



Great Plains Gazette

Newsletter of the Northern Great Plains Network

Issue 5 - Spring 2016

Coordinator's corner

We're looking forward to field season and getting closer to being fully staffed. Please find a short newsletter with the most important information found on [page 2](#) – what is work is being done this year at the parks and when you should expect to see folks. Of course, parks will still get individual emails with reminders of the actual dates, but we thought it might help everyone see the big picture of what is happening when.

Angela Jarding was selected and promoted to Data Manager position in early March. We will refill the Assistant Data Manager position as soon as possible. Darren Thornbrugh will be joining us as Aquatic Ecologist in mid-June.

We have six returning seasonals this year which should make everything run more smoothly. The paperwork is in and we are looking forward to hiring four career seasonal veg crew members by the end of September.

We're excited to work with Dan Licht and the Wyoming Natural Diversity Database (WYNDD) to continue bat monitoring this year. Water quality monitoring for DETO, KNRI and THRO started in March, working with USGS Water Science Center's in Wyoming and North Dakota. Bird Conservancy of the Rockies (formerly RMBO) will again be surveying birds in all 13 parks.

Stop by and see us when you are in Rapid City. We're looking forward to another year of monitoring with you in the parks!

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Monitoring Schedule

2016 Field Schedule

When you can expect to see us and our partners at your park!

	Bats	Birds	EPMT	Forest Structure/Riparian Vegetation	Plant Community	Legacy	Water
AGFO	Jun	May-Jul	Aug	Aug (Riparian)	Jun	Jul-Aug (Macros)	
BADL	Jun	May-Jul	Jun-Sep		Jun		
DETO		May-Jul	Sep		Jul		Mar-Nov
FOLA	Jul	May-Jul	Aug		Jun		
FOUS	Jul	May-Jul	Jun-Sep		Jul-Aug		
JECA	Jul	May-Jul	Jul	Sep-Oct (Forest)	Jul		
KNRI	Jul	May-Jul	Jul		Jul		Mar-Nov
MNRR	Jul-Aug	May-Jul					
MORU	Jun	May-Jul	Jul	Sep-Oct (Forest)	Jul		
NIOB	Jul	May-Jul					
SCBL	Jul	May-Jul	Sep		May	Jul (Prairie Dogs)	
THRO	Jul-Aug	May-Jul	Jun-Sep		Jul-Aug		Mar-Nov
WICA	Jul	May-Jul	Aug	Sep (Riparian)	Jun-Jul		



Spring rains turn BADL green

Landbirds and Water Resources

Landbirds

New songbird observed at parks



Blue-gray gnatcatcher

© Terry Sohl

The 2015 field season was an exciting one for bird monitoring at our network parks. The blue-gray gnatcatcher was observed in both Badlands and Wind Cave National Park for the very first time. It was recorded for the first time at Devils Tower in 2014, although it was not observed there in 2015. The blue-gray gnatcatcher's breeding range has been shifting northward since the early twentieth century, and it is now breeding in South Dakota and the Black Hills. Research shows that its expansion northward is linked to warmer January temperatures.

All of the Network's bird data are located at the [Avian Data Center](#). If you would like to look at 2013, 2014, or 2015 bird data for your park, please contact [Angela Jarding](#) and she can walk you through the steps to access your data.

Water Quality Monitoring

Real-time Water Quality Monitoring now available for DETO, KNRI, and THRO

The Northern Great Plains Network partnered with the USGS Wyoming-Montana Water Science Center and North Dakota Water Science Center to install and operate continuous monitoring stations on the Belle Fourche River (DETO), Knife River (KNRI) and Little Missouri River (THRO). The stations will provide continuous data on gauge height, temperature, specific conductance, pH, and dissolved oxygen during the 2016 ice-free season.

Continuous data from all 2016 water quality monitoring sites can be accessed from the following links:

[Devils Tower NM - Belle Fourche River](#)

[Knife River Indian Villages NHS - Knife River](#)

[Theodore Roosevelt NP - Little Missouri River](#)



Bison enjoying a dip in the Little Missouri River

Spotlight on Safety

Wilderness First Aid

Staff trains to prepare for the unexpected



GIS Tech Adam Weaver to the rescue!

The staff of the Northern Great Plains Network that work in the field have something in common—they are all certified in CPR and Wilderness First Aid. The 2-day Wilderness First Aid courses teach students how to care for people who become ill or injured in locations far from definitive care. These valuable skills can be put to use when we are 5 miles into the backcountry of Badlands National Park or when we are more than a 1 hour drive from the nearest hospital.

Our field crew supervisors, Isabel Ashton and Chris Davis, are trained Wilderness First Responders. Wilderness First Responders take a 10-day class designed to provide people with the tools to make critical medical and evacuation decisions in remote locations.

The Wilderness First Responder course has been offered as a partnership between the Outdoor Education Program at Black Hills State University and the National Outdoor Leadership School. Wilderness First Aid courses have been provided by the Red Cross. We believe this investment in safety and our employees has contributed to our excellent safety record.



Veg Crew Lead Chris Davis assesses a "victim"

New Faces at the Network

Celebrating Advancements and Welcoming Seasonals

Angela Jarding



We are pleased to announce that Angela Jarding has been hired as our new NGPN Data Manager. She started with the Network in 2012 as a GIS/Data Management seasonal. Angela worked on many natural resource projects within the Network developing GIS database systems, ArcPad GPS field collection forms, and mapping projects.

In 2014, Angela became the Assistant Data Manager and broadened her knowledge of database systems including Microsoft Access and SQL Server. Angela has a B.S. in Wildlife and Fisheries Sciences and a M.S. in Wildlife Sciences from South Dakota State University. Her past experience includes working at Badlands NP, Wind Cave NP, and the U.S. Forest Service.

Angela is excited to continue her working relationships with Network parks, and is eager to develop GIS visualization applications of Network data to enhance public knowledge about the Network.

Angela, her husband, and two young girls live on a ranch and enjoy managing their land to sustain big game populations through habitat improvement projects and symbiotic cattle grazing. When she finds spare time, she likes to bike the Mickelson trail, hunt, or explore nature with her children. Please join us in welcoming Angela to her new position!

The Seasonal Shuffle

This season we are fortunate enough to have many returning faces. Among the returning seasonal Vegetation Technicians are:

Joseph Ladd
Logan LaFleur
Lee Mickelson
Stephanie Rockwood
Will Vogel

We are excited to have Daina Jackson, who has spent 3 seasons with the network as a Vegetation Technician, return to us in a new capacity. This summer Daina will be performing the role of our seasonal GIS Technician!

Among the familiar faces, we are also excited to have two new seasonal Vegetation Technicians on the crew. Join us in welcoming:



Cheers to a safe and productive monitoring season!

Staff Updates (Continued)

Darren Thornbrugh

Darren Thornbrugh was hired as our new Northern Great Plains Network Aquatic Ecologist and is scheduled to begin in early June.

Darren is an aquatic ecologist and has been working in freshwater ecology since 1999. He has a B.S. in Geography, B.A. in Environmental Studies from the University of Nebraska – Lincoln, M.S. in Biology from Kansas State University and a Ph.D. in Fisheries and Wildlife from Michigan State University.

Darren's current post-doctoral work has incorporated principles of watershed ecology, landscape ecology, aquatic ecology, hydrology, and water quality in a systems approach to develop an index of watershed integrity for the conterminous US. The national Index of Watershed Integrity was developed as a first approximation as an applied index following a conceptual model of watershed integrity highlighting the multiple human-related pressures humanity exerts on watersheds in the US.

Darren's past experience includes 5 years spent working on long term monitoring and research projects with 15 federally listed threatened or endangered fish species and the river and streams they inhabit. He has spent many years working in aquatic bioassessment and community ecology, assessing relationships between community structure of fish and macroinvertebrate assemblages, aquatic ecosystems and multiple human-related pressures in the landscape.

Darren is very excited to join the NGPN team and help to further develop water quality and other aquatic components of the inventory and monitoring efforts for the NGPN.

Darren, his wife and son will be moving from Corvallis, OR to Rapid City, SD in early June. He is an avid fisherman and his family and he enjoy exploring the outdoors via hiking, biking, camping, backpacking, and paddle sports.



Missouri National Recreational River



Acronyms

AGFO	Agate Fossil Beds National Monument
BADL	Badlands National Park
DETO	Devils Tower National Monument
FOLA	Fort Laramie National Historic Site
FOUS	Fort Union Trading Post National Historic Site
JECA	Jewel Cave National Monument
KNRI	Knife River Indian Villages National Historic Site
MORU	Mount Rushmore National Memorial
MNRR	Missouri National Recreational River
EPMT	Exotic Plant Management Team
NGPN	Northern Great Plains Network
NIOB	Niobrara National Scenic River
SCBL	Scotts Bluff National Monument
THRO	Theodore Roosevelt National Park
USGS	U.S. Geological Survey
WICA	Wind Cave National Park



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New NGPN Documents

Available for download on our [website!](#)

Resource Briefs

[Landbird Monitoring Results 2015](#)

Agate Fossil Beds NM
Badlands NP
Devils Tower NM
Fort Laramie NHS
Fort Union Trading Post NHS
Jewel Cave NM
Knife River Indian Villages NHS
Missouri NRR
Mount Rushmore NMEM
Niobrara NSR
Scotts Bluff NM
Theodore Roosevelt NP
Wind Cave NP

Reports

[Plant Community Monitoring Summary Reports 2011-2015](#)

Agate Fossil Beds NM
Devils Tower NM
Fort Laramie NHS
Scotts Bluff NM

[Fort Union Trading Post NHS: Geologic Resources Inventory Report 2015](#)

[Knife River Indian Villages NHS: Geologic Resources Inventory Report 2015](#)

[Air quality related values \(AQRVs\) for Northern Great Plains Network \(NGPN\) parks: Effects from ozone; visibility reducing particles; and atmospheric deposition of acids, nutrients and toxics 2016](#)

2016

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