



Saving Our Scrub

A newsletter dedicated to sharing information about the Florida scrub ecosystem



Volume 2, Number 3 September 2001

Florida Scrub Symposium 2001

Dawn Zattau, U.S. Fish and Wildlife Service, Jacksonville, FL

Florida Scrub Symposium 2001 is finally over, and attendance and feedback indicates it was a great success. Those of you who came know how many people managed to pack into the room; sorry for the coziness! All of the talks were interesting and informative, and the audience was attentive and patient.

Here are some numbers regarding attendance, as close as I can guess, since some folks never got around to registering:

- n 198 people attended
- n 20 consulting firms sent a total of 38 people
- n 9 county governments sent a total of 22 people
- n 3 federal agencies sent a total of 23 people
- n 1 high school sent two people
- n 6 non-government organizations sent a total of 26 people
- n 3 private research facilities sent a total of 21 people
- n 4 state agencies sent a total of 40 people
- n 4 universities sent a total of 13 people
- n 3 Water Management Districts sent a total of 6 people
- n 7 attendees were placed in the "other" category; they were folks who came because they love scrub habitat.
- n 6 attendees came from outside of Florida (including one from Europe and two from the west coast of the U.S).

These numbers tell me a few things. First there are a large number of folks interested in scrub habitat, coming from a large number and types of agencies and organizations, and even though budgets are tight, there was good support provided, allowing pretty even attendance across the spectrum of agencies. Florida scrub is known well outside of the boundaries of Florida.

The Proceedings of the symposium have been completed and mailed to all who attended and to others who didn't. If you did not receive a copy and would like to get one, send an email to me, and I'll drop one in the mail to you.

I've received some excellent input for the next symposium, scheduled for some time in 2003. I'll be convening a core group to begin planning in January 2002. If you are interested in participating in the planning and execution, I certainly won't object to having help. Send an email to me, and I'll include you on the list to be contacted in December.

I thoroughly enjoyed putting it all together, and I look forward to doing it again in 2003.

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Photo by Henry Mushinsky, University of South Florida

Sand skink

Implementation Schedules For The South Florida Multi-Species Recovery Plan (MSRP)

David Martin, U.S. Fish and Wildlife Service, Vero Beach, FL

The South Florida MSRP consolidates recovery planning for all federally listed species for which the Fish and Wildlife Service's South Florida field office in Vero Beach has lead responsibility. The MSRP was completed in 1998 except for the implementation schedules that assigns each recovery task a priority (the highest priority going to tasks that are necessary to prevent extinction of a species), responsible government or private agencies, estimated costs, and estimated time necessary for completion (or "continuous" for tasks that don't end).

For scrub species, the MSRP generally covers those whose ranges are restricted to Polk, Highlands, and Osceola Counties in the interior, or to St. Lucie County southward on the Atlantic Coastal Ridge. The MSRP doesn't cover the Florida scrub-jay but it does cover the sand skink and bluetail mole skink. It does not cover plants with northerly ranges (such as *Bonamia grandiflora*, *Nolina brittoniana*, or *Lupinus aridorum*) or those plants that occur in the Tampa Bay region (*Chrysopsis floridana* and *Chionanthus pygamaeus*). The MSRP does cover the relatively wide-ranging lichen *Cladonia perforata*, as well as narrow Polk-Highlands endemics such as *Dicerandra christmanii*, *D. frutescens*, *Eryngium cuneifolium*, *Hypericum cumulicola*, *Paronychia chartacea* ssp. *chartacea*, *Polygonella basiramia*, and *Polygonella myriophylla*. The MSRP includes three plants from the Atlantic Coastal Ridge: *Asimina tetramera* from northern Palm Beach County and Jonathan Dickinson State Park; *Harrisia fragrans* (the fragrant prickly apple cactus) from Savannas Preserve State Park (not exactly a scrub plant, but neither is it exactly a hammock species, so we made it an honorary "scrub" species), and *Dicerandra immaculata* of St. Lucie County, with a seemingly successful introduced population at Hobe Sound National Wildlife Refuge on the Atlantic Coastal Ridge in Martin County.

Each implementation schedule covers an ecosystem. The one covering scrub includes both the Lake Wales Ridge (and

vicinity) and the Atlantic Coastal Ridge. In its current, early draft form, it is a large document (some 110 pages), although we hope to slim it down by the time it's distributed for public review. At the present time, a few experts are reviewing the draft, in large part for their help with priorities and costs. At this early stage, we think the priorities will emphasize habitat management, especially restoration of something resembling historic fire regimes, which appears to be both costly and difficult in terms of the need for intense fires or some suitable substitute near houses or other facilities near the borders of preserves. There are obviously plenty of other challenges, including managing recreational use, invasive pest species, and monitoring the species.

The scrub implementation schedule is being compiled by Dave Martin at the Vero Beach office of the U.S. Fish and Wildlife Service, who would like to discuss priorities and potential costs for each of the tasks. The completed portions of the MSRP are posted on the Internet at <http://verobeach.fws.gov/Programs/Recovery/vbms5.html>, or can be obtained on CD-ROM.

Dave can be reached at 561-562-3909, extension 230, or by email at Dave_Martin@fws.gov.

Saving Our Scrub is published regularly to provide a forum for sharing information about the imperiled Florida scrub ecosystem. The newsletter is distributed free to anyone interested in obtaining a copy. Comments, suggestions, and article submissions should be directed to the editor. The editor and the U.S. Fish and Wildlife Service assume no responsibility for information contained herein, or for injury or damage resulting from use of such information. Information herein will be used at the reader's own discretion and risk. Views and opinions expressed herein are those of the author or source of material and do not necessarily reflect the opinions, views, or endorsements of the U.S. Fish and Wildlife Service.

Meetings, Etc.

FLORIDA EXOTIC PEST PLANT COUNCIL September 12-14, 2001, St. Augustine, FL. "Weeds in La Florida." See www.fleppc.org.

INTERNATIONAL CONFERENCE ON ECOLOGY AND TRANSPORTATION September 24-29, 2001, Keystone, CO. See www.itre.ncsu.edu/cte/icoet2001.html or contact Katie McDermott (kpm@unity.ncsu.edu) or Gary Evink (garyevink@aol.com).

NATURAL AREAS ASSOCIATION 28TH ANNUAL CONFERENCE October 3-6, 2001, Cape Canaveral, FL. "2001: A Spatial Odyssey." Deadline for paper submission is May 31. Visit www.natareas.org for more information and see the article on page 6 of this newsletter.

SOUTHEASTERN ASSOCIATION OF FISH AND WILDLIFE AGENCIES October 13-17, 2001, Louisville, KY. See www.kdfwr.state.ky.us/seaafwa.htm.

TALL TIMBERS 22ND FIRE ECOLOGY CONFERENCE October 15-18, 2001, Kananaskis Village, Alberta Canada. "Fire in Temperate, Boreal and Montane Ecosystems." See www.talltimbers.org.

MANAGING FOR DIVERSITY September 12-14, 2001. TNC's Natural Areas Training Academy. See cnr.ifas.ufl.edu/programs. Click on "Academy" icon.

CONSERVATION SITE ASSESSMENT November 13-15, 2001. TNC's Natural Areas Training Academy. See cnr.ifas.ufl.edu/programs. Click on "Academy" icon.

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TNC's Fire Strike Team Assists On Two Lake Wales Ridge Prescribed Fires

Mary Huffman, *The Nature Conservancy*

Burn bosses on the Lake Wales Ridge took advantage of recent favorable weather conditions to attempt two prescribed burns on different properties. The Florida Scrub-Jay Fire Strike Team assisted with both burns.

On Monday, July 30, the U.S. Fish and Wildlife Service attempted its first burn on the Lake Wales Ridge National Wildlife Refuge. After two test fires confirmed an incompatible wind direction, burn boss Fred Adrian called off the burn, and the fire was put out. Four cooperating agencies participated in the exercise. The unit will need to be re-ignited at another date, hopefully soon. The burn unit is part of a *Ziziphus* re-introduction research project coordinated by Archbold Biological Station.

On Tuesday, July 31, the Florida Fish and Wildlife Conservation Commission conducted a 420-acre burn at its Lake Placid Scrub Wildlife and Environmental Area. Burn boss, Kevin Main, led the inter-agency effort involving staff from three different organizations. This burn unit also contained research plots established cooperatively with Archbold Biological Station. The study will compare mowing, burning and combination restoration treatments.

With these burns accomplished, the Fire Strike Team has 61 burn units from 24 scrub sites on its waiting list. Those units encompass 9500 acres of overgrown scrub, scrubby flatwoods and high pine communities: habitat for 25 federally listed species.

Congratulations to the two burn bosses.

Please contact Mary if you need further information. She can be reached at 863-635-7506 or by email at mhuffman@tnc.org.

Grant Opportunities

Dawn Zattau, *U.S. Fish and Wildlife Service, Jacksonville, FL*

Money for recovery and restoration projects is becoming harder and harder to come by. Each year as I get to know more of you out there in the scrub community, the number of worthy proposals I receive for Service funding grows, but the overall pot seems to shrink. This lack of funding is extremely frustrating for me, because I know that many good projects could take place if only there were enough money to go around. We've all learned by now that it's not a perfect world, and as much as I'd like it to happen, the Service will not be able to fund everyone. It is for this reason that I keep coming back to this column so that all of you can learn of potential alternate funding sources for your scrub projects.

In the last issue of *Saving Our Scrub*, I relayed information on places to go to learn about how to write grant proposals. I have recently learned of a new course that will be offered in February 2002 at the U.S. Fish and Wildlife Service's National Conservation Training Center (NCTC), located in Shepardstown, West Virginia. "Grant Writing for Conservation" will cover the legal authorities for grants, the importance of partnerships, strategic planning for large project implementation, funding sources, building relationships with potential funders, and the basics of grant writing. I have taken many and taught one class (several times) for NCTC, and these folks know how to teach conservation-related topics. I'll get more information to you regarding this course as more becomes available.

Here are some opportunities for grants that I have learned of since the last edition of the newsletter:

EDUCATION GRANTS General information on the availability of educational grants for grades K-12 can be found at www.schoolgrants.org.

LEARN AND SERVE AMERICA Sponsored by the Corporation for National Service, this program provides students and youth with opportunities to serve America by connecting community service with academic learning, personal growth, and civic responsibility. For more information see www.learnandserve.org.

ENVIRONMENTAL EDUCATION GRANTS PROGRAM Sponsored by the Environmental Protection Agency (EPA), this program provides financial support for projects that

design, demonstrate, or disseminate environmental education practices, methods, or techniques. For more information, see www.epa.gov/enviroed/grants.html or aspe.os.dhhs.gov/cfda/p66951.htm or phone EPA at 202-260-8619.

LAND AND WATER CONSERVATION FUND GRANTS TO STATES uses offshore oil leasing revenues to support the creation of state and local park and recreation areas that guarantee perpetual public outdoor recreation opportunities. LWCF grants may be used for state planning and for the acquisition and development of state and local facilities that provide active and/or passive recreation opportunities. Recreation enhancement may be accomplished through the preservation of open space, estuaries, forests, wildlife and natural resource areas. For more information see www.ncrc.nps.gov/lwcf/.

WILDLIFE CONSERVATION AND APPRECIATION PROGRAM Sponsored by the U.S. Fish and Wildlife Service, this program provides grants to fund projects that bring together the Service, state agencies, and private organizations and individuals. Projects include identification of significant problems that can adversely affect fish and wildlife and their habitats, actions to conserve species and their habitats, actions that will provide opportunities for the public to use and enjoy fish and wildlife through nonconsumptive activities, monitoring of species, and identification of significant habitats. For more information see <http://aspe.os.dhhs.gov/cfda/p15617.htm> or www.fws.gov. You can also contact the Service by telephone, at 703-358-1852.



Scrubby Flatwoods Restoration Along Wildland/Urban Interface

Alissa Powers, Sarasota County Environmental Services



In 1998, Sarasota County purchased Lemon Bay Preserve in South Venice to compensate for Florida scrub-jay (*Aphelocoma coerulescens*) impacts during County transportation projects. Lemon Bay Preserve was selected as the compensation site because of its high quality and diversity of habitats and its proximity to known scrub-jay families. In addition to 59 acres of scrubby flatwoods, the Preserve contains pine flatwoods, mangroves, oak hammocks, and saltwater marshes. The primary management goal was to restore the habitat for scrub-jay occupation. Restoration activities posed challenging due to the close proximity of residential houses (only 200 feet away).

To the east, the Preserve is contiguous with residential development. This wildland/urban interface coupled with the long period of fire suppression on the Preserve made prescribed fires hazardous. County staff consulted with the U.S. Fish and Wildlife Service, Florida Fish and Wildlife Conservation Commission, Gopher Tortoise Council, and local scrub-jay expert, Jon Thaxton, prior to selecting a management strategy to restore the scrubby flatwoods. The County elected to roller-chop the area to minimize the risk based on consultation recommendations. In July

2000, the scrubby flatwoods were roller-chopped using a 30-inch double drum spiral-toothed roller-chopper pulled by a D6 high track bulldozer. Several passes with the roller-chopper were required to reduce the vegetation. Impacts to gopher tortoises were a major concern. To minimize soil disturbance and reduce impacts to gopher tortoises, the drums were not filled. Also, gopher tortoise burrows were flagged and carefully avoided during roller-chopping.

Once fuel loads were reduced, it was then safe to conduct a prescribed burn. First, a perimeter fire line had to be installed along the urban interface. Again, the roller-chopper was used to create a 20-foot wide fire line, which acts as both a firebreak and an access road. Exotic vegetation (mostly Brazilian pepper) was removed from the edges of the scrubby flatwoods using both hand-removal crews and mechanical chippers. Within the Preserve boundaries, natural features such as oak-palm hammocks act as internal firebreaks, therefore, no additional fire lines were installed. The last step in preparing for a prescribed burn was notification of the local homeowners. All homeowners were personally contacted and received

educational literature about the ecological benefits of prescribed fire and about the protection measures the County was taking to prevent property damage. In September 2000, the roller-chopped areas were burned. The burn was conducted by a contractor with assistance from County staff and the local fire department. Only 19 of the 55 acres under prescription successfully burned due to duff layer moisture content.

Wildlife has responded favorably to the roller-chopping and subsequent burning. Scrub-jays were observed on the Preserve as early as one month after roller-chopping, and one scrub-jay family is consistently using 11 acres of scrubby flatwoods for foraging. Southern bald eagle (*Haliaeetus leucocephalus*) sightings have become more frequent. In addition, the state-endangered Curtiss' milkweed (*Asclepias curtissii*) was discovered in the managed area.

Although we have improved the quality of habitat for scrub-jays and other wildlife,



Lemon Bay Preserve prior to land management activities.



Lemon Bay Preserve after land management activities. Scrub-jays now forage here.



Curtiss' milkweed on Lemon Bay Preserve.

Meetings, Etc.

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ECOLOGY, CONSERVATION & MANAGEMENT OF BIODIVERSITY IN TROPICAL FORESTED REGIONS November 14-15, 2001, Cairns, Queensland, Australia.

See www.rainforest-crc.jcu.edu.au/events.asp?what='conferences'&event=41

MANAGING VISITORS AND VOLUNTEERS IN NATURAL AREAS January 23-25, 2002. TNC's Natural Areas Training Academy. See cnr.ifas.ufl.edu/programs. Click on "Academy" icon.

INTRODUCTION TO FIRE EFFECTS (RX 310) February 25-March 1, 2002. TNC's Natural Areas Training Academy. See cnr.ifas.ufl.edu/programs. Click on "Academy" icon.

VEGETATION MONITORING IN A MANAGEMENT CONTEXT March 11-16, 2002. TNC's Natural Areas Training Academy. See cnr.ifas.ufl.edu/programs. Click on "Academy" icon.

BUILDING COMPREHENSIVE VOLUNTEER PROGRAMS March 20-22, 2002. TNC's Natural Areas Training Academy. See cnr.ifas.ufl.edu/programs. Click on "Academy" icon.

WORKING ACROSS BOUNDARIES TO PROTECT ECOSYSTEMS April 29-May 1, 2002. TNC's Natural Areas Training Academy. See cnr.ifas.ufl.edu/programs. Click on "Academy" icon.

MISC. TRAINING in a wide variety of topics, including (but not limited to) conservation biology, permitting, and partnership building is available at U.S. Fish and Wildlife Service's National Conservation Training Center, based in Shepardstown, WV. For additional information see their web site at www.nctc.fws.gov.



Scrub-jay surveying Lemon Bay Preserve after roller-chopping.

a great deal of work remains to be done. In the areas that did not burn, bare sandy patches do not occupy adequate area for scrub-jay foraging and caching. Root raking is being considered to create more sandy patches. This will also help reduce saw palmetto coverage. Another issue that hasn't been addressed is the canopy density of mature slash pine. Selective timbering of pines may still be performed in the future to

reduce pine densities to acceptable levels (below 20%) and to limit avian predator perching sites within the scrubby flatwoods. Other future management activities include retreatment of exotic species and maintenance of firebreaks.

Alissa can be reached at 941-378-6142 or by email at apowers@co.sarasota.fl.us

Natural Areas Association Annual Conference

Ruark L. "Rook" Cleary, Florida Department of Environmental Protection
Bureau of Invasive Plant Management, Tallahassee, FL

The Natural Areas Association, an international society dedicated to protecting biodiversity, is having its 28th annual conference at Cape Canveral, Florida, on October 3-6, 2001. Two of the conference sessions will be hosted by the NAA Program Assistance Committee, whose mission is to assist in the development or enhancement of public natural areas programs throughout the country. One session will deal with the elements of a successful natural areas program and will close with a panel discussion on "how do we get a system of dedicated natural areas in Florida?" Panelists include former Volusia County Commissioner and Florida Audubon

President, Clay Henderson, and former State Representative, Dean Saunders.

The other session will move the focus to the local level, looking at county programs dedicated to the protection and management of natural areas. Two reasons for this focus are: (1) many Florida counties have conservation programs that are larger than in most states (e.g., Miami-Dade, Brevard, Volusia, Palm Beach), and the variety of these programs offers a range of "startup" options that other counties or states without programs could consider; and (2) despite its millions of acres of conservation land, Florida does not have a "dedicated lands law" that sets conservation as the "highest and best use"

of these lands. Any effort to correct this situation would rely heavily upon the support of Florida's counties. This session includes presenters from Alachua, Brevard, Indian River, Lee, and Miami-Dade Counties.

Anyone interested in habitat preservation or land conservation issues should not miss these sessions! For more information on the conference, visit:
www.natareas.org/2001conf.htm.

Rook can be reached at 850-487-2600, extension 213, or by email at Ruark.Cleary@dep.state.fl.us.

Reclassifications of Federally Listed Plants On The Lake Wales Ridge

Dave Martin, U.S. Fish and Wildlife Service, Vero Beach, FL

A 1999 Florida Natural Areas Inventory (FNAI) survey of rare plant species and high-quality natural communities at twenty six Conservation and Recreation Lands (CARL) Program sites recommended that the threatened papery whitlow-wort (*Paronychia chartacea* ssp. *chartacea*) be removed from the list of endangered and threatened plants; the report further recommended that the status of wireweed (*Polygonella basiramia*) and sandlace or Small's jointweed (*Polygonella myriophylla*) could be reclassified from endangered to threatened. These recommendations were based on the success of land acquisition programs, especially Florida's CARL program. *Paronychia chartacea* ssp. *chartacea*, for example, was known from over 140 locations, with 39 percent on at least 16 different managed areas. Both wireweed and sandlace were found at over 100 locations, with 43 percent and 31 percent, respectively, on managed areas.

When *Paronychia chartacea* was listed, its range extended only from Lake and Orange counties south to the southern end of the Lake Wales Ridge. In 1991, Loran Anderson of Florida State University described a second subspecies, *Paronychia*

chartacea ssp. *minima*, from the white sand shores of sinkhole lakes north of Panama City, where it occurs with rushes and sedges. These lake shores are extremely vulnerable to all-terrain vehicles, as well as residential development, so the newly-described subspecies, which was automatically federally listed as a threatened species by virtue of belonging to the same species as the Lake Wales Ridge subspecies, has proven to be more seriously threatened. The FNAI report recommends upgrading subspecies *minima* to endangered status. The U.S. Fish and Wildlife Service's budget (which Congress arranged to make reclassifications easier than listing actions) doesn't allow that reclassification at the present time.

We are beginning to develop a proposal to reclassify the three Lake Wales Ridge species. Each species will be analyzed in terms of the five factors that can qualify a species for listing under the Endangered Species Act: (1) the present or threatened destruction, modification, or curtailment of their habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; and (5) other natural or manmade

factors affecting their continued existence. The standards for reclassifications and delistings are the same as the standards for listings. If the reclassifications take place, we anticipate that recovery measures planned for *Polygonella basiramia* and *P. myriophylla* will continue. In particular, it's quite important that if *Paronychia chartacea* ssp. *chartacea* is delisted, the Endangered Species Act requires that it be monitored for five years. We'd be very interested in suggestions for how to design and implement a monitoring program.

We are also interested in sightings of these plants—especially from the northern ends of their ranges, near Lake Louisa and in Lake County and Shadow Bay (Lakes Cain-Marsha) Park in Orlando for *Paronychia chartacea*; Lake Pierce in Polk County for *Polygonella basiramia*; and the Vineland area of western Orange County for *Polygonella myriophylla*. Please contact me if you have ideas or information to share.

Dave can be reached at 561-562-3909, extension 230, or by email at Dave_Martin@fws.gov.

Safe Harbors...

Not just for boats anymore

Jane Monaghan, U.S. Fish and Wildlife Service, Jacksonville, FL

Safe Harbor agreements are for federally listed animals that occur on non-federal land. The majority of the nation's current and potential endangered and threatened species habitat is on property owned by non-federal entities. However, landowners may be concerned about the restrictions that come with listed species if they manage their land to benefit them. Safe Harbor agreements avoid this dilemma by encouraging these property owners to manage their land in ways that are beneficial for listed species without the burden of additional restrictions.

Without these restrictions, many property owners are willing to voluntarily manage their land to benefit listed fish, wildlife, and plants. Beneficial management activities include actions that restore or maintain habitat, e.g., prescribed burning, longer tree rotations, planting scrub species, installing inserts for red-cockaded woodpeckers (RCWs). Many times the U.S. Fish and Wildlife Service (Service) can offer the landowner funding to help with these activities. Funding to prepare firelines or contract out the burning can make the difference for small landowners.

Safe Harbor agreements do not free landowners from their obligation to avoid harming those endangered or threatened species that are already present on their property prior to the agreement being signed. The amount of occupied habitat or the number of individuals of a listed species currently on the property become the baseline for the agreement. This baseline is determined during the early negotiations between the Service and the landowner. This baseline cannot be compromised at any time during the agreement unless it is due to natural causes out of the landowners control.

When the agreement is terminated, expires, or the land is sold, etc. the landowners are still responsible for this baseline number in the event they intend to incidentally take a listed species during otherwise legal

activities. Determining baseline conditions ensures that the covered species will be at least as well off after a project has been completed and the site returned to pre-project conditions as it was at the time the Safe Harbor agreement was made. Generally, the agreement can also allow the Service a reasonable amount of time to translocate animals which are above the baseline, in the event the landowner decides to return to baseline when the agreement is terminated. This may only be appropriate for certain species where translocation has been proven to be successful.

Safe Harbors generally are for long periods of time (10 + years). One of the most important requirements for any Safe Harbor agreement is that the management activities should result in a "net conservation benefit" to the covered species. In order to meet this requirement it is helpful to pose two questions in sequence. First, is the management action reasonably likely to produce some benefit for the covered species during the time that the agreement remains in effect? If the answer is no, the Safe harbor agreement should not be approved. For example, if the landowner agrees to manage for RCWs by planting longleaf pine but the agreement is only for twenty years, the net benefit is not likely to occur. If the answer to the question is yes, a second question must be asked: Are there any likely negative consequences during the proposed management activities, or from the future return of the species to its baseline condition on the property that outweigh the expected benefit? If such negative consequences are unlikely, the agreement may satisfy the net conservation benefit standard; if such consequences are probable, it does not.

One of the most difficult aspects of determining net conservation benefit is describing the "indirect" contribution to recovery. Each species and project will involve different circumstances. The following is a list of benefits which could be considered:

- a Reduction of habitat fragmentation rates
- a Maintenance of occupied habitat
- a Maintenance, restoration and/or enhancement of unoccupied habitat useful for the recovery of the listed species
- a Increase in habitat connectivity
- a Maintenance of current population size
- a Increase in current population size
- a Improvement of species population distribution
- a Reduction of the effects of catastrophic events
- a Contribution to research knowledge, management techniques, and/or conservation strategies
- a Exotic predator/competitor control

Currently, the Service and the Florida Fish and Wildlife Conservation Commission are working together to develop a statewide RCW Safe Harbor in Florida. Other Southeastern states (South Carolina, North Carolina, Virginia and Georgia) already have RCW Safe Harbor agreements in place. Louisiana and Alabama have RCW Safe Harbor agreements that are pending.

Where can you get more information? The final Safe Harbor policy, published in the Federal Register in June 1999, can be found at the Service's Jacksonville Ecological Services website, <http://northflorida.fws.gov>. We have also provided a direct link to the Safe Harbor publication on the Environmental Defense Fund website, where a copy of the publication can be ordered. Also, the Service is working on a Safe Harbor handbook that should be available for release to the public soon.

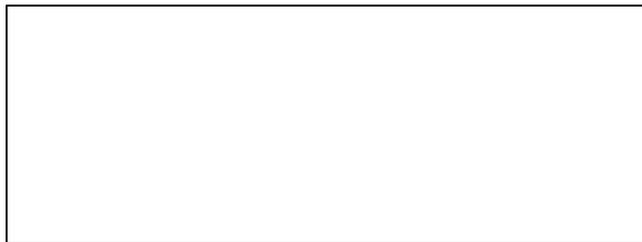
Jane can be reached at 904-232-2580, extension 128, or by email at Jane_Monaghan@fws.gov.

The editor is seeking unique scrub pictures to place in each newsletter at this location. Your photo could be anything scrub-related (e.g. general habitat shots, shots of flora or fauna, management activity, etc.). Please submit any photos and captions via email to dawn_zattau@fws.gov or mail a print, negative, or slide to Dawn Zattau, U.S. Fish and Wildlife Service, 6620 Southpoint Dr. S., Ste. 310, Jacksonville, FL 32216. I promise to return the original to you as soon as I have scanned the image!

Photo by Eugene Kelly, SWFWMD



Avon Park harebells, *Crotalaria avonensis*



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