



# Network Update

Spring/Summer 2012

Welcome to the 2012 spring/summer newsletter of the Southern Plains Inventory & Monitoring Network! In this edition, we will update you on the summer monitoring plans and recent reports and other things we've been up to. Something you want to hear about in particular? Give us feedback.

## Network Review

The Southern Plains Inventory and Monitoring Network (SOPN) is conducting its three-year review May 22-23 this year at Chickasaw National Recreation Area. The purpose of this operational and administrative review is to ask, "Is the network set up to succeed?" This is a good opportunity for network staff, park staff, and partners to get together and celebrate the successes to date and reflect on the improvements that could make the products of the SOPN even more useful to parks, partners, and the public. We hope you will join us at the review; please watch our web site for additional information.

## Inventory & Monitoring Moving to Natural Resource Stewardship and Science

The Intermountain Region (IMR) Inventory & Monitoring Networks are moving (administratively) to WASO Natural Resource Stewardship and Science (NRSS). For the past several months, the IMR Directorate, WASO I&M Division Chief, the IMR I&M Regional Program Manager, and the IMR I&M Network Program Managers have been discussing the advantages and disadvantages for continuing with the current administrative organization in IMR vs moving administration of the IMR I&M Program to the WASO I&M Division. The decision has since been made to move the IMR I&M Program to WASO. This decision was supported by all seven I&M Network Program Managers and the Regional Program Manager, and supported by the WASO I&M Division Chief, Steve Fancy. NPS Associate Director, NRSS Bert Frost, and John Wessels have subsequently come to an agreement for transferring program management and supervision of IMR's Inventory & Monitoring Program to WASO/NRSS. Some key components of that agreement include:

- NRSS will assume full program management, administration, and supervision of the IMR I&M Program.
- There is a commitment by IMR and NRSS that there will be no change or disruption of services and support to IMR parks that they currently receive from their I&M network.
- I&M Network staff will continue to be stationed where they are located at this time including in IMR parks, at universities, and in other federal offices.
- The new IMR I&M Program Manager, Associate Regional Director, and IMR Regional Office staff will communicate and collaborate on issues of mutual interest on a routine basis.
- IMR will transfer sufficient units of travel ceiling to NRSS to maintain its primary mission.



Join us at Chickasaw National Recreation Area for the SOPN three-year review.





# MONITORING

The following are updates on monitoring from last season, and preparations for this year. Check out new monitoring reports and resource briefs on SOPN’s website at <http://science.nature.nps.gov/im/units/sopn/reportpubs.cfm>.

## Exotic Plants

Of particular note during the 2011 season (see the new 2011 Exotic Plant Monitoring Annual Report) was the active growth and seed set of many of our most prolific exotic plants while most native plants were drought dormant. SOPN will be watching for the impacts of this competitive ability on future populations of exotics.

SOPN exotic plant monitoring should begin this year on May 21<sup>st</sup>. We are once again fortunate to have Jonathin Horsley leading the monitoring effort—his 4th season with us. We are sharing his biotech position with the Chihuahuan Desert Network, which carries out their exotic plant monitoring in the spring and fall. Johnny and his assistant will be bringing their knowledge of southern exotic plants to SOPN parks, increasing our capacity for early detection of new exotics in parks. This winter has seen the production of a list of potential exotic plant threats to SOPN parks, and Field ID Guides are being prepared to assist future monitoring. Potential threats were assessed based on exotic plants that are found in counties surrounding the parks.

## Grasslands and Fire Effects

The annual report covers two years of effort (2010-2011), but we are now on track to produce this report annually. The crew prided themselves on their “forensic botany” effort—the identification of crispy brown grasses—and conditions continued to deteriorate as the field season drew to a close. Rainfall has been better over the winter and we are hoping for lots of green vegetation for the 2012 efforts.

Our collaborator, the Southern Plains Fire Group, is busy filling the SCA crew member slots for the 2012 season. We are very pleased that Tyler Engel has been hired by the SPFG as the permanent crew leader for grassland monitoring. Tyler led the crew in 2010 and did a great job. His knowledge of the protocol, excellent leadership skills, and continuously growing knowledge of plant identification bodes well for another season of strong data collection. The monitoring schedule will be communicated to the parks as soon as the crew has been hired and training can be set.

## Landbirds

In 2011 we had a total of 1,552 point visits (the number of unique points multiplied by the number of visits) on 34 transects or grids; and we recorded a total of 12,528 individual birds (of 164 species) during our point visits. In 2012 we will be starting to explore useful ways to present landbird data in anticipation of our 5-year synthesis report in 2013.

SOPN continues to monitor landbirds in cooperation with the Sonoran and Chihuahuan Desert Networks through a cooperative agreement with Rocky Mountain Bird Observatory (RMBO). Representatives of RMBO are expected to attend our SOPN review meeting in May for an opportunity to interact with them directly.

Although raw data are currently available either through SOPN or the RMBO Avian Data Center (<http://www.rmbo.org/public/monitoring/CountsEffort.aspx>), they are undergoing a web site overhaul that should enable data to be accessed more easily and with more options for queries and generated reports. The updated site is expected to be completed by the end of the summer.

Landbird Monitoring in SOPN parks should begin in Late April and continue through June. Parks should expect that sampling will be conducted at approximately the same time as last year (Figure 1), but Ross Lock (RMBO) should contact you in advance regarding specific dates.

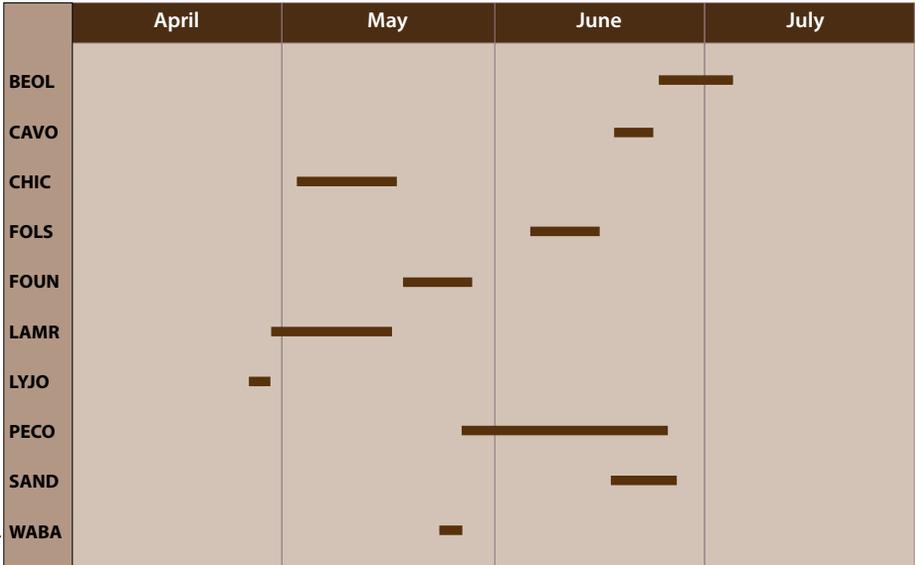


Figure 1. 2011 Landbird monitoring schedule; 2012 should be similar timing.



# PROJECTS

## Natural Resource Condition Assessments

Natural Resource Condition Assessments (NRCAs), administered by Water Resources Division, are intended to evaluate current conditions for a subset of natural resources in national park units. NRCAs also report on trends in resource condition (when possible), identify critical data gaps, and characterize a general level of confidence for study findings. The resources emphasized for a given park depend on the park's resource setting, status of resource stewardship planning and science, and availability of data and expertise to assess current conditions for a variety of potential study resources.

For the past three years, the Inventory & Monitoring Program has been the lead on these assessments for Intermountain Region Parks. We initially conducted two NRCAs for PECO and FOUN using Natural Heritage New Mexico as a cooperator. These two assessments have been completed and can be found on IRMA at (PECO and FOUN respectively):

<http://nrinfo.nps.gov/Reference.mvc/Profile?Code=2175554>  
<https://irma.nps.gov/App/Reference/Profile?Code=2175552>  
[Once you get to the report page, scroll down to "Holdings" in order to download a copy.]



NRCA field trip with subject matter experts at CAVO.

After completing these two assessments we initiated an assessment of CAVO using a different approach, where rather than using a single cooperator, SOPN took the lead and used a combination of small agreements and technical assistance requests for subject matter expertise and writing/editing services. This assessment of CAVO has also now been completed and can be found on IRMA at:

<https://irma.nps.gov/App/Reference/Profile?Code=2182563>

We believe that the latter approach was considerably better, and we recently initiated new assessments at SAND, WABA, and LIBI using the CAVO approach. LIBI is being done cooperatively with the Rocky Mountain Network in order to gain efficiencies for conducting NRCAs in parks with similar resource issues.

The future of how NRCAs will be conducted is unclear, but it is likely that IMR will take over as the lead on these assessments starting in 2013, if not sooner. SOPN will complete the ongoing assessments and any that are started by SOPN in 2012 (still under discussion). We will have updates on our progress and efforts at the upcoming SOPN meeting in May.

## Short Videos Emphasize Connection between Natural and Cultural Resources

In FY2010, we had an opportunity with some end-of-year funds (note: these were not SOPN funds) that came to the Learning Center of the American Southwest and Greater Yellowstone Science Learning Center to develop some products emphasizing the connection between natural and cultural resources. Based on the recent success in the Pacific Northwest developing some short videos, we decided to use part of these funds for a series of short videos. Because there was already work being done at WABA on an interpretive garden that focused on the connection between prairie restoration and the cultural significance of native plants, we chose this as our first topic. For the others, we decided to use the Santa Fe Trail as a common theme for a strong connection between the natural and cultural resources. Thus, we also made videos at FOLS, BEOL, FOUN, and PECO using this common theme. The resulting videos can be found on the Learning Center of the American Southwest site at: [http://www.southwestlearning.org/video/humans\\_nature](http://www.southwestlearning.org/video/humans_nature).



The Santa Fe Trail depicted in videos for FOLS, BEOL, FOUN, and PECO.



## INFORMATION TECHNOLOGY

### SOPN PARK CODES

**ALFL**

Alibates Flint Quarries  
National Monument

**BEOL**

Bent's Old Fort National  
Historic Site

**CAVO**

Capulin Volcano National  
Monument

**CHIC**

Chickasaw National  
Recreation Area

**FOLS**

Fort Larned National  
Historic Site

**FOUN**

Fort Union National  
Monument

**LAMR**

Lake Meredith National  
Recreation Area

**LYJO**

Lyndon B. Johnson National  
Historical Park

**PECO**

Pecos National Historical  
Park

**SAND**

Sand Creek Massacre  
National Historic Site

**WABA**

Washita Battlefield  
National Historic Site

### NPScape

NPScape is a landscape dynamics monitoring project that produces and delivers to parks a suite of landscape-scale data sets, maps, reports, and other products to inform resource management and planning at local, regional, and national scales (find it at <http://science.nature.nps.gov/im/monitor/npscape/index.cfm>). Changes in the composition and configuration of different land cover types within and adjacent to national parks has been shown to greatly affect biological and physical processes within those parks, such as habitat availability, animal movements, potential for invasion by exotic plants, water quality, and in-stream habitat for fish and other aquatic organisms. Information about changes and trends in landscape-scale indicators in and around parks can help park managers anticipate, plan for, and manage associated effects to park resources.

SOPN has recently used the data from NPScape to conduct viewshed analyses for natural resource condition assessments conducted at CAVO and FOUN. SOPN is currently looking into using NPScape as the primary data source for monitoring both the Landscape Dynamic and Human Demographic vital signs.

### SOPN's Updated Website

SOPN has recently made several changes to its website to include the most up-to-date information regarding network activities and make it easier to find information regarding network activities. The inventory section has been expanded to include separate pages for each category inventoried by SOPN. Links to the various national level inventories are also included. New sections added are pages about monitoring protocols and natural resource condition assessments. The individual vital signs pages have been completely redesigned to make it easier to find at which parks the vital sign is monitored. A new interface will also make it easier to obtain monitoring reports and

briefs. Finally, a master reports and publications page will serve as a one-stop shop for all major SOPN reports. You can find the newly updated SOPN website at <http://science.nature.nps.gov/im/units/sopn/index.cfm>. SOPN will continue to support the Learning Center of the American Southwest (<http://www.southwestlearning.org>) to post resource management information for a broader audience, but will also post all reports on its own website to make information easily accessible.

### Integrated Resource Management Applications (IRMA)

Previously, SOPN has stored data in three separate applications that specialized in a specific data type. Species data was made available in NPSpecies, bibliography data in NatureBib and GIS data in the NPS Data Store. The National Park Service has worked to integrate these applications under one umbrella. The Integrated Resource Management Applications, or IRMA (formerly NRInfo), is the beginning of a web-based "one stop" for resource-related data and information, including reports and other documents, data sets, maps, images, links, and more. IRMA allows users to easily search, view, download, and print information from multiple sources and systems, all from a consistent user interface. User identity is automated, eliminating the need for logins or passwords. IRMA is replacing many of the older, stand-alone information "silos" that were often difficult to use and duplicated effort and data.

Searching for data on IRMA is quite simple. The home page uses a search dialog similar to Google. Just enter the terms you want and go. You can also narrow down your searches to only include selected park units. More advanced search settings can be found by clicking "Advanced Search" to the right of the search bar. This will give you the option to narrow down results by only searching certain fields in a record, or even

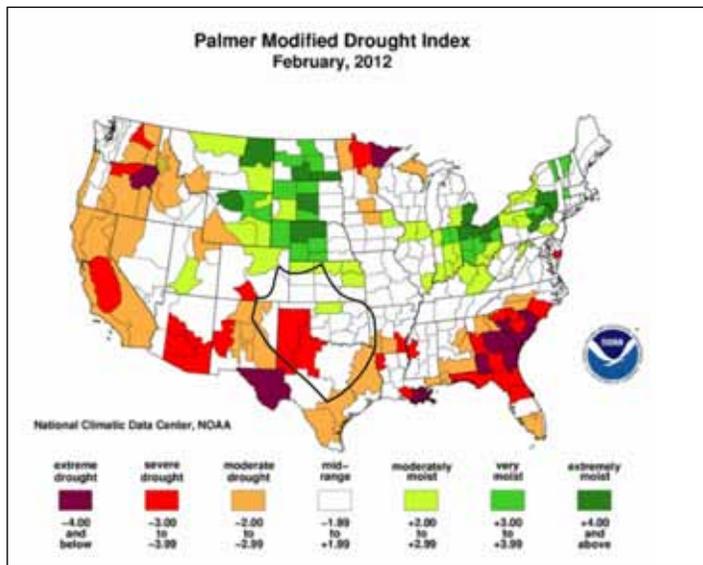
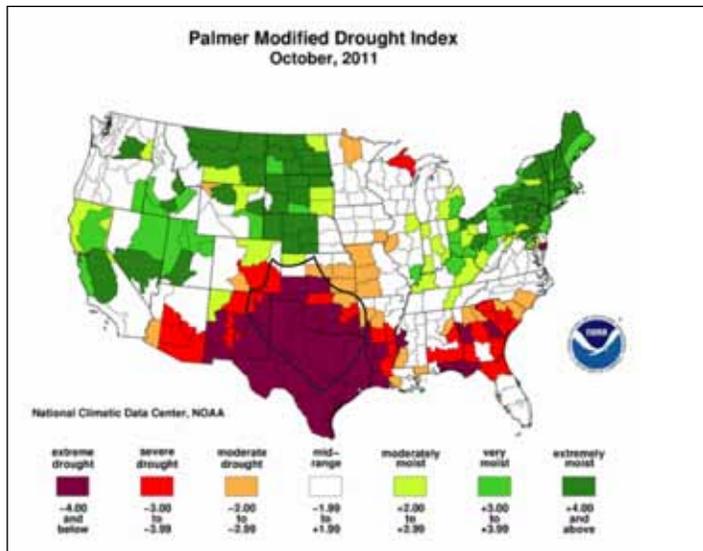


Figure 2. Palmer Drought Index maps for October 2011 (above) and February 2012 (below) showing improvement over the winter months.

by drawing on a map to define a search area. In addition, you can narrow your search to only include GIS records or species records. One more useful search feature of IRMA is to explore data based on topics. You can find quick access to information about resource topics such as air, climate and even cultural resources. All of this information can be found by going to at <http://irma.nps.gov>.

### Drought Conditions

Drought conditions have improved over the winter months in the Southern Plains (Figure 2). Eastern SOPN parks have come out of drought, and the forecast is for normal moisture for the remainder of the spring (Figure 3). Western parks are still in varying drought conditions but all have improved since last Fall. According to the Climate Prediction Center’s April 2nd report, La Niña conditions have also eased recently and are expected to reach ENSO-neutral conditions by the end of April. What happens next? Here’s hoping there will be enough rain in the Southern Plains to provide the vegetation monitoring crews some green plants to identify.

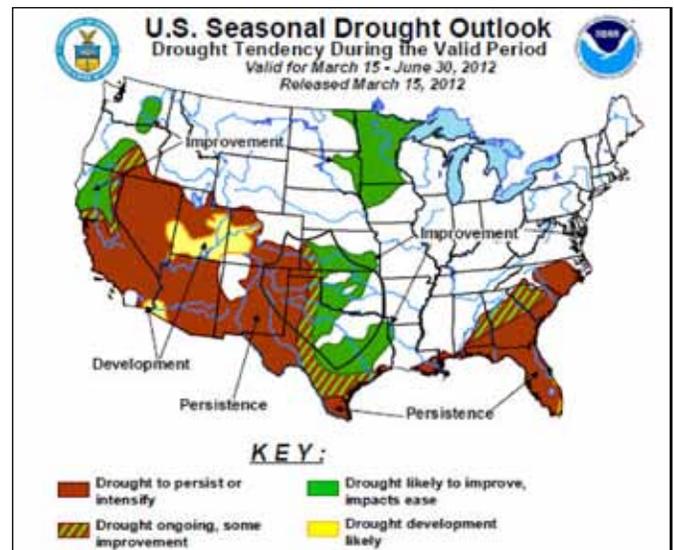


Figure 3. Drought tendency forecast for March 15-June 30, 2012.



## Southern Plains Network

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