100 Years of Greatness and Counting

By Ted Gostomski, Network Science Writer

I t’s finally here! The Centennial we have all been waiting for is finally upon us. If you’re not excited about it, you may need to loosen the band on your flat-hat. This is a HUGE event and perhaps a tremendous opportunity to strengthen the relevance of our work to the daily visitors and to long-term management of our Network parks.

You may be wondering, How can we do that? There are still the constant issues of too much work and not enough time or money. And you would be partially correct; there is too much work, and there is never enough time or money. But in this historic year, there is no better time to consider the question, what can we do to set the foundation for the next 100 years? Should the Network hone in our monitoring to answer questions that have risen from the data we have already collected? Can we improve the way the Network and parks work together, or with other people and organizations, so that we achieve more while bringing greater attention to the parks themselves?

“I think the Network’s data will become increasingly valuable,” says Great Lakes Network program manager Bill Route. “While we need to remain somewhat flexible to answer pressing questions [or respond to] “brush fire” issues, it is important to monitor core resources for the long-term in order to assess change over the next 100 years.”

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Connecting people with the science done in the parks is also an important goal. We have built a nice relationship with a local high school in Bayfield, Wisconsin, engaging students in independent research based on questions related to our contaminants monitoring program. In addition, our contaminants monitoring program will now be almost entirely accomplished through citizen science, as people learn how to collect and identify dragonfly larvae that are used to monitor mercury in the environment. (For more information, see Citizen Scientists Study Mercury in Dragonfly Larvae on the National Park Service’s “Explore Nature” web page.)

“I believe delivery of information to the public is critical,” says Bill Route. “We need to find ways to engage people in a variety of ways, using scientific journal publications to meet our mandate of documenting sound science results, short briefs for busy managers and public officials, electronic publications for virtual visitors and an increasingly Google-oriented society, and ‘story maps’ for the many individuals who like to explore [places] using spatial media. In short, we need to get better at quick, short communications with a nice photo or two, and to post them where they can be easily found.”

The foundation is there for us to take the next step. Are we motivated to do so? Are we doing enough to fulfill the National Park Service Centennial goal of connecting with and creating the next generation of park visitors, supporters, and advocates?

New Publications

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Our “2016 Report” will make its debut this spring. Sixteen stories about natural resource monitoring and management in all nine parks show the diversity of our work.

“Our intent for the report is to highlight our partnership with the nine parks, which is focused on understanding the complexities of natural systems and how key resources change through time,” says Network Program Manager Bill Route. “Park and Network scientists have unique perspectives. Park staff are in the best position to focus on park-specific issues, while Network staff can look more broadly at patterns and trends that put the parks in a broader regional context. This report will give readers a glimpse of both viewpoints.”

2016 Field Schedule

Contaminants monitoring using bald eagle nestlings is complete. We are moving into a new phase of monitoring mercury using larval dragonflies. That work is being done by a mix of partners and park staff. The water quality crew is also testing for contaminants in surface water samples that will be collected from APS, PRG, SLBE, and VOYA. The vegetation monitoring team returns to Voyageurs to finish revisiting plots established there in 2008. Bat monitoring using remote recorders begins at all nine parks.

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AMPH—Amphibians. Collection of data recordings will be accomplished by park staff and volunteers. *Monitoring is being conducted using a U.S. Geological Survey protocol.

BATS—Data cards will be collected by park and Network staff. *Monitoring being conducted under a park protocol.

BC—Bioaccumulative Contaminants (dragonflies and fish). Samples will be collected by Randy Lehr and Northland College students (APS, GPJRO, SRO, M III, SACHN, Jay Marburger and others (INDU, SLBE), volunteers (PRQ), and Jaime LeDuc and others (VOYA).

DIAT—Diatoms. Collected during water quality sampling at SRO, and by St. Croix Watersheds Research Station staff with assistance from Jaime LeDuc at VOYA.

LB—Landbirds. Conducted by park staff and others.

WQ—Water Quality. Conducted by Josh Dickey (INDU), Mark Romaniski and two biological technicians (SRO), Leah Kanuulainen (PRQ), Rick Damstraand Michelle Prosser (SACN), Chris Otto (SLBE), and Jaime LeDuc (VOYA). *Includes sampling for surface water contaminants. **Includes sampling for mercury in water from a subset of lakes.

Staff Insider

Jessica Kirschbaum, Botanist

Jess joined the Network in 2007 as a seasonal employee, essentially doing the job she has now held as a permanent employee since 2009. While working towards a Bachelor’s degree in Environmental Science at Northland College, Jess became interested in plants and started working as a field botanist for private and government agencies. She continued doing botany work, as well as work in environmental education, before earning her M.S. in Biology with an emphasis in Botany at the University of Minnesota-Duluth. As half of the foundation of the vegetation monitoring program, her organization, attention to detail, and of course her skills as a botanist are indispensable.
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