



2013 Annual Report



Audubon FLORIDA

Photo: Stephen Kintner

Florida Scrub-Jays and Jay Watch

Volunteers, site managers, interested agencies, and professional biologists: thanks to you, Florida Scrub-Jays continue to benefit from your efforts through the Jay Watch program, as detailed in this 2013 annual report.

Why Scrub-Jays?



The Florida Scrub-Jay is our state's only endemic bird species, found nowhere else in the world. It was listed as federally Threatened by the U.S. Fish and Wildlife Service (USFWS) under the Endangered Species Act in 1987, largely due to loss of its scrub and scrubby-flatwoods habitat and decades of fire suppression that allowed the scrub to become overgrown and unsuitable for Scrub-Jays. While roller-chopping of too-tall oak scrub can open bare sand patches needed by the jays for predator detection and for caching acorns, fire removes ground cover and some of the rarer scrub plants require fire to set seed and reproduce.

What can you do to help Scrub-Jays?

Be an ambassador with your friends and family and teach tolerance for controlled burns at both urban and rural parks and preserves throughout the state!

Learn to identify some of the plants that characterize scrub habitat throughout the Florida peninsula. Over time you will become more attuned to the plant diversity and structure that indicate habitat quality. Ask yourself "How do scrub plant diversity and the spacing of bare sand patches relate to the number of jay families and their breeding success this year?"

Build your skills by observing Scrub-Jays during the cooler months of the year in addition to the summer survey period. Observing behavior helps us learn about their annual life cycles and provides clues that help assign birds to the same or different family groups during surveys.

Take time to refresh your skills in a Jay Watch training session or attend a training in a different location. Invite your family and friends to attend with you! If you are a seasoned volunteer, consider attending an advanced training session in 2014.

Volunteer on habitat restoration projects through Jay Watch or the Ridge Rangers (see page 6 for an example).

Thank you Jay Watch volunteers and site managers for all you do to help Florida's only endemic bird species!

Marianne Korosy, Ph.D.
Jay Watch Coordinator
Audubon Florida
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Thank you, Jay Watchers,
for giving your time and effort
to make our needs known to
site managers through the data
you collect on those hot
summer mornings!

2013 Volunteer Participation

Audubon Florida assumed statewide coordination of the Jay Watch program in 2012 and we are working hard to raise funds from a variety of donors to ensure the program remains with Audubon for many years to come. The success of the Jay Watch program, and the program's contributions to recovery of Florida Scrub-Jay populations statewide, depends upon dedicated volunteer citizen scientists which have grown in number considerably since 2002 when The Nature Conservancy and Archbold Biological Station began the program with 55 volunteers surveying 11 properties in Polk and Highlands counties. In 2013, 258 volunteers invested 2,044 hours sharpening their skills in onsite trainings and performing field surveys across the state. We are working to extend the reach of Jay Watch each year so:

*Talk to your friends and family and invite them to a 2014
training or survey - help us grow the number of Jay Watch citizen scientists!*

Jay Watch volunteer appreciation event, Bok Tower, 2013. Photo: Steffanie Munguia.



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Jay Watch Trainings—2012 and 2013



Jay Watch training at Lyonia Preserve, Volusia County.

In 2012, Audubon hit the ground running, and with help from FWC and Archbold staff, set up five Jay Watch trainings that were attended by 103 participants. Trainings were held in Marion, Volusia, Martin, Polk, and Highlands counties. In 2013, two additional training sessions were held—in Manatee and Sarasota counties and a total of 119 citizen scientists participated in these seven trainings - a 15% increase over 2012.

We also added a pilot advanced training session in Highlands County led by Jay Watch Science Advisor Dr. Reed Bowman, and co-taught by Craig Faulhaber, FWC, and Cheryl Millett, TNC. The advanced training was designed to increase knowledge of Scrub-Jay behavior traits useful in distinguishing group membership where multiple groups interact along shared territory boundaries. Thanks goes to Chris Becker, DEP District 4 Biologist, for hosting the advanced training at Lake June-in-Winter Preserve State Park. In 2014, Jay Watch training locations may be extended to a new location. Stay tuned for details!

A big thanks goes to Jay Watch partners who hosted and helped teach onsite Jay Watch trainings: Manatee County Natural Resources Department, DEP Office of Greenways and Trails, Volusia County, DEP-Florida Park Service, St. Johns River WMD, Sarasota County Natural Resources Department, Lake Wales National Wildlife Refuge, and the Florida Fish and Wildlife Conservation Commission.



Jay Watch training at the Cross Florida Greenway, Marion County



Deb Comeau, Manatee County Audubon Jay Watch volunteer, records survey data at Duette Preserve



Volunteers training at Duette Preserve, Manatee County.
Photo courtesy of Manatee County Natural Resources Department



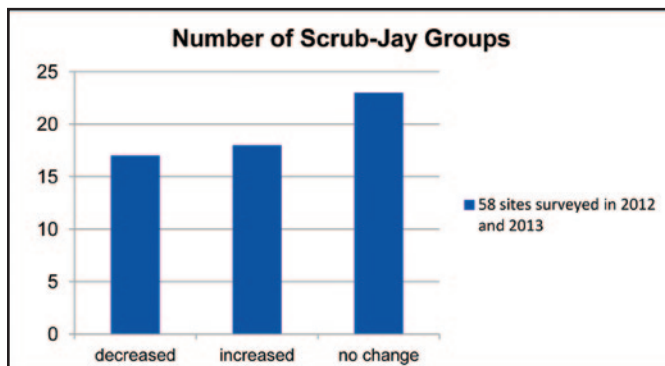
A Quick Look at Scrub-Jay Population Trends

Plotting Scrub-Jay population data over time provides useful information on both short and long term trends that can be applied to management strategies and research on the life histories of Jays. Trends in the number of Scrub-Jay family groups may vary considerably from site to site reflecting changes in land management such as frequency and extent of prescribed burns or roller-chopping, interannual weather patterns that affect onset of nesting (phenology) and food availability for adult Jays and their offspring, and changes in surrounding, offsite land uses.

Despite a modest two-year increase in Florida Scrub-Jays at Jay Watch sites, Florida's only endemic bird species continues to show a long term statewide decline.

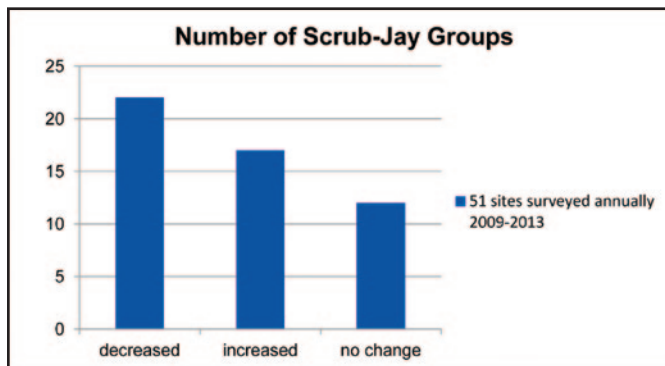
Trends in Number of Scrub-Jay groups

Of the 69 sites reporting data in 2013, this was the first year that zero Scrub-Jays were observed at three sites: Fish-eating Creek Wildlife Management Area in Glades County, Cedar Key Scrub Preserve State Park in Levy County, and North Schewe Preserve in Sarasota County.



At sites surveyed for Scrub-Jays in both 2012 and 2013, 17 sites reported a decrease in the number of groups from 2012 to 2013, 18 sites reported an increase, and 23 sites showed no change in number of jay groups from 2012 to 2013.

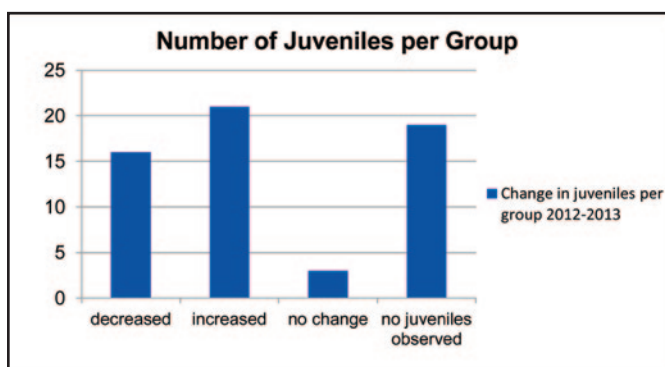
For sites surveyed annually from 2009 through 2013, 13 sites showed a decrease in number of Scrub-Jay groups, 11 sites showed an increase, and 10 sites showed no change over this 5-year survey period.



So despite apparent increases in number of Jay groups over the most recent, two-year timeframe, there is a declining trend in number of Jay groups when a longer time period is examined—in this case, the most recent five-year period.

Number of Juveniles 2012—2013

For sites surveyed in both 2012 and 2013, 15 sites showed a decrease in number of juveniles per group, 20 sites showed an increase, 3 sites showed no change, and at 13 sites no juveniles were observed. Eleven of the 13 sites that reported no juveniles have ≤ 2 jay groups on the site. Excluding the latter 13 sites, it appears that reproductive success was higher in 2013 than in 2012 at sites with more than one group of Scrub-Jays.



Volunteers Restore Jay Habitat at Lyonia Preserve

Trends in Scrub-Jay populations on each site collected by Jay Watch volunteers inform land managers where prescribed fire and mechanical treatments are needed to reduce overgrown scrub and leave bare sand patches in which new plant growth can occur and in which Jays can cache their acorns. At urban parks like Lyonia Preserve in Volusia County, where homes and schools crowd the preserve's boundary, the opportunity to burn the scrub rarely arises. Roller-chopping swaths of scrub with tractors helps keep the low, open habitat preferred by Scrub-Jays but in some areas targeted removal of individual sand pine saplings is necessary.

Wells Fargo's Green Team Volunteers



One of Jay Watch's newest supporters, Wells Fargo, organized a group of their employees in the Orlando area to come to the rescue of sand pine "infested" scrub habitat in April 2013. Twenty members of Wells Fargo's Green Team, pictured below, put their boots on the ground for Florida Scrub-Jays and lopped off 3,509 individual sand pine saplings in a couple hours of hot, hard work at Lyonia Preserve. Why remove sand pines, you may ask? Pine trees provide perches for hawks, owls, and crows that like to make lunch of Florida Scrub-Jays and their naive young offspring. Like all pine trees, sand pines drop needle duff which covers the bare sand patches in which Jays bury their acorns making it difficult for the birds to relocate their buried cache. Pine needle duff also mulches new scrub plant growth and when taller, the pines shade out scrub oaks that need full sun to thrive. Although there is some disagreement among experts about the optimum density of pine trees within scrub habitat, sites that consistently maintain large numbers of Scrub-Jay family groups have a relatively low density of

pine trees. So – removing those 3,509 saplings at the ground in a couple hours of hard work? That investment of time by a dedicated group of Wells Fargo volunteers gave new life a chance to survive – birds and plants alike – in the urban scrub paradise that is Lyonia Preserve.

Audubon is working with additional partners and fundraising to support more of these scrub habitat restoration projects around the state.

Look forward to reading about these opportunities in upcoming Jay Watch e-newsletters in 2014!





Citizen Science, once without a meaningful definition, is now widely understood as simply “public participation in organized research”, which embraces hundreds of thousands of participants around the world. This immensity of participants and the landscapes and regions over which they live is a unique attribute of citizen participation in science. Audubon’s Christmas Bird Count has collected continent-wide data on winter bird abundance and distribution since the turn of the century – both spatial and temporal scales unachievable by traditional approaches to science. However, to achieve these

scales, citizen science has to do two things well – 1) recruit new participants, and 2) train them so their data is of the same quality as earlier participants. To recruit new volunteers, we need curious individuals motivated by a sense of responsibility towards protecting public resources... traits they share with superheroes!

How appropriate because our selfless volunteers surely fit that definition! But it is their curiosity about our world in which lies the key to success for citizen science...we have to slake that insatiable curiosity. Jay Watch’s volunteer recruitment and retention has been fantastic, with as many as 300 volunteers. We’ve grown from surveying 17 sites to over 100 sites and our training has evolved each year, providing comprehensive methodology for new volunteers and essential refreshers for our returning volunteers. The day-to-day interaction of volunteers with managers and biologists allows instant feedback to questions...in both directions. Our analyses of Jay Watch data provides information about FSJ population trends, both locally and regionally, and has been helpful in refining our methods and our training. This year, we offered our first advanced training sessions to provide solutions for more complex problems such as how to distinguish groups of unbanded birds in dense populations, knowing when to deviate from established protocols to improve data quality, and distinguishing juvenile birds from adults using behavioral cues. This training not only improves the quality of Jay Watch data, but it answers questions simmering in the minds of our best volunteers. Ultimately, Jay Watch can move from “contributory” to “collaborative” citizen science. By using on-line tools we hope to “democratize” our data so that both managers and volunteers can conduct their own analyses and provide new insights into our monitoring protocols, training, and conservation implications. We’re thrilled with the leadership Florida Audubon has provided Jay Watch and are excited about the future!

Reed Bowman, Ph.D.

Research Program Director, Avian Ecology
Archbold Biological Station

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superheroes!



FROM THE ADVISOR

Special Thanks to 2013 Jay Watch Donors

Batchelor Foundation

Disney Worldwide Conservation Fund

State Wildlife Grant awarded by the U.S. Fish & Wildlife Service
to the Florida Fish and Wildlife Conservation Commission

Wells Fargo—National Fish and Wildlife Foundation

Jay Watch Partner Organizations

Archbold Biological Station

Florida Department of Environmental Protection Florida
Division of Forestry

Florida Fish and Wildlife Conservation Commission
Indian River County

Manatee County Natural Resources Department

Palm Beach County Parks and Recreation

Polk County Environmental Lands Program

Sarasota County

Southwest Florida Water Management District

St. Johns River Water Management District

U.S. Fish & Wildlife Service

U.S. National Park Service

Volusia County

Audubon Chapters with Jay Watch participants

Citrus County Audubon

Flagler Audubon

Halifax River Audubon

Highlands County Audubon

Lake Region Audubon

Manatee Audubon

Marion County Audubon

Audubon of Martin County

Orange Audubon

Peace River Audubon

Pelican Island Audubon

Ridge Audubon

St. Lucie Audubon

Santa Fe Audubon

Sarasota Audubon

Seminole Audubon

Tampa Audubon

Venice Area Audubon

West Volusia Audubon



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How to Participate in Jay Watch

Find a training

Jay Watch surveys runs mid-June through July, with volunteer trainings held prior to the surveys in May and early June. For training information or to sign up for the Jay Watch e-newsletter, contact: Jacqui Sulek <jsulek@audubon.org>

Sign up for surveys

To join surveys or for data inquiries contact:
Marianne Korosy <mkorosy@audubon.org>

More information

Florida Fish and Wildlife Conservation Commission hosts an online Florida scrub-jay sharepoint site at <http://share2.myfwc.com/scrubjay/default.aspx>. Scrub management guidelines can be found here, plus updates on regional scrub working group meeting and upcoming activities.