maturity. Most of those that came up in 2000, from the 1998 seeding, have not emerged again.



Figure 6. *Spiranthes romanoffiana*.

Figure 7. *Corallorhiza maculata* (left).

Figure 8. *Corallorhiza striata* (right).



My hypothesis is that the longer they stay underground, before looking for light, the better their chances are for long-term survival. I have now found new plants emerging after the seed had been in the soil for at least seven years, just as Curtis (1943) had reported for *Cypripedium* species in the eastern U.S.

To continue to learn the details about the phenology of mountain lady's slippers, in the spring of 2005, I put permanent markers by 2,600 mountain lady's slipper plants. They ranged in size from first-year arrivals (Fig. 12, page 13), to those with three flowers (front cover) and several stems (Fig. 13, page 13). Hereafter, each new plant will be marked so its growth stage can be monitored annually.

The information accumulated will tell us the probability of survival after emergence, the length of time to flowering - in various soil and sunlight environments - and, hopefully, many answers for which we do not even now know the questions.

When I started the preserve in 1992, little did I know that the orchids were calling. Saving their space and increasing their numbers has been the most satisfying experience of my life.

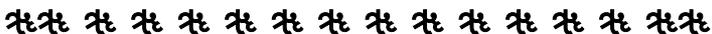
I encourage anyone who can find a site where native orchids are growing to preserve that land for them, and for us.

Figure 11. Newly emerged seedling of *Cypripedium montanum*.



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1% For Orchid Conservation

Mark Sullivan

San Francisco, California

MarkSullivan@orchidconservationcoalition.org

Orchid conservation is a subject that we hear about from time to time on forums, in magazines, and from society meeting speakers. We are appalled to hear about habitat destruction or the decimation of species by illegal collecting such as in the case of *Phragmipedium kovachii*, or to see the 'before and after' slides of a clear-cut hillside which once was covered with orchids. It is appalling, but for most of us it is distant. How can an individual make a difference? One individual can make a small difference; a group of individuals can make a bigger difference.

The Orchid Conservation Coalition (OCC) is a coalition of people, orchid societies, businesses, and conservation groups concerned about orchid conservation. It provides a framework for networking and cooperation to create a more effective effort toward orchid conservation. Through the sharing of information we can identify effective orchid conservation organizations and projects that need support. '1% For Orchid Conservation' is a program of the OCC. The purpose of 1% For Orchid Conservation (1% FOC) is to commit orchid societies and businesses to donate 1% or more of their net revenues each year to *in situ* orchid conservation. The board of each orchid society or business decides where their donation goes. The program is open to all orchid organizations and businesses worldwide; worldwide participation is critical to making the 1% FOC most effective. It also doesn't matter if 1% of net revenues is a small or large amount. It is the cumulative amount of all participants that will make the difference. Participation is the key.

Through participation, donors can identify and share information on worthwhile orchid conservation organizations and projects. As a coalition, donors will be better able to make sure donations are effectively used by orchid conservation organizations and projects. Currently there are three orchid conservation organizations that are participating: the Orchid Conservation Alliance, Orchid Conservation International, and Phytosophy's G.R.O.W. By participating they agree to use funds raised through 1% FOC for *in situ* orchid conservation as outlined by the 1% FOC criteria, be accountable for those funds, give progress information back to the donors and verify donations. Donating organizations are not limited to these three orchid conservation organizations. All that is required by 1% FOC is that donations go to organizations that fit the criteria. The 1% FOC criteria are a definition of *in situ* orchid conservation. It is useful in helping delineate between actual *in situ* orchid conservation and activities that fall outside the scope of *in situ* orchid conservation. The OCC would like to hear of other orchid conservation organizations and projects that

fit the criteria so that we can list them and share that information for possible other donations.

Orchid societies and businesses can also engage in their own local *in situ* orchid conservation projects to qualify. There is a 1% FOC trademark (Fig. 1) to identify participants and raise awareness for orchid conservation. This logo can be used by donor businesses for marketing purposes to tell customers that you care about orchid conservation. Customers who care about orchid conservation will look for the logo and take 1% FOC participating businesses into consideration when making purchasing decisions. Most orchid growers and the general public are concerned about environmental issues, but it is hard for



Figure 1. 1% FOC Logo.

an individual to easily make a contribution. For a customer paying 20 cents (or insert your currency here) more on a 20 dollar orchid purchase and knowing that 20 cents will go toward orchid conservation, it is an easy way to participate and feel good about it.

Eventually, we would like to see the logo on all those mass-market orchids sold in the big box stores. But before the big box store and the general public will buy into the idea, the orchid world in general needs to support orchid conservation. Currently, there is one orchid society, the San Francisco Orchid Society, and two businesses participating: the Orchid Seedbank Project and Nascent Orchids. There are about 14 orchid societies that are considering participation. There are many individuals who have participated in getting the OCC up and running to this point. The Orchid Conservation Coalition does not have any officers. It does not receive contributions, and it does not distribute money. You could say the OCC is truly a non-profit organization. The OCC and 1% FOC is a coalition to raise money for other orchid conservation organizations and to raise awareness for orchid conservation.

Membership is by participation. An individual can participate immediately by asking her/his orchid society to consider participating in 1% for orchid conservation. NOC members also can help by identifying North American *in situ* orchid conservation projects and organizations that could benefit in receiving those donations. For more information and details please visit <http://www.orchidconservationcoalition.org>



The Current Status of Orchids in the Francis Marion National Forest, Berkeley County, South Carolina

Jim Fowler
Greenville, South Carolina
jimstamp@aol.com

It was a dark and stormy night... I've always wanted to begin an article with that sentence. It actually does have a direct bearing on this article – only later.

The Francis Marion National Forest (known locally as ‘The Francis Marion’) consists of about 250,000 acres of mixed hardwood forests, longleaf pine savannahs, and bottomland forests with their associated swamps, rivers, and

floodplains. It is dotted with a dozen or so small communities whose residents make a living working on nearby farms, small industry, or in the fishing villages along the coast. It is this incredible variety of forest types that supports about three-dozen species of orchids – the largest number of species found in any one region of South Carolina.

The Francis Marion takes up most of the landmass of Berkeley County, the largest of the dozen or so coastal plain counties in the state. A road map will show you that the southern one-third of the forest spreads into a portion of Charleston County, as well.

The many bottomlands and floodplains host a variety of orchid species including *Platanthera flava* var. *flava*, *Listera australis*, *Corallorhiza wisteriana*, *Corallorhiza odontorhiza*, *Goodyera pubescens*, *Spiranthes odorata*, *Gynadeniopsis clavellata*, *Malaxis spicata*, *Malaxis unifolia*, *Ponthieva racemosa*, *Tipularia discolor*, and *Triphora trianthophora*. This habitat also harbors an occasional snake or alligator for the lucky (or unlucky) naturalist. Of course, it goes without saying that you can't visit the area during orchid season without finding your share of ticks, chiggers, and mosquitoes.

Many of the lower, wet areas that are scattered throughout the forest are geologic features known as Carolina Bays. They are easily spotted from high-altitude photographs, but appear as rounded ponds or swamps from ground level. These are shallow, rounded depressions that were left over from a large meteor storm in ancient geologic time. They vary in size from a couple of acres to hundreds of acres, and provide an excellent habitat for orchids

As you would expect





to find in any large national forest, there are scores of forest service roads (paved and dirt) created to facilitate the maintenance of the forest. It is these forest service roads that give us such easy access to most of the orchid-bearing habitat. In fact, many of the orchids can be found growing within a few steps of these forest service roads. Although this seems to be a positive thing for the orchid enthusiast, it has a definite downside.

The main stretch of highway that connects the northern portion of the forest with the southern portion is a two-lane blacktop named Steed Creek Road. To the local orchid lovers in the area, it is also known as "Orchid Alley." Recently, the Department of Transportation has proposed a considerable widening of this highway. I won't go into the reasons for the widening except to say that it is mostly political in nature. In any case, the result would be devastating to many of the prime orchid habitats along the roadside ditches and ditch banks.

The orchid species that can be found along the roadside on just one particular mile of this road are *Pogonia ophioglossoides*, *Platanthera conspicua*, *Platanthera ciliaris*, their hybrid *Platanthera* \times *lueri*, *Platanthera cristata*, *Cleistes divaricata*, *Calopogon barbatus*, *Calopogon tuberosus*, *Calopogon pallidus*, *Spiranthes cernua*, *Spiranthes lacera* var. *gracilis*, *Spiranthes vernalis*, *Spiranthes praecox*, *Spiranthes laciniata*, *Habenaria repens*, and at least three species of *Sarracenia* (pitcher plants) as well as the federally protected *Schwalbea americana* (American chaff-seed). Now, you might say that the initial con-



Ponthieva racemosa

Figures to accompany 'The Current Status of Orchids in the Francis Marion National Forest, Berkeley County, South Carolina' by Jim Fowler (page 8).



Pteroglossaspis ecristata

1



Figures 1 and 10 from ‘A New Preserve for *Cypripedium montanum* (Mountain Lady’s Slipper)’ by Andy Huber (page 1). **1.** View from the GROWISER field station. **10.** *Cypripedium montanum* and putative mycorrhizal fungi.

10





Figures 12 and 13 from 'A New Preserve for *Cyripedium montanum* (Mountain Lady's Slipper)' by Andy Huber (page 1). **12.** A few-days-old plant of *Cyripedium montanum*. **13.** *Cyripedium montanum* plant with several stems.





Figures to accompany
*‘Microthelys rubro-
callosa* (Robins. and
Greenm.) Garay
(Orchidaceae): A
New Orchid for the
United States’ by Ron
Coleman (page 18).





Malaxis spicata

struction of the road bed must have destroyed many of these plants, too. But the widening of the existing road will not only destroy the plants and their habitat (probably for the remainder of our lifetime), but will also lead to increased traffic flow with its associated litter and pollution – not a welcome prospect. As I write this, a grassroots effort is underway to stop this project even though some of the work has already begun (bridge widening and preliminary survey work.)

But all is not lost. For those of you who were fortunate enough to visit The Francis Marion in August of 2004 for our annual Native Orchid Conference, you will remem-



Malaxis unifolia

ber the more-than-adequate supply of orchids that were available for your viewing pleasure in the longleaf pine savannahs and river floodplains. And that was just during a single two-day period. Orchids are in bloom in this area from late February until late November (depending on when the first frost occurs). Ten months of bloom is not too shabby. That's one of the reasons I spend so much of my free time in The Francis Marion.

A few of the rare orchids that have been seen in the savannahs include the very rare *Calopogon multiflorus*, and the scarcely seen *Gymnadeniopsis integra*, *Gymnadeniopsis nivea*, and *Pteroglossaspis ecristata*. These four species seem to be especially sensitive to the periodic burning of the savannah grasses to reduce competition for nutrition and sunlight. Perhaps this burning also results in particular essential nutrients being released back into the soil. I'm sure that additional study of these species will add a world of knowledge to our pitifully small understanding of their life cycle and nutritional requirements.



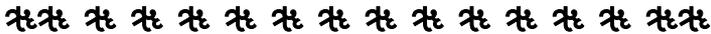
Now, back to the first sentence of this article: 'It was a dark and stormy night...' In a single dark and stormy night in September of 1989, hurricane Hugo swept through the center of The Francis Marion, inflicting terrible damage to the old-growth live oaks and ancient longleaf pines. It was thought that the forest would never recover from the storm's 160 mile-per-hour onslaught. But, as has happened to the area over millennia, old trees were knocked down, and new trees have sprouted in their place. I believe that by opening much of the area, the hurricane has actually improved the orchid habitat.

Add the judicial use of prescribed burning to the opening of the forest canopy, and you get a perpetual habitat that approaches the natural conditions of a century ago. Many of our coastal plains orchids are dependent on burns of the native grasses that make up most of the ground cover of the longleaf pine savannahs. Typically, the orchids will fail to show up if the savannah is not burned on at least a two- or three-year cycle.

Clearing out the storm debris took years to finish. But now, the forest is beginning to resemble the forest that we all remember from years back. You can now begin to recognize the several stages of forest succession that you would expect to see in a maturing longleaf forest system. In addition, many of the ancient live oaks that lined the local river systems have begun to recover and now hide their scars with layers of *Polypodium polypodioides* (resurrection fern), *Tillandsia usneoides* (Spanish moss), and dense clumps of *Epidendrum magnoliae*.



Although the area will never be the same forest that was present two hundred years ago before the ancient trees were cleared for rice plantations and decimated by the naval stores and timber industries, we still have a great deal to be thankful for. It is an area that is open to anyone who has the time and energy to explore for our many native orchids and other native flora and fauna. There are numerous savannahs down there that haven't been walked in years. Who knows? You may be the one to find a species hitherto unknown to the state. Give me a call, and let's go orchid hunting.



***Microthelys rubrocallosa* (Robins. and Greenm.) Garay (Orchidaceae): A New Orchid for the United States**

Ronald A. Coleman and Marc Baker, Ph.D
Tucson, Arizona
ronorchid@cox.net

The Sacramento Mountains of Otero County in south-central New Mexico reach to over 8,200 feet elevation. They are home to orchids such as *Platanthera brevifolia* and *Malaxis porphyrea* that Coleman (2002) calls monsoon orchids: plants whose primary range is Mexico, but because of summer rains brought on by monsoon winds, extend north into New Mexico and Arizona. Monsoon orchids do not even appear above ground until after the start of the monsoon induced rains in July, and do not bloom until August or later.

In late August 2004 Marc Baker was studying the flora on a hillside at 8,000 feet elevation in the Lincoln National Forest. *Platanthera brevifolia* and *M. porphyrea* were growing in the area and Baker saw a third orchid he did not recognize. He photographed the plants and collected a specimen. Upon completing his assignment he contacted Ron Coleman, and sent photos and notes.

The photos were not clear enough to allow a positive identification, and when on 5 September 2004 Coleman was in the Sacramento Mountains, he located three floral spikes. Unfortunately by then the brief flowering season was over and the withered remains of the flowers at the tips of the capsules were not much help. However, using Baker's notes and photos, and with additional queries to Baker, Coleman was able to tender an initial identification of the plant as *Schiedeella rubrocallosa* (Robins. and Greenm.) Balogh.

Coleman could barely wait for the next year to find out more about these plants and visited the site on 3 July 2005, finding two sets of newly emerged leaves and one flower spike. He was back on 7 August 2005 and found five plants in bloom and a sixth spike that had been eaten off. Additional leaves were now up on non-blooming plants for a total of 17 plants. The leaves were a dark, bluish green, narrowly lanceolate, and up to 10 cm long by 1.5 cm wide. Leaves associated with blooming plants were in pairs, but non-blooming plants often had single leaves. It appears the leaves emerge at the same time as, or just before the inflorescence, and fade shortly after anthesis.

The flower spikes (see figures on page 14) were up to 32 cm tall with over 30 buds and flowers on each. The stem below the flowers was covered with up to six bracts that completely shrouded it. The ovaries were held vertically, tight against the inflorescence axis, and each was completely covered by a floral bract. The tubular flowers were at right angles to the ovaries. Each flower

measured a mere 5 mm long and only 2 mm wide. Sepals and petals were greenish with white edges and formed a tight hood around the lip and column. Even in this tight closed form it was easy to see that the lip was brightly marked with reddish orange. The tip of the lip was straight in most flowers, but had a slight down-turn in some. The lip was broadly dilated in the middle, narrowing to a tiny claw where it joins the column and with a blunt narrow apex. Two bright reddish-orange calli covered the lower half of the lip, and there was a green splash between the calli and the white apex.

After seeing the fresh flowers (see figures on page 14), Coleman was convinced of the specific epithet but there was still some uncertainty as to the proper genus. McVaugh (1985) contains a good description and line drawings of what he called *Spiranthes rubrocallosa*. Balogh (1981) transferred this species to *Schiedeella*. Garay (1980) transferred it to *Microthelys*. Szlachetko (1991) then transferred it to *Galeottiella*. Szlachetko (1991) has the best description of any of these sources and superb line drawings. In Pridgeon et al. (2003), it is called *Microthelys rubrocallosa* and there are excellent line drawings and a color photograph. Like many taxa within Spiranthininae the proper genus may well be debated for years. But, the use of *Microthelys* by Garay (1980) and Pridgeon et al. (2003) is a reasonable choice of genus for now.

Because of Baker's discovery, *Microthelys rubrocallosa* (Robins. and Greenm.) Garay can now be added to the list of monsoon orchids in the Sacramento Mountains. The type specimen of *M. rubrocallosa*, then known as *Spiranthes rubrocallosa* Robins. and Greenm., was found in the Sierra Madre Mountains in Chihuahua, Mexico in 1887. The exact distribution of *M. rubrocallosa* within Mexico is still being researched, but Baker's discovery is approximately 270 miles (436 km) north of where the type specimen was collected. This is the only known colony of *Microthelys rubrocallosa* in the United States. Only 20 plants have been observed; only four bloomed in 2004, and only six bloomed in 2005. It will be interesting to see how this colony progresses and if more are discovered in the Sacramento Mountains.

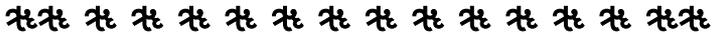
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1. Contribution to the Revision of *Galeottiella*. *Fragmenta Floristica Geobotanica*. 36(1):1-12.

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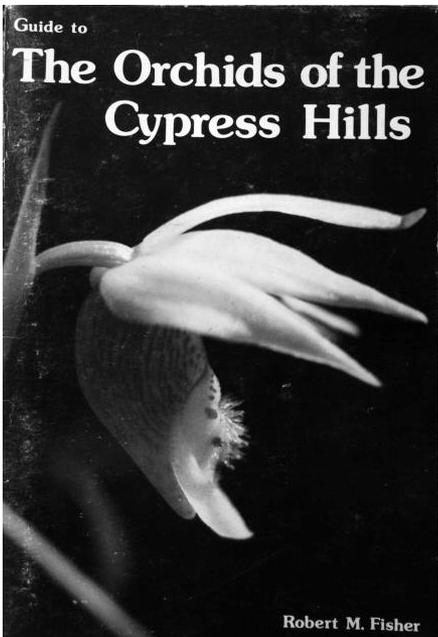


In Search of Cypress Hills

Shirley Curtis
Rollinsford, New Hampshire
cscurtis623@aol.com

On a nice spring day in 1990 my sister and I went to a small New Hampshire town's annual flea market; I was looking over the books for sale, when I spotted a small orchid book. It was called "Guide to the Orchids of the Cypress Hills," by Robert M. Fisher (1980). I had no clue where to locate the Cypress

Hills. Looking through it, I saw pictures of *Calypso bulbosa*. The description said that it was the most common and abundant orchid in the Cypress Hills of Alberta! Right then I knew I needed this book, and wanted to find out where this place was. I looked on several maps of Alberta but couldn't find Cypress Hills; finally, I found it near Elkwater, Alberta, which was about 2,300 miles from home! Well, maybe someday we would go there, I thought.



Scientists believe that 30 million years ago a river flowing eastward left a deposit of cobblestone in the area that was gradually lifted into prominence by the erosion of the surrounding strata. Later when the Wisconsin Glacier moved across

Canada, it bypassed the 80 square miles that today form the summits of the hills called Cypress Hills.

The Cypress Hills are a flat-topped plateau covering an area of about 1,000 square miles in southwestern Saskatchewan and southeastern Alberta. Glaciation bulldozed the surrounding terrain, with the ice mass splitting around the Hills and leaving them intact. In the middle of sweeping prairie grassland, 2,000 feet higher than the surrounding countryside and nearly 5,000 feet above sea level, is an area called Cypress Hills Interprovincial Park. The vegetation of the Cypress Hills is composed mainly of grassland and forest species, but there are no cypress trees. French-Canadian explorers mistakenly thought the lodgepole pine (*Pinus contorta* var. *latifolia*) of these hills was their “cypress,” the jackpine (*Pinus banksiana*) of eastern Canada, so they named the area Cypress Hills.

In 1992 my husband Cory took early-retirement after having some heart problems; he made this decision so we could enjoy life. This is when we decided to buy a small motorhome and drive to Alaska the following year. Seeing as how I am the planner in the family, I made sure to include Cypress Hills on our route. We arrived at the Cypress Hills campground on June 3rd, stepped out of the camper, walked about 20 feet, and there we saw hundreds of *Calypso bulbosa*! “Wow, hundreds of calypso bulbosa!” I exclaimed. Cory wanted supper, but I just had to get out the tripod and camera. We ate after dark!

Calypso bulbosa was, indeed, the most common and abundant orchid here!



Amerorchis rotundifolia var. *lineata*



Amerorchis rotundifolia



We found anywhere from 2,000 to 10,000 plants. Someone else said they grow in the millions, even billions.

My little book also said that a very rare variety of *Amerorchis rotundifolia* (var. *lineata*) was also here. We went to the visitor center and asked where we could find *Amerorchis rotundifolia* (round-leaved orchis). We were told that it was a secret, because there were so few of them. I showed them my book and was told that this book was now out of print. Then after talking with someone else, the person decided that we were trustworthy and told us of the location but asked that we not tell anyone. We drove to the area but a truck was parked right near it with two men standing beside it. We drove on, turned around, but they were still there. Not wanting someone else to follow us into this secret site, we waited. Well, they also waited. Finally, we got out and went down over the side of the road. The two men followed us, so we talked with them. It turned out they lived in the area and one of the men had been monitoring *Amerorchis rotundifolia* var. *lineata* for many years! What a stroke of luck! He had done a population study of the orchids and gave me a copy of his work. They showed us around and showed us the orchids he had marked. We were invited to call him if we came back another time, which we did. He then showed us several other sites a few years later. *Amerorchis rotundifolia* var. *lineata* has broad purple stripes on the lip instead of spots. This variety was once thought to occur only in the Cypress Hills (in one small area), but has since been found at other places. We were told there were only about 10 plants, but we counted up to 35 plants on June 17, 1995. *Cypripedium passerii*

Cypripedium passerinum



num (sparrow's egg lady slippers) and *Listera borealis* (northern twayblade) were also blooming here at the same time - new orchids to check off on my orchid list.

Now whenever we head west, we usually stop at the Cypress Hills Interprovincial Park in Alberta for a couple of days. It's a delightful area. Wildflowers bloom from spring until fall. One can sometimes spot elk, pronghorn antelope, moose, white tail deer, mule deer, turkeys, and 200 other species of birds. A Four Season Resort complex offers year round accommodations. There are 12 campgrounds, many hiking trails, and a really nice visitor center. Most interestingly, however, there are 18 species of wild orchids here. Starting about the middle of June there are beautiful clumps of coral roots everywhere. *Corallorhiza maculata* flowers from late June to early August. The lip of

the flowers is white with purple spots, and the species is quite common in campgrounds in the pine forest. Some of the other orchids that occur here are: *Corallorhiza striata*, *Corallorhiza trifida*, *Cypripedium parviflorum*, *Coeloglossum* (or *Dactylorhiza*) *viridis*, *Goodyera oblongifolia*, *Goodyera repens*, *Listera cordata*, *Malaxis brachypoda*, *Platanthera dilatata*, *Platanthera aquilonis*, *Platanthera obtusata*, and *Spiranthes romanzoffiana*.

Corallorhiza striata



END NOTES

5th Annual Native Orchid Conference Meeting June 9 –12, 2006

Southern Oregon University Ashland, Oregon, USA

Ashland, Oregon is situated in the convergence of three mountain ranges. This unusual geological convergence gives rise to a unique and diverse flora which supports twenty-five native orchid species, fourteen of which typically bloom in June.

Field trips will be half-day and full day excursions led by area botanists. Trips are planned to Crater Lake, Illinois Valley, and the Russian River using transportation provided by university vans.

Details of conference registration and schedules are expected to be available on the Native Orchid Conference website by January 2006 at <http://groups.yahoo.com/group/nativeorchidconference/>.

ADDRESS CHANGE

NOC, Inc. has a new mailing address:

The Native Orchid Conference, Inc.
P.O. Box 29010
Greensboro, NC 27429-9010

Our e-mail address and website link remain the same.

Happy and Productive 2006 to All!

The Native Orchid Conference, Inc.

P.O. Box 29010

Greensboro, NC 27429-9010

Web Site: <http://groups.yahoo.com/group/nativeorchidconference/>

Officers

President: David McAdoo; ncorchid@yahoo.com

Vice-President: Lorne Heshka; lheshka@escape.ca

Secretary: Jim Pyrzynski; pyrzynskij@worldnet.att.net

Treasurer: Mark Rose; rmarkrose_2000@yahoo.com

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