



# Saving Our Scrub

A newsletter dedicated to sharing information about the Florida scrub ecosystem



Volume 2, Number 2 May 2001

## Florida Scrub Symposium 2001

Dawn Zattau, U.S. Fish and Wildlife Service

The symposium is on! Thanks to all of you who responded to my plea for completed registration forms and abstracts. The meeting will be extremely informative for any and all interested in the scrub ecosystem. Perhaps best of all, **there will be no registration fee associated with this meeting!** As soon as the program committee has reviewed the abstracts, I will be sending letters out to each of you who will be presenting papers. In addition, at that time, a detailed agenda will be posted at our website; I'll send a message to you once it is posted.

Please note that the block of rooms I have reserved at the Radisson will be held no later than **May 14, 2001**. If you have not made your reservation by that date, any unused rooms remaining in the block will be released, and you will not be able to stay in the hotel at the special rate of \$77.00 per night (plus tax). Please contact Radisson's Central Reservations office at 1-800-333-3333 or the Radisson Plaza Reservations desk at 407-425-4455 and make your reservation today. In order to receive the special rate (and to make sure FWS gets credit for booking the room!), be sure to tell them you will be attending the U.S. Fish and Wildlife Service's scrub symposium.

I'll be taking additional registrations up to and during the symposium, but please let me know ahead of time if you will be attending. In this way, the hotel will be able to prepare the meeting area for the correct number of attendees. A copy of the registration form is available on page 6 of the February 2000 issue of "Saving Our Scrub"; you can fax it to me (completed, of course) at 904-232-2404, email the requested information to me at dawn\_zattau@fws.gov, or send it to me via good old-fashioned snail mail at: U.S. Fish and Wildlife Service; 6620 Southpoint Dr. S., Ste. 310, Jacksonville, FL 32216-0912. Please pass on the information to whoever you think may be interested in attending so that we can gain the maximum benefit from this effort.

I look forward to seeing you in June!



### Inside This Issue:

Meetings, Etc. ....	2
Grant Opportunities .....	2
Scrub Restoration and Fuel Reduction at Seabranck Preserve State Park, Martin County, FL .....	3
Editorial .....	5
A "Different" Kind Of Scrub-Jay Habitat .....	6
Natural Areas Training Academy Celebrates First Year .....	7

### New On The Web:

**LAKE WALES RIDGE BIOTA REFERENCES** have been added to Archbold Biological Station's web site. See [www.archbold-station.org/fai/species4.html](http://www.archbold-station.org/fai/species4.html). This web-reference has links to internet images of Lake Wales Ridge plants and animals and supplements the already published booklet "Florida's Ancient Islands ([www.archbold-station.org/fai/index.html](http://www.archbold-station.org/fai/index.html)) and other Lake Wales Ridge references at the Archbold web site accessible from the gateway page "The Lake Wales Ridge: Ancient sands, diverse biota" ([www.archbold-station.org/abs/regionalecol/lkwr.htm](http://www.archbold-station.org/abs/regionalecol/lkwr.htm)).

"ISLANDS IN TIME", Archbold's 18-minute Lake Wales Ridge video, is now available on the internet ([www.archbold-station.org/abs/regionalecol/isltime.htm](http://www.archbold-station.org/abs/regionalecol/isltime.htm)). Follow the links and enjoy this outstanding description of the fragile ancient scrub ecosystem.

FNAP's "GUIDE TO FLORIDA'S RARE AND ENDANGERED PLANTS" will be published soon in hardback, with a web edition following; Archbold will provide a link on their web site when it is available.

## Meetings, Etc.

**VEGETATION MONITORING IN A MANAGEMENT CONTEXT** April 23-28, 2001, Archbold Biological Station. For registration information, contact Valencia Community College's continuing professional education program (904) 299-5000, ext. 6701 or 6700. To inquire about workshop content, contact Pete Colverson (407) 935-0002.

**ACHIEVING ECOSYSTEM MANAGEMENT GOALS THROUGH INTERAGENCY TEAMWORK** May 1-2, 2001, Camp Kulaqua, Gainesville. For registration information, contact Valencia Community College's continuing professional education program (904) 299-5000, ext. 6701 or 6700. To inquire about workshop content, contact Pete Colverson (407) 935-0002.

**FLORIDA NATIVE PLANT SOCIETY** May 10-13, 2001, Tarpon Springs, FL. See [www.fnps.org](http://www.fnps.org).

**COMMUNITIES WORKING FOR WETLANDS** May 16-18, 2001, Orlando, FL. For information see the web site at [www.iwla.org/sos/awm](http://www.iwla.org/sos/awm) or call 1-800-965-5004.

**2001 SCRUB SYMPOSIUM** June 5-7, 2001, Orlando, FL, Radisson Plaza Hotel. Contact Dawn Zattau (904) 232-2580, ext. 107; [dawn\\_zattau@fws.gov](mailto:dawn_zattau@fws.gov).



**2001 LAND TRUST CONFERENCE** June 8-10, 2001, Naples, FL, Naples Beach Hotel & Golf Club. Hosted by Conservancy of SW Florida. Contact Mimi Wolok (941) 403-4225; [mimiw@conservancy.org](mailto:mimiw@conservancy.org)

**SOCIETY FOR CONSERVATION BIOLOGY** July 30-August 4, 2001, Hilo, HI. "Ecological Lessons From Islands." See [www.hear.org/scb2001](http://www.hear.org/scb2001).

**ECOLOGICAL SOCIETY OF AMERICA** August 5-9, 2001, Madison, WI. "Keeping All the Parts: Sustaining and Restoring Complex Ecosystems." See [esa.sdsc.edu/annual.htm](http://esa.sdsc.edu/annual.htm).

## Grant Opportunities

Dawn Zattau, U.S. Fish and Wildlife Service, Jacksonville ([dawn\\_zattau@fws.gov](mailto:dawn_zattau@fws.gov))

There never seems to be enough money to get done all that is needed to conserve our scrub ecosystem. Every year, I receive more and more requests for money needed to accomplish activities necessary to achieve the goal of recovery of many of our listed scrub species. My frustration in not being able to fund most of these activities is one of the reasons I include a column on various grant opportunities in this newsletter, hoping that you can find other sources to help you get these important proposals accomplished.

Since the inaugural edition of the newsletter, I've provided you with lists of available grants so that you can seek money needed to accomplish scrub conservation and management goals on your own. While driving home from work the other day, I was listening to National Public Radio, and the local station announced the availability of a class to learn not only about how to write grant applications, but also to learn about how to find them.

After hearing the announcement of the class, it occurred to me that many of you may not have received training on how to go about seeking various grants, so providing a list of funding sources may not result in achieving my bottom-line goal, which is you being chosen as a recipient of a grant to improve the status of the scrub ecosystem in Florida. I called the contact given on the radio and received some information I thought was valuable enough to share with you.

The class I heard about is being taught by **The Grantsmanship Center** ([www.tgci.com](http://www.tgci.com)). I'm sure there are other organizations who provide similar training, and if you know of any, please let me know! While tuition (\$675) could be considered steep by those who approve training, the good news is that if you sponsor a class, up to 3 of your staff (depending on enrollment) can attend free. By visiting the web site, you can learn where and when these classes are being held throughout Florida. You can also learn about how to become class sponsor.

I also learned of another organization, **The Foundation Center** ([www.fdncenter.org](http://www.fdncenter.org)). At this organization's web site, you can search for various types of grants and sign up to receive free newsletters which inform you of available grants, etc. I just signed up to receive several of the newsletters, and I'll let you know more about the types of information available after I receive a few of them.

On another note, I received an email from a colleague telling me of a new site called The Federal Commons ([www.cfda.gov/federalcommons/](http://www.cfda.gov/federalcommons/)), launched in December of last year. The site will eventually allow applicants to submit and track their grant applications online, and act as a "one-stop-shopping" location for all federal grants.

As always, I will continue my search to bring to you the most up-to-date information available on grant availability. I can always use help; if you know of anything or have any ideas on how to make this section of the newsletter more informative, please let me know!

**INTERNATIONAL CONFERENCE ON ECOLOGY AND TRANSPORTATION** September 24-29, 2001, Keystone, CO. See [www.itre.ncsu.edu/cte/icoet2001.html](http://www.itre.ncsu.edu/cte/icoet2001.html) or contact Katie McDermott ([kpm@unity.ncsu.edu](mailto:kpm@unity.ncsu.edu)) or Gary Evink ([garyevink@aol.com](mailto: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](http://www.natareas.org) for more information.

**SOUTHEASTERN ASSOCIATION OF FISH AND WILDLIFE AGENCIES** October 13-17, 2001, Louisville, KY. See [www.kdfwr.state.ky.us/seafwa.htm](http://www.kdfwr.state.ky.us/seafwa.htm).

**TALL TIMBERS 22ND FIRE ECOLOGY CONFERENCE** October 15-18, Kananaskis Village, Alberta Canada. "Fire in Temperate, Boreal and Montane Ecosystems." See [www.talltimbers.org](http://www.talltimbers.org).

**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](http://www.nctc.fws.gov).

# Scrub Restoration And Fuel Reduction At Seabranh Preserve State Park, Martin County, Florida

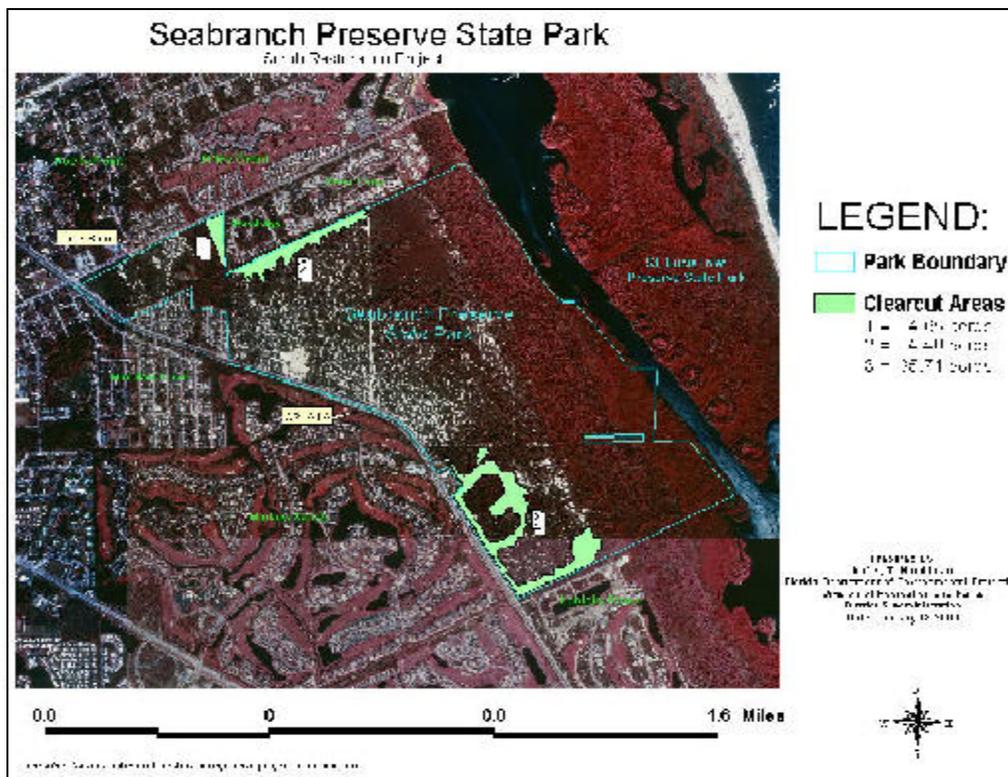
Jeffrey T. Hutchinson, Florida Department of Environmental Protection, Division of Recreation and Parks

Landscape fragmentation, due to residential development and transportation networks in south-east Florida, has limited the role of fire in perpetuating scrub and other fire dependent communities. At the landscape level, Seabranh Preserve State Park (SPSP) is surrounded by residential communities directly to the north, west and south. Roadways also border the preserve to the west and portions of the north boundary while railroad tracks

delineate the western boundary. To the east, these anthropogenic barriers limit natural fires from spreading across the landscape and maintaining the scrub community. The only connectivity to wildlands in SPSP occurs along a small strip in the southeast corner of the park where the preserve connects with baygall swamp and estuarine tidal swamp managed by Martin County and the Florida Inland Navigation District.

Prior to the restoration project, extreme fire hazards existed along the north and south boundaries of the preserve. Using prescribed fire as a management tool was thwarted by the threat of escapes and property damage outside the park boundary. Mike Sawyer, Wildfire Mitigation Specialist with the Florida Division of Forestry, stated after a tour of north boundary of SPSP that it was one of most serious fire hazards he has observed in south Florida. In several locations, the sand pine canopy along the north boundary in SPSP was contiguous with sand pine canopy in residential areas and wood shingle homes.

Due to these factors, the use of



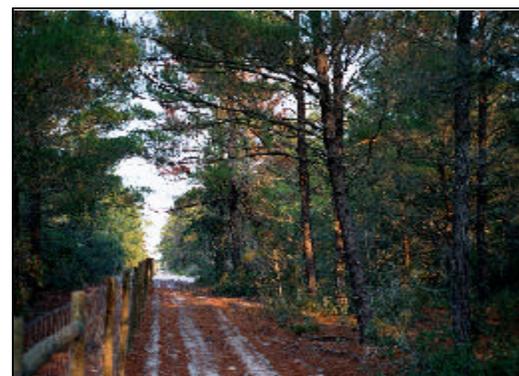
prescribed fire in tracts of mature scrub in SPSP was deemed hazardous. As an alternative, timber removal was selected to reduce the fuel loads, restore habitat for endemic species of wildlife, and create buffer zones for future management with prescribed fire within the preserve. The objectives of the project were: 1) decrease the chance of a catastrophic wildfire near residential homes, and 2) restore mature sand pine scrub to the beginning stage of secondary succession suitable for listed species such as the Florida scrub-jay, gopher tortoise, and Florida mouse.

In the early stage of the project, a cooperative partnership developed that involved the Florida Department of Environmental Protection (Florida Park Service), Florida Division of Forestry, United States Fish and Wildlife Service, and The Nature Conservancy. In addition to this project, restoration projects also occurred in mature sand pine scrub in Jonathan Dickinson State Park (JDSP) and Hobe Sound National Wildlife Refuge, both of which are also located in Martin County.

The planning process for this scrub

restoration project took almost two years. Initially, park service biologists surveyed and mapped selected tracts of mature sand pine that were deemed the most difficult to manage with prescribed fire. Sites selected for restoration were chosen because of their location next to residential developments and roadways. Florida Division of Forestry was contacted and assisted in the overall planning

process. Mike Penn of the Florida Division of Forestry worked with park staff to develop the timber contract, mark the timber sale boundary, and monitor the bidding procedure. In addition, cooperation between the four partners involved in the overall restoration project resulted in four public meetings, press releases, newspaper articles, informational brochures, letters to local and state representatives, road signs, and educational kiosks.



Sand pine canopy overhanging into a residential community

(Continued on page 4)

# Scrub Restoration And Fuel Reduction At Seabranh Preserve State Park, Martin County, Florida

(Continued from page 3)

An additional meeting was arranged to discuss the project with homeowners that resided next to areas designated for timber removal in SPSP. Road signs and educational kiosks were placed at the site well in advance of project initiation. Road signs contained a contact number for the public to get further information on the project. Staff at The Nature Conservancy's Blowing Rocks Preserve in Jupiter, Florida volunteered to answer questions from the public.

Atlantic Land and Timber, Inc of Roseland, Florida was awarded the contract to do the restoration work. From November 29 to December 15 of 2000, timber crews mechanically removed 54.8 acres of mature sand pine (> 35 years old) from scrub and scrubby flatwoods in SPSP. Timber removal occurred in 3 separate tracts of mature sand pine adjacent to residential communities and County Road A1A. Sections of the restoration sites within SPSP were succeeding into oak scrub and limited sand pine regeneration was observed. Tracts that were selected for restoration typically contained sand pine with low volumes of merchantable timber. All sand pines > 6" d.b.h. were removed from the selected sites and sold for mulch at a nearby business. However, some of the larger sand pines (ca. 5-10%) were sold as plylogs. One of the benefits of contracting the project out to a local silviculture firm was that the project did not result in a net loss of revenue to the park. As part of the contract, the park received 0.50 cents / ton for all timber taken off site.

During the removal of the sand pines from each tract, individual trees were hauled to a staging area and run through a de-limber. This process stripped all limbs, needles, cones, and small portions of the

bark from individual trees. Only sand pine boles were removed from each site. The remaining debris from the sand pines, along with oaks and saw palmettos, are the fuel load required to carry a prescribed fire. After sand pines were

removed from the sites in SPSP, skidders were used to spread the remaining debris evenly over the area to further reduce fuel loads and flame heights during the planned burns. Finally, to complete the scrub restoration project, prescribed fire will be applied to mimic the natural process of fire in setting scrub back to the beginning stage of secondary succession.

Due to the close proximity of the project to several residential developments and C.R. A1A, it was important that as many local residents and members of the general public as possible be informed about the project. During the first three weeks of the project at JDSP, staff at The Nature Conservancy reported that they had received about 12-15 calls from the public regarding the project. Most of the callers were only curious about the details of the project. When the project started at SPSP, the number of calls during the first two days increased to about 50. Cooperation with The Nature Conservancy eased the amount of time that park

staff had to address the concerns of the public.

An additional benefit of the restoration project is that it will allow park staff the opportunity to properly manage the preserve within the confines of urban sprawl. Buffers created by timber removal along the park boundary will allow for the proper implementation of a prescribed burn program. Due to the small size of SPSP and its isolation to other natural areas, it was important to maintain some structural diversity and spatial heterogeneity in SPSP. Within the oldest stand of sand pine scrub (ca. 45 years old) adjacent to C.R. A1A, a 16.6 acre tract of mature sand scrub was left uncut in the center of the clear-cut area (see map). Several species of raptors that include ospreys, great horned owls, sharp-shinned hawks, and red tailed hawks have been observed in the area. The buffer area around the uncut portion of mature sand pine will also allow park staff to monitor the succession rate of sand pine or apply prescribed fire to the site at a future date.

To monitor the success of the restoration project and succession rates of vegetation in coastal sand pine scrub, permanent plots were established prior to timber removal. All herbaceous plants and shrubs were surveyed within twelve 2 x 10 meter plots. Sand pines were surveyed using a 10-factor prism. Vegetation plots will be resurveyed on an annual basis

(Continued on page 5)



*Various outreach efforts helped to reduce negative public reaction to the restoration effort.*



*John Griner, Park Manager, surveys the north boundary of the project, post-logging.*

# Editorial

## Following The Path Of Greatest Resistance: An Approach To Trail Development In Florida Scrub

*Keith N. Chappell, Environmental Program Coordinator, Gumbo Limbo Nature Center, Boca Raton*

The sandy, beaten paths that wind throughout many urban scrub sites are distinctive indicators that off-road vehicles, bikers, and people have already “paved” their way through some of these sensitive lands. These early trails are relatively accessible, easy to navigate and are often further developed into trails for the public. Although the conventions for trail development rely on the

***“Somewhere ages and ages hence:  
Two roads diverged in a wood, and I-  
I took the one less traveled by,  
And that has made all the difference.”***  
~Robert Frost

actual specifications for each habitat, many of the listed and earlier sere plants of the Florida scrub thrive on these pre-made paths. By following the path of greatest resistance through either oak thickets, palmettos or accumulated debris tends to turn back the successional clock and allow these earlier sere plants a chance to grow and thrive on the bright and open regions of these pre-made roads. As succession proceeds through a series of stages, developing trails in the later ecological stages of the Florida scrub benefits and preserves the diversity of the smaller scrub plants.

Beginning trails through the oak thickets, pines or palmettos are not always

the most inviting or the easiest routes to develop. Thorny vines, hog plums, oak trees, pine trees and saw palmetto are among the few species of plants that are often encountered when developing a trail through these later stages of ecological succession. Often times the path of greatest resistance lies adjacent to the worn dirt-bike roads that are so tempting to further develop. However,

developing these pre-made paths has the tendency to eliminate the ecological conditions that early sere plants require for survival.

Public trails throughout the Florida scrub habitats should circumvent numerous stages of ecological succession, while encouraging the diversity of earlier plant communities and managing the later ones. When developing a trail through the Florida scrub, following the path of greatest resistance commands serious commitment and a notable amount of physical exertion. However, these types of trails not only benefit the earlier plant communities, but

also serve to maintain the dynamic Florida scrub ecosystem by sustaining an ecological equilibrium.



In the picture shown above, the path of greatest resistance proceeds through a dense oak thicket as opposed to an open stretch of sand just adjacent to the new path.

## Scrub Restoration And Fuel Reduction At Seabranh Preserve State Park, Martin County, Florida

*(Continued from page 4)*

following prescribed fire. The first prescribed burn of the project in SPSP was tentatively set for mid-January of 2001. However, current drought conditions have prolonged the last stage of the project. Lack of rainfall over the past 5 months has created drought like conditions unfavorable for prescribed fire. Due to the close proximity of residential homes, prescribed



fire at each site will be dependent on increased rainfall, prevailing winds and other environmental factors.

*Jeff can be reached at Florida Department of Environmental Protection, Division of Recreation and Parks, 13798 SE Federal Highway, Hobe Sound, FL 33455 or by email at [jeffrey.hutchinson@dep.state.fl.us](mailto:jeffrey.hutchinson@dep.state.fl.us).*

# A "Different" Kind Of Scrub-Jay Habitat

Dawn Zattau, U.S. Fish and Wildlife Service, Jacksonville ([dawn\\_zattau@fws.gov](mailto:dawn_zattau@fws.gov))

"What do you mean I have scrub-jays on my property. Look at it! The habitat can't even remotely be identified as scrub!"

In the regulatory arena, this sentiment (or a variant which sometimes isn't so nicely worded!) is expressed to Service biologists too often. Much of the published literature describes scrub-jay habitat as what occurs along the Lake Wales Ridge. As a result, the consulting community (and some land owners) have a mental picture of what scrub-jays will live in which often is quite different from that of the "atypical" habitats scrub-jays sometimes occupy in real life. Often, consultants may not even think to survey for the presence of the species simply because the site isn't

"ideal" scrub. This omission can create a costly dilemma for a land owner unlucky enough to have some of this atypical habitat which serves as home to one or more families of scrub-jays.

If scrub-jays are present, prohibitions against "take" existing in the Endangered Species Act take effect, whether or not the habitat is considered atypical. Therefore, if such a site containing scrub-jays hasn't been surveyed in advance, we normally find out a permit will be required for development to proceed long after expensive site design already has taken place. We would rather be involved in the process early on, preferably before a site has been purchased for development. In that way, there are no surprises

facing the developer, who may or may not choose to purchase the site after learning what mitigation requirements may be necessary for the development to proceed.

This recently happened at a development site occurring in Lake County. Jane Monaghan, a biologist on staff at the U.S. Fish and Wildlife Service office in Jacksonville recently visited this site and took photographs to document one of these "atypical" habitats which was occupied by Florida scrub-jays. Following are some of the photos.

My purpose in sharing these photos is to let those readers who have little experience in all types of scrub-jay habitat broaden that mental picture they may have of what scrub-jays occupy. I'll share more sites and photos as I learn of them to further expand the mental picture. The best rule of thumb is to survey **all** the habitat types identified in Fitzpatrick *et al.* 1991 ("Ecology and Development-Related Habitat Requirements of the Florida Scrub Jay (*Aphelocoma coerulescens coerulescens*), Nongame Wildlife Program No. 8" published by the Florida Game and Fresh Water Fish Commission. In this way all of the "Type I, II, and III" habitats in which scrub-jays actually do occur should be surveyed in enough time for the Service to provide guidance on what may be required of the land owner should development proceed without potentially costly delays occurring later in the process.

(Continued on page 7)



Scrub oaks encroaching into the 100-year floodplain along Grassy Lake.



Old citrus grove with clumps of scrub oaks. Jays were using the thick hedgerows on the edges.

# A "Different" Kind Of Scrub-Jay Habitat

(Continued from page 6)



Jays using these oaks were seen diving into the muscadine thickets on the left.



An old citrus grove being restored to scrub by jays?

## Natural Areas Training Academy Celebrates First Year

Peter Colverson, *The Nature Conservancy*

The Natural Areas Training Academy celebrated its first birthday in May with the completion of its Certificate in Natural Areas Management workshops. Six of the workshop's participants graduated from the program and earned the certificate. The graduation was an occasion to celebrate the unique accomplishments of the graduates who have worked hard all year to complete the certificate.

**The Natural Areas Training Academy was created by The Nature Conservancy's Florida Chapter in partnership with Valencia Community College and the University of Florida's Institute for Food and Agricultural Sciences (IFAS). Representatives from several state and county land management agencies serve on an advisory committee to ensure relevance and quality in the academy's programs. The program provides basic skills needed to effectively manage Florida's natural areas. The program consists of five workshops designed and delivered by a team of experienced public and private natural areas managers. All five workshops emphasize current conservation management practices and hands-on learning. Upon completion of the five workshops the certificate is conferred by IFAS, Center for Natural Resources.**

The academy will begin its second year in September by offering the "Managing for Diversity Across Florida's Unique Landscapes" workshop. The three-day workshop will run from September 12-14. Space is limited so enroll early. Contact Peter Colverson for more information about the Natural Areas Training Academy at (407) 377-2978 or via email at pcolverson@tnc.org.

*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.*

**Saving Our Scrub**  
Editor: Dawn Zattau

Submit articles and photographs to:  
Dawn Zattau  
U.S. Fish and Wildlife Service  
6620 Southpoint Dr. S., Ste. 310  
Jacksonville, Florida 32216  
904-232-2580, ext. 107  
Fax: 904-232-2404  
E-mail: dawn\_zattau@fws.gov

Deadline for next issue:  
July 13, 2001

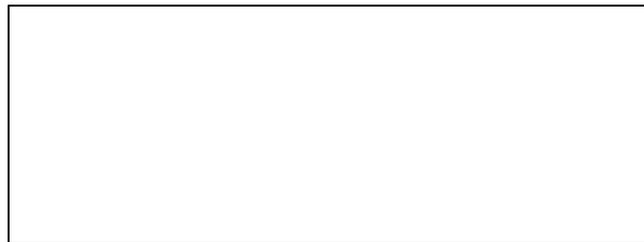
Website:  
<http://northflorida.fws.gov>

Photo by W.T. "Tom" Helfrich



Florida scrub-jay near Deltona

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](mailto: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!



Address Correction Requested

U.S. Fish and Wildlife Service  
Dawn Zattau  
6620 Southpoint Dr. S., Ste. 310  
Jacksonville, FL 32216

