The Weather Vane

The Newsletter of the Heartland Inventory and Monitoring Network

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News in Brief

Aquatic Monitoring

Invertebrate sampling was completed at OZAR, and is half-way complete at BUFF. Sample processing and identification continues. Draft reports are also in progress.

Bird Monitoring

Reports have been drafted for HEHO, HOME, and PIPE and will be out to the parks for review soon.

Data Management

Our main priority has been completion of park biological inventory reports. The reports evaluate biological inventories for each park and organize the results from many independent sources. Mike Williams, inventory specialist and former NPS employee, wrote the reports.

Fire Ecology

Sherry wishes to meet with park staff responsible for fire operations either in person or by phone during January and February. Please schedule time to visit with her about fire plans for the upcoming year. Maria Gaetani now has full time status, and Mary Short will join the fire effects monitoring crew until the end of fire season.

Fish Community Monitoring

Staff continue analyzing data and writing reports for fish monitoring in small stream parks. A poster on fish and habitat data in OZAR springs will be presented at the Water Resources Division meeting in February.

Invasive Plant Monitoring

Invasive plant monitoring in six network parks was featured in Park Science (see More of the Web).

Plant Community Monitoring

Staff are preparing final reports for AGFO and SCBL and preparing to transfer all monitoring data to Northern Great Plains Network. Data analysis began for HOME and PIPE. Karola is assisting on deer surveys currently .

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Patience, Persistence, and the Long-Term: Thinking in Decades about Invasive Plants

As designed, ecological monitoring focuses on long-term results. Ecologists hold long-term results as one of the virtues of these programs. As we patiently observe the system, we begin to understand the patterns and fluctuations of ecological indicators - bird community composition, plant biomass, water quality. All the while, we measure conditions with an eye towards diagnosing the changing health of resources that the National Park Service protects. Furthermore, monitoring may even provide insight to issues that we could not have anticipated.

Garlic mustard

But there are critics that ask, "Do the benefits justify the costs?". . . . "Can we focus monitoring sufficiently, given the complexity of biological systems?" . . . . "Can scientific data really strengthen the immediate and diverse decisions that managers must make?" . . . ."Does nature even provide reliable, readily measured indicators of ecosystem conditions?" . . . . "Do the data ever make it out of reports and into park operations?"

At some time, we have all probably landed on one side or the other with our answers to these questions. To address the value of monitoring, reflect on the network's invasive exotic plant monitoring. Hard to believe, but the network — park and network staff working together — has almost a decade of experience in cooperatively addressing invasive plant monitoring and management issues.

Chemical treatment in forest

Planning for invasive plant inventories began in 2000 and was completed in 2004 – about the same time that network staff began informally developing monitoring methods for these plants. During a meeting held to prioritize Vital Signs (indicators of conditions) in 2003, park managers formally recognized invasive plants as a common monitoring need across most parks. This sparked development of a monitoring protocol, which we tested, beginning in 2004, and published in 2007. We just completed the first round of field work, initiated in 2006, this year for the 13 parks slated for invasive plant monitoring. Running along a similar historical timeline, park managers within the network cooperated in submitting a proposal for an exotic plant management team in 2000. In 2006, under the leadership of the Midwest Regional Office and Effigy Mounds National Monument, the parks submitted an updated proposal for the team. This proposal was awarded an increase in base funding to serve all 15 network parks beginning in fiscal year 2010. These are the fruits of patience and persistence over a decade — a permanent source of reliable invasive plant information for parks and a permanent source of funding to control these plants.

So what about the virtues of long-term ecological monitoring? In this case, patience and persistence are clearly warranted, given the potential value of our hard-won EPMT with which we will gather information and apply sound management strategies. This benefit trumps any lingering philosophical concerns. Patience and persistence

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Heartland Network

Communication Interpretation Education

The Heartland Inventory and Monitoring Network has been a leader in the I&M program by making communication an important part of its activities. It started with the development of a Communication Plan in 2006. The plan can be found on the HTLN website.

Several of the suggested products from the Communication Plan product matrix were completed and distributed to parks. The matrix was available for interpreters to use as a reference, giving product ideas, instructions and costs that could be placed directly into a Project Management Information System request for funding.

During the development of the plan, the HTLN began publishing its bimonthly newsletter, The Weather Vane. Additionally, we began making resource briefs that gave a summary of results from monitoring reports for each park.

In 2007, HTLN invited a representative from the interpretation division of each park to attend the annual meeting. To this point, only parks' Technical Committee representatives, the Board of Directors, and other invited staff or partners received invitations to the meeting. Tom Richter, Midwest Region Chief of Interpretation and Education, led the effort to get park interpreters involved. The effort was well received and led to the invitation being extended again in 2008.

During this development of a communication program, a small group of interpreters and Technical Committee representatives have guided the information and education activities of the HTLN. They have met by telephone conference as often as monthly to determine best areas in which the HTLN should focus.

Once again the HTLN and its Communication Working Group have started planning a large meeting for the network Technical Committee, Board of Directors, scientists and park interpreters. We are considering showcasing examples, where monitoring results have been used either in management decisions and/or in interpretive media.

The Annual Meeting became a biennial meeting after 2008. We still hope to have strong park representation at the meeting in early August, 2010 in Springfield, Missouri. We hope to see many of you there.

— Sherry Middlemis-Brown

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across a decade have set the stage so that we can all play a role in determining if the dynamic between monitoring and management can improve resource management. If we press on, patiently and persistently, for one more decade — maybe less — we'll know the answer. *— Craig Young*

An EPMT treks to a treatment site, wearing full safety equipment for the job.

Exotic Plant Management Program update

After a decade of effort, the HTLN has established an Exotic Plant Management Team (EPMT). Craig Young leads the development of a work plan for 2010. The recipe for success includes working directly with parks to complete their priority projects, and remaining flexible to meet park needs. The EPMT intends to support and expand rather than replace existing park-based invasive plant monitoring and treatment.

Craig recognized that the EPMT could not hire a team or otherwise commit itself to long-term financial expenditures until a long-range plan was completed. Therefore, he has gone to the HTLN parks and asked how each would benefit from assistance in treating invasive exotic plants during 2010.

The EPMT will generally seek to locate assets within parks and under park direction. The EPMT assets, including staff and equipment, may also be shared among parks to create an economy of scale. The parks have worked with Craig to finalize the 2010 work plan to begin EPMT support this spring. The Board of Directors must approve the plan before implementation.

The EPMT has embarked on assisting parks with National Environmental Policy Act compliance as well. The EPMT may assist parks with completing compliance to cover more complicated projects than those for 2010 in the future. The main thing is that the EPMT will have boots on the ground in 2010.

— Sherry Middlemis-Brown

Park Acronyms

ARPO= *Arkansas Post National Memorial*
BUFF = *Buffalo National River*
CUVA = *Cuyahoga Valley National Park*
EFMO = *Effigy Mounds National Monument*
GWCA = *Geo. Washington Carver Nat. Mon.*
HEHO = *Herbert Hoover Nat. Historic Site*
HOME= *Homestead Nat. Mon. of America*
HOCU = *Hopewell Culture Nat. Historical Park*
HOSP = *Hot Springs National Park*
LIBO = *Lincoln Boyhood National Memorial*
OZAR = *Ozark National Scenic Riverways*
PERI = *Pea Ridge National Military Park*
PIPE = *Pipestone National Monument*
TAPR = *Tallgrass Prairie National Preserve*
WICR = *Wilson's Creek National Battlefield*

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Rare Plant Monitoring

The 2009 Missouri bladderpod and western prairie fringed orchid reports are nearing completion.

White-tailed Deer Monitoring

The 2010 surveying season at ARPO, PERI, and WICR began January 4th and continues through February 12th.

More on the Web

Park Science: http://www.nature.nps.gov/ParkScience/

HTLN information and education website: http://science.nature.nps.gov/im/units/htln/education.cfm

HTLN invasive exotic species website: http://science.nature.nps.gov/im/units/htln/innp.cfm