

SUMMER 2015



The Legacy Letter

Dinner and Engaging Conversation

Has it been a while since someone took you into the great outdoors and invited you to dinner for the enjoyment of your conversation? If not, lucky you! But if so, then this may be just the invitation you have been waiting for. Join in the fun at **Nebraska Natural Legacy Conference 2015**. It will be a birthday celebration as the Nebraska Natural Legacy Project turns 10 years old!

The conference will take place at the **Holiday Inn Convention Center in Kearney, NE on September 29–30**. The first day will be jam-packed with updates on projects, research, and wildlife happenings that impact our at-risk species and their habitats. The second day, participants will continue to learn about Nebraska's natural wonders and then explore Audubon's Rowe Sanctuary and sites in the Rainwater Basin to see the inspiring results of long-standing conservation efforts in central Nebraska.

Presenters include:

Audubon Nebraska
Department of Agronomy and Horticulture, University of Nebraska–Lincoln
Ducks Unlimited
Lauritzen Gardens
Nebraska Breeding Bird Atlas
Nebraska Cooperative Fish & Wildlife Research Unit
Nebraska Game and Parks Commission
Oak Woodland Alliance
Quail Forever
Rainwater Basin Joint Venture
Rocky Mountain Bird Observatory
Saline Wetlands Conservation Partnership
Sandhills Task Force
School of Natural Resources, University of Nebraska–Lincoln
South Dakota State University
The Nature Conservancy
The Xerces Society
University of Colorado
U.S. Fish & Wildlife Service
Wayne State College

Naomi Edelson, Senior Director of State and Federal Wildlife Partnerships with the National Wildlife Federation, will deliver the keynote presentation. Thanks to the Nebraska Environmental Trust and U.S. Fish and Wildlife Service, registration is FREE for this event! Happy Birthday Natural Legacy! Visit: shopoutdoornebraska.ne.gov/events to register.

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- Registration for Natural Legacy Conference 2015 is Open!
- Mussel Propagation
- Outreach and Education in the Pine Ridge

Building Mussels

State Fisheries Biologists are working on building their mussels! That's right — not the kind you grow in the gym but rather in the fish hatchery. The objective of this project is to develop the techniques and equipment necessary to propagate and culture the plain pocketbook (*Lampsilis cardium*) freshwater mussel, a Tier I at-risk species in Nebraska.

Mussels require a host fish species as part of their natural life cycle. Gravid female mussels from the Elkhorn River were collected, so that the mussel workgroup could attempt to inoculate largemouth bass with glochidia (the microscopic larval stage of mussels). Two methods were used: 1) placing fish in a small volume of water and introducing the glochidia, and 2) direct inoculation of fish by using a pipette to apply glochidia to gills.

The fish were then placed into the cage system in ponds at Calamus, North Platte, and Valentine hatcheries. Fish were also held indoors. As a result of these efforts, juvenile mussels are in fact now being reared. These mussels are continually fed using peristaltic pumps. They have grown in size from barely visible to the naked eye to 1.5–2.0 mm in less than 2 months. Way to grow those mussels!



A gravid female plain pocketbook mussel at North Platte hatchery displays to attract fish. Notice how the eye spot in display mimics a fish to lure in a reproductive host fish. The host fish will rupture the marsupial gills holding the glochidia which can then attach to the gills of the fish.

Outdoor Adventures in the Pine Ridge



Photo by Katy Kuhnel

Learning by birding: students enjoy observing nature and gaining techniques for birding at the 2015 Outdoor Discovery Program in Scottsbluff, NE.

In western Nebraska, Coordinating Wildlife Biologist Katy Kuhnel has been active in reaching out to youth interested in learning more about science and nature. Local high school students with aptitude in natural resources requested her assistance as they prepared for an Envirothon competition. She also assisted with the Chadron Conservation Festival and the Scottsbluff Outdoor Discovery Program. Each program involved an activity centered on birding or a bird behavior program.

Kuhnel also led a birding hike for the Nebraska Leadership in Energy and Environmental Design (LEED) program that was held at Fort Robinson State Park this summer. There, she gave a presentation about her role in the Nebraska Natural Legacy Project. And, Chadron third graders were happy to have her take them on a birding field trip at Chadron State Park!

For more information about the *Nebraska Natural Legacy Project*, contact:

Kristal.stoner@nebraska.gov or
Melissa.panella@nebraska.gov

