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* Click on the header to take you to this section of the newsletter.

**Federal job announcements can be found at:**
http://jobsearch.usajobs.opm.gov/agency_search.asp

**Submit your information**

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GENERAL/CROSS AREAS

WFRP-MS Application Released

The Wildlife, Fish, and Rare Plants Management System was released earlier this month. The reply due date is November 21, 2008. Please refer to the user’s guide for instructions regarding passwords and access to the database. The regional coordinators and Netta Grant are available to assist you with other issues the guide does not cover.

Link:  WFRP-MS Letter PDF

Submitted By:  Netta Grant Scott, USFS/WO/WFW

Call for Nominations for FY 2009 WFW Continuing Education for Natural Resource Professionals

Due Date:  August 29, 2008

The call letter for the FY09 workshops in the WFW Continuing Education program was released electronically May 23. Hard copy brochures and letters were sent out to Forests and Districts in early June. If you have not received a hard copy brochure and would like one, contact Shelly Witt. PDF and TXT versions of the brochure are available at the Continuing Education website. Workshops focus on natural resource professionals, but there are a number of workshops with value to other disciplines. All are welcome. Forest Service employees can register directly in AgLearn.

www.fs.fed.us/biology/education

Contact:  Shelly Witt, switt01@fs.fed.us, 435-881-4203

Submitted By:  Shelly Witt, USFS/WO/WFW

WO-WFW Welcomes "Dry side" Assistant Director Detailer

The WO-WFW staff welcomes Kelly Russell. Kelly is Acting Assistant Director/Wildlife, Planning & TES through August. She comes to us from the Oklahoma Ranger District - Ouachita National Forest where she is the District Ranger. Her background is strongly aquatic ranging from District to Region. While in the Southern Regional office she coordinated the R8 WFW Continuing Education program - a very important job. Welcome Kelly.

Submitted By:  Shelly Witt, USFS/WO/WFW

SOIL

Western Regional Soil Survey Conference Report

The FS Soil Survey/TEUI Progress Report to the Western Regional Soil Survey Conference is now available. It is in PowerPoint format. If you have any questions, contact National Soils Program Leader, Randy Davis.
WO-WFW Welcomes BAER Program Leader Detailer

The WO-WFW staff would like to welcome Jeff TenPas. Jeff will be acting as the BAER Program Leader from June 1 to July 31, 2008. His regular job is the Regional Watershed Improvement Program Leader and Zone Soil Scientist in R5. While in the WO, Jeff can be reached at 202-205-0804. During the detail he will be working on revisions to the BAER manual and handbook, plus fires and other issues that come up. Welcome Jeff.

Submitted By: Jean Thomas, USFS/WO/WFW

National Watershed Boundary Maps to be Completed in 2008

Several federal, state and tribal agencies have been collaborating with the Natural Resources Conservation Service (NRCS) to complete a nationally consistent watershed boundary map for 6th level hydrologic units (12-digit HUCs) in the United States. This extensive effort is expected to be completed by the end of September for the contiguous U.S., Hawaii and Puerto Rico, and by December for Alaska. Many states have certified layers that can already be used. Thanks to Ted Geier, R9, and Greg Enstrom, NRIS, for their work in coordinating USFS contributions to this project.

Submitted By: Sherry Hazelhurst, USFS/WO/WFW

Climate Change and Water -- New Brochure

The new brochure, "In Brief - Climate Change; Perspectives from the Forest Service", which highlights some key concepts important to forested watersheds that are emerging through a growing body of literature. Our Watershed staffs (agency wide) helped in the development of this brochure. Read the brochure (PDF), share the information, and discuss the ideas with others. In addition to the brochure, Forest Service scientists and managers are collaborating on a report that exploring how climate change may impact water resources and associated management on national forests and grasslands. Stay tuned for that report!

Submitted By: Sherry Hazelhurst, USFS/WO/WFW
WILDLIFE

Radar Technologies - Interesting Applications for Bats, Birds and some Insects

Several universities are currently using radar technology to study birds and bats. Radar technology is being used as a tool for understanding 'aerofauna'. Excerpted from the website..."Understanding the factors affecting migratory bird and bat populations during all three phases of their life cycle – breeding, non-breeding, and migration – is critical to species conservation planning. This includes the need for information about these species' responses to natural challenges, as well as information about the impact of human activities that alter resources critical to migrants during passage and stopovers. Birds and bats are also uniquely susceptible to human use of the airspace. Wind turbines, communication and power transmission towers, and other tall structures known to cause bird and bat mortality are being erected or proposed in increasing numbers across the country. In addition, the potential for bird-aircraft collisions poses human safety threats. Management and regulatory agencies, conservation organizations, and industry currently lack this information needed to meet their missions and statutory responsibilities."

Radar Technology Website: www.fort.usgs.gov/radar/
(A few talented participants from the Radar Technology workshop designed and launched this website; hosted by USGS)

Sections of interest:

* Links to all of the USGS radar-related products (available to the public.)

* Radar workshop, with links to the contact for all workshop participants, the workshop agenda, and the workshop proceedings. www.fort.usgs.gov/Radar/Workshop.asp

* Links to additional radar biology websites providing general information about radar applications and specific information about radar research projects.
  www.fort.usgs.gov/Radar/USGSResearch.asp

* Bibliography of radar publications (specifically related to birds, as well as some for bats and insects.) www.fort.usgs.gov/Radar/Bibliography.asp

Visit the Radar Technology Website - you will probably learn something new.

Submitted By: Gail Tunberg, USFS/R3/WFW
Coming Events – Conferences & Meetings:

SOIL

Smithsonian Soil Exhibit opens soon!

The Smithsonian Soil Exhibit opens on July 19, 2008 at the Natural History Museum.
For more information visit the Smithsonian website.
Link:  http://forces.si.edu/soils/
Link:  www.mnh.si.edu/press_office/pressreleases_2008.asp

Submitted By:  Randy Davis, USFS/WO/WFW

WILDLIFE

Audubon Launches Exciting New Initiative - TogetherGreen

Application Due Date:  June 27, 2008
A major component of 'TogetherGreen' is a Conservation Leadership Program designed to support and build the capacity of current and emerging conservation leaders and provide networking opportunities and training support. This leadership program is open to conservation professionals working in non-profits, business, government, media, universities, and other organizations. Open to rising stars to mid-career professionals to seasoned volunteers. The fellowship is designed to supplement full-time jobs (plus, applicants receive a $10,000 grant for their organization to apply to a project they would complete during the program). In addition to the grant, fellows receive several professional development opportunities, including funding to attend a five-day Conservation Leadership Institute and follow up retreat. The due date has passed. However, good time to network and get ready for next year.

Applications and additional information:  www.togethergreen.org/fellows

Flier:

Submitted By:  Jina Mariani, USFS/WO/WFW
Technical Information & Publications:

**SOILS**

San Dimas and Rocky Mountain Research Station project partnership

San Dimas and the RMRS are collaborating a research project concerning Biomass/Whole Tree harvest effects on soil nutrients. Below is a presentation on the project for more information.

Link: [Biomass Soil Nutrients Research Presentation PPT 32.5 KB](#)

Submitted By: Randy Davis, USFS/WO/WFW

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**Sharing Success:**

**AIR RESOURCE**

Protecting Air Quality on the Superior National Forest

*The Superior National Forest addresses air quality concerns through a twofold approach: monitoring Forest conditions and working with other interests during the air quality regulatory process.*

By: Kris Reichenbach (*R09_Superior*)

Air pollutants have the potential to degrade forest resources in a number of ways, including visibility impairment, mercury contamination of fish, acid deposition, and direct injury to vegetation. The Superior National Forest (SNF) is addressing these concerns with a twofold approach: monitoring conditions on the Forest and participation in the air quality regulatory process.

The SNF directly monitors the effects of air pollution from sources inside and outside the Forest by measuring the chemistry of the air and precipitation, and indirectly by monitoring the health of sensitive parts of the ecosystem. Since the late 1970s, continuous monitoring of air quality and precipitation has taken place at the Fernberg station located 20 miles east of Ely, Minnesota.

Due to this long data record, the station provides invaluable information regarding trends over time as well as tracking existing conditions. Data from the Fernberg station also adds to regional and national tracking of air quality. In addition, the Forest uses mobile monitoring stations during wildfire and prescribed fire to monitor smoke levels.

Along with direct monitoring of air quality the Forest partners with other agencies and organizations on various studies regarding secondary effects of air pollutants particularly mercury deposition. One example is a continuing partnership between the Forest Service and State of Minnesota to capture and analyze fish as part of the statewide monitoring program.
A preliminary report indicates a decrease in mercury levels in approximately half of sampled lakes while levels have increased in a quarter of the lakes sampled and stayed the same in the rest since cooperative monitoring began in the 1970s.

Some work was accomplished as part of a different study, funded through the Federal Joint Fire Sciences Program, which focuses on determining if and how prescribed burning in the BWCAW affects lake chemistry and whether any associated change occurs in the amount of mercury in fish in those lakes.

In July 2005, a crew of Forest Service employees, tribal members, volunteers, and contractors captured and released loons on selected lakes across the Superior National Forest. This survey was part of a national cooperative effort led by the Biodiversity Institute to determine the amount of mercury in loons throughout North America.

Because loons primarily feed on fish, body, blood and feather samples collected from chicks and adults are tested for mercury and lead as an indication of contamination in the lakes they frequent.

Data collected during monitoring is also critical information for our participation in the air regulatory process. Two pieces of Federal legislation are the basis for SNF’s participation in the air quality regulatory process.

The first is the Clean Air Act which gives national forests with wildernesses classified as "Class I" certain legal rights such as notification of new industrial sources locating nearby and consideration of the Forest's comments on the impacts of the source by the permitting agency. These Forests have an "an affirmative responsibility" to protect the visibility and other resources affected by air quality.

For example, in 1977 Congress set the following goal in the Clean Air Act to improve visibility: "Congress hereby declares as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I Federal areas which impairment results from man-made air pollution." Congress recognized that experiencing clean, clear air was important to visitors to these areas.

The second piece of Federal legislation is the Wilderness Act, under which the Forests have the responsibility to administer their Wilderness areas to maintain their Wilderness character and natural conditions. Air pollution can degrade the natural character of wildernesses. Consideration and mitigation of the Forest Service's concerns is accomplished by working with state permitting agencies and EPA through the issuance of air emission permits for each new facility and on comprehensive air management plans.

The Forest's comments are considered by the relevant permitting agencies in setting emission limits and other conditions (such as adding pollution control equipment) in the permits and plans issued. The SNF's ability to work well with a multitude of partners including regulators, industry, consultants, interest groups, and citizens has led to innovative approaches to reducing air pollution from the local industrial base.
In addition to commenting on permits for individual facilities, the SNF is actively involved with other agencies in a holistic approach to addressing two issues of particular concern: visibility and mercury. Minnesota has recently proposed draft plans to reduce visibility (i.e. Regional Haze) and mercury impairment.

For example: Over the past two years the Forest Service has worked with its partners (National Park Service, Minnesota Pollution Control Agency, EPA, and advocacy groups) to develop a comprehensive plan to address the explosive growth of new industrial development adjacent to Minnesota Class I areas.

This effort has lead to development of a Northeast Minnesota (NE MN) Plan which is part of the draft MN State Regional Haze Plan. The NE MN Plan was developed in an effort both to streamline the new source permitting process, and to move from a source-by-source approach to a cumulative assessment approach in analyzing potential impacts to visibility.

To the best of our knowledge, Minnesota is the only state going the extra step to address new source growth in this way in its regional haze plan. Visibility in the Minnesota Class I areas is predicted to improve by 2018 due to enforcement of federal and state emission control programs.

The challenge for the future will be to manage additional growth on the Iron Range in such a way that visibility and other air quality conditions are protected.

Submitted By: Nick Schmal, USFS/R9/WFW
DC Area Kids Go Fishin’ on the Mall

When you think of the National Mall in Washington DC, you probably don’t identify it as a fishing hotspot. However, for more than 300 children on June 2, Constitution Garden Pond on the National Mall, provided their first experience at “wetting a line.”

“Youth Fishing Day on the Mall” is an annual event supported by a broad coalition of Federal and State agencies, and non-governmental organizations. During their time on the Mall, students quickly learned how to tie fishing knots, bait hooks and cast a bobber. Students also learned about aquatic ecology, boating safety and catch-and-release fishing. Woodsy Owl and Smokey Bear delighted kids of all ages, and posed for many photos – and shook many hands, or paws, or wings.

The day of fishing fun was the culmination of an educational fishing curriculum that began in the classrooms of the DC and Maryland schools. The kids participating in Fishing Day learned about local aquatic species and aquatic habitats before their visit to the National Mall.

Steve Phillips, assistant Fish Program Leader in the Washington Office explained, “This year, I think the kids caught more pond algae than sunfish, but everyone had a great time learning together. Although it may have been the kids’ first fishing experience, we hope it won’t be their last!” Phillips went on to thank the many WO staffs who made the day a success. “We couldn’t have done this without the enthusiastic assistance of the Engineering, Conservation Education, Lands, Wilderness and Ecosystem Management Coordination staffs.”

Fishing Day kicked off a weeklong celebration of National Fishing and Boating Week. During June, Ranger Districts and Forests and Grasslands across the Forest Service, host a wide variety of fishing day events. In most cases, learning about aquatic ecology is as much a focus of the event as is catching fish.

The Annual D.C. National Fishing and Boating Week Youth Fishing Event is a collaborative effort between the U.S. Fish and Wildlife Service, The D.C. Dept. of the Environment, the National Oceanographic and Atmospheric Administration, the National Park Service, the Bureau of Land Management, the Bureau of Reclamation, the U.S. Army Corps of Engineers, the U.S. Forest Service, the Recreational Fishing and Boating Foundation, Trout Unlimited and C.A.S.T. for Kids.

Submitted By: David Schmid, USFS/WO/WFW
Stewardship Week
Shawnee National Forest participates in the 19th annual Illinois Resource Center environmental education program. By: Lisa Roper (R09_Shawnee)

This year was the 19th annual environmental educational program hosted by the University of Illinois, in partnership with the Shawnee National Forest, at the University's Resource Center in Pope County, Illinois.

This four-day program has over 35 activity stations set up around their facility grounds that children, kindergarten through 6th grade, can attend to learn about the environment. The stations' topics included environmental education games, the weather, caves (a temporary mock cave was built on the site), nature hikes, fire prevention and much more. This year the program hosted 3,188 students, bringing the 19-year total to over 55,000 students who have experienced this hands-on environmental education adventure. For the first time this year a "second generation" child attended Stewardship Week. What a great feeling this must have been for event coordinator, University of Illinois Forest Resource Center Interim Director, Diane Murphy.

The Stewardship Week program has won regional awards in the past and continues to maintain excellent educational standards. The Forest is only one of the several agencies and partners from southern Illinois who donate time, money or both to this worthwhile program that reaches so many children each year. Besides the hosting Forest Resource Center and the Forest, other agencies and organizations that participate each year include:

- Trees Forever
- University of Illinois,
- Illinois Department of Natural Resources,
- National Wild Turkey Federation
- University of Illinois Extension Office
- USDA - Natural Resources Conservation Service
- Southern 7 Health Department
- Rocky Mountain Elk Foundation
- Southeastern Illinois Electric Coop
- Southern Illinois Electric Coop
- USDI - Fish and Wildlife Service - Crab Orchard National Wildlife Refuge
- Illinois State Geological Survey
- Illinois Department of Public Health
- Illinois Department of Agriculture
- Shawnee Resource Conservation and Development Area
- 12 local Soil and Water Conservation Districts
- Quail Unlimited River Oaks Chapter
- National Wild Turkey Federation Shawnee Hills Longbeards Chapter
- Pope County Sportsman Club
- WSIL - Channel 3 TV and WSPD - Channel 6 TV
- Southeastern Illinois Electric Coop
- USDA - National Resources Conservation Service
- Quail Unlimited River Oaks Chapter
- National Wild Turkey Federation Shawnee Hills Longbeards Chapter
- Pope County Sportsman Club
- WSIL - Channel 3 TV and WSPD - Channel 6 TV
- Southern Illinois Electric Coop

This is definitely a program that connects children to the land and teaches them about protecting ecosystems across boundaries.

Submitted By: Nick Schmal, USFS/R9/WFW
Go Native!
A handout developed by a VISTA volunteer on the Monongahela pulls together information on native plants to encourage their use in gardens
By: Kathleen Goodrich-Arling (R09_Monongahela)

Most gardeners prize color of flower and foliage, its form and fragrance, and sometimes the edible nature of plants. Many rely upon their local garden center or super center to provide them with an array of plants to add to their gardens. Others glean plants from a friend's garden.

Unfortunately these choices often result in the addition of non-native plants to home gardens simply because people are unaware of the inherent beauty of native plants. A surprising number of plant and flower lovers also do not realize that many of the plants they prize were developed from native plants.

As part of a much larger project to increase awareness of native plants and their value to the world around us, Wendy Campbell, a VISTA volunteer working on the Greenbrier Ranger District of the Monongahela National Forest, put together a simple but effective one sheet handout listing some choices for those gardeners who would like to reduce their reliance on hybrids and non-natives.

Titled "Go Native!" the handout lists "selected native plants for showiness, edibles, and pollinators from elevations above 2400 feet in the Allegheny Mountains of West Virginia and Virginia." Adapted, with permission, from lists provided by the West Virginia Heritage Program of the WV DNR, the handout lists 30 wildflowers and herbs, 9 shrubs, 19 trees, 8 sedges, 3 grasses, and 8 edibles for humans that also feed or host pollinators. The next version will include bloom times to increase the usefulness of the information.

Not intended to take the place of any of the excellent field guides that are available, this information sheet can serve as a guide for someone wishing to incorporate native plants into their own gardens. The WV Heritage Program web site contains links to WV plant nurseries that stock many of these native plants since neither the Forest Service nor the WV DNR wish to encourage collection of native plants from public lands.

Once plants mature at the two native plant gardens currently being developed in 2008 on the Monongahela, visitors will be able to easily see for themselves just how beautiful many of the native mountain plants are.

Submitted By: Nick Schmal, USFS/R9/WFW
Vacancies/Employment Opportunities:

Federal job announcements can be found at: http://jobsearch.usajobs.opm.gov/agency_search.asp

WFW Newsletter Contact Information:
Disclaimer – Non Discrimination Statement

WFW Newsletter is a monthly newsletter without a clever name and is provided by the National Forest System Watershed-Fish-Wildlife-Air-Rare Plants staff (including Soils and Meteorology) of the USDA Forest Service. Contributions are welcome and should be submitted to Netta Grant at agrant@fs.fed.us or your favorite Program Leader no later than the 20th of each month. We reserve the right to edit contributions for clarity and brevity. Emphasis on brevity. Links to detailed URLs or documents are great – include them in your information contribution. If photos are included in your submission please provide alternative text with each photo. Alternative text should not repeat captions but describe the scene shown in the photo.

If brevity and clarity are a struggle for you, we recommend the “Plain & Simple! Document Writing” workshop instructed by Dr. Jud Monroe.

Vacancy Positions listed are for outreach purposes only and are not full announcements. Interested individuals should contact the units referenced or consult the USAJOBS website.

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