



U.S. Fish & Wildlife Service

Nevada Fish and Wildlife Office

Conserving the Biological Diversity of the Great Basin, Eastern Sierra & Mojave Desert

Spring/Summer
2008

Exploring Nature – Spring 2008



Students from Lincoln Park and Catherine Dunne Elementary Schools explore nature at McCarran Ranch on Earth Day.

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Over 250 fourth and fifth graders from Catherine Dunn and Lincoln Park Elementary Schools joined the Service’s Nevada Fish and Wildlife Office (Service) and The Nature Conservancy (TNC) at McCarran Ranch on Earth Day to learn about their environment. This is the first year TNC and the Service have partnered with Washoe County Schools and the event surpassed organizers expectations.

McCarran Ranch, a 300-acre cooperative partnership restoration project situated on the Truckee River just ten miles east of Reno, proved to be the perfect location for children to participate in hands-on activities teaching them about wetlands, native plants, and river function.

“Looking for new opportunities and expanding existing opportunities to get people back into nature is a high priority for us,” said Bob Williams, Field

Supervisor for the Service. “Since this event was so successful we are looking to expand this partnership with TNC and Washoe County Schools in the future.”

Students rotated among three different activities, spending ten minutes at each. They teamed up with a partner and watched as water flowed through straight and curved tubes (simulating rivers) learning about the importance of river meander and function. They threw hula-hoops over vegetation and learned which plants were native to the area, why natives are important, and were awarded a prize for the most diversity within their “ecosystem”. In addition, they were able feel some of the local wetland inhabitants as they put their hands into tubs and watched as pollywogs and small carp swam though their fingers. They were able to view aquatic invertebrates close-up, using

Exploring Nature at McCarran Ranch (continued)

magnifying glasses and got to witness first hand mayflies hatching.

In addition to squeals of delight, comments such as: “the fish is so neat, it splashed my friend’s eye,” and “it’s awesome” were heard throughout the day. One of the children stood looking quietly at the river from the trail and thoughtfully said “it looks just like a picture I saw in a magazine once.”

All the activities of the day were documented in the students personal work book/field guides that were created especially for the event by Lisa Gilbertson from TNC.

“It is our hope that we will be able to inspire a conservation ethic in these young people,” said Williams. “We also hope the experience they had at McCarran Ranch will encourage them to get back outside in the future.”

(1) Chad Mellison, Service Biologist, explains the importance of wetlands to students; (2) students get a magnified view of invertebrates; (3) students look at wetland inhabitants; (4) Mikey Hazelwood, TNC explains the importance of river function and meanders; (5) Students throw hula-hoops out into vegetation to discover diversity of different plants; and (6) Steve Caicco, Service Botanist and Patti Bakker, TNC, help students identify plant diversity within their “ecosystem”



Earth Day Festivities-2008

Crowds gathered around the Service’s booth this year at an Earth Day celebration held on April 20, 2008, at Idlewild Park in Reno. More than 5,000 people attended the celebration aimed at providing information to help conserve the environment.

In addition to displays and information on such things as how to go green and recycling, visitors enjoyed a number of earth-friendly arts and crafts. The Service booth featured the 2008

Nevada Junior Duck Stamp drawings and a display on Nevada’s native frog and toad species. Service staff were on hand to answer questions and provide information about Service activities in Nevada.



(Above) Todd Gillmore and Rebecca Palush distribute information to visitors (Below) visitors pick up information at Service’s Earth Day display.



Exploring Nature at Stillwater National Wildlife Refuge



Approximately 60 second grade students from West End Elementary School in Fallon, Nevada, spent the day at Stillwater National Wildlife Refuge. They participated in various activities to learn about the Refuge as well as their environment.

After a tour of the Refuge, students



participated in a game of wildlife jeopardy; fluttered around as butterflies to find their habitat; checked off items in nature on a walk to a new observation platform; learned to use binoculars and identified water fowl; and were able to net some pollywogs. The day culminated with a demonstration of a rocket net used to capture birds and a picnic lunch.



(1) Sue Lackey, Administrative Officer leads “wildlife jeopardy”; (2) Rebecca Palush, Administrative Assistant teaches students about the importance of habitat; (3) Carl Lunderstadt, Deputy Refuge Manager demonstrates the use of binoculars; and (4) Dave Potter, Biologist, provides an opportunity to touch wetland inhabitants.

Ash Meadows Naucorid Responds To Restoration

The Ash Meadows naucorid (*Ambrysus amargosus*) is a small, aquatic insect that has persisted on the edge of extinction for at least a half a century. The naucorid occurs in small thermal springs within the Point of Rocks area of the Service’s Ash Meadows National Wildlife Refuge in southeastern Nevada. It is a thermal endemic, restricted to a narrow range of environments; specifically, gravel substrates within warm flowing water. The development of commercial agriculture during the 20th century caused significant changes to its habitat. The establishment of the Refuge in 1983 secured essential habitat for the naucorid, allowing habitat restoration efforts to proceed. Several restoration and reintroduction efforts had succeeded over the years; however, recent numbers of individuals in the springs have been low or declining.

Service Biologist, Shawn Goodchild and Refuge staff, focused on a small-scale restoration action (approximately 12 square meters) to improve the

naucorid’s habitat where gradual change due to shading by overgrown vegetation and declines in water availability had occurred. Their restoration efforts included: removing sections of moist-soil grasses, such as *Cladium*, to allow sunlight; replacing unsuitable substrate with hand picked, one-inch gravel within the streamlets; and using larger gravel to create habitat pockets in steep stream gradients, which had previously not been used by the naucorid.

This intricate restoration effort doubled the amount of naucorid habitat. The naucorid’s response was dramatic; their numbers essentially quadrupled. More work, however, is needed to improve and maintain the naucorid’s habitat including the restoration and connection of additional springs. The restoration so far is a promising success story and will move the recovery efforts for the Ash Meadows naucorid forward in the future.



Ash Meadows naucorid (*Ambrysus amargosus*)

Gary Scoppettone Receives National Recognition As Endangered Species Recovery Champion



Gary Scoppettone assists moving threatened Railroad Valley springfish back to their historic habitat.

Gary Scoppettone, one of 18 individuals recognized throughout the nation, received this year's Endangered Species Recovery Champion Award from the U. S. Fish and Wildlife Service. Recovery Champions are selected from Service employees and partners who are making significant contributions to the recovery of native endangered or threatened species.

Gary is the foremost expert on Nevada's native fishes and their habitat requirements. He is one of only a handful of contemporary scientists studying the status, distribution, life history, and habitat use of native fishes in the Great Basin and Mojave Desert and the threats to their existence. His efforts have provided a critical link between science and on-the-ground management actions, providing a science-based approach to the Service's various aquatic species recovery programs.

Gary is a longtime facilitator of cooperation among public and private

partners to achieve recovery of listed fishes. He has a deep-rooted connection to the Nevada landscape and the rural communities that depend on its lands and water because of his agricultural background, including his family's working hay ranch in central Nevada. His unique combination of academic expertise and knowledge of the working landscape is yet one more of his many outstanding attributes that has facilitated cooperative partnerships in the conservation and recovery of Nevada's fish species.

Gary is the Section Chief for U. S. Geological Survey's Western Fisheries Research Center and has been with the Research Center in Reno since 1977. Assisted by his team of laboratory and field staff, he has conducted research to address the management needs of Nevada's 26 listed native fishes, producing over 40 journal articles and publications in the process.

Service Assists With Blackbrush Seed Collection



Leilani Takano assists in collecting blackbrush seeds.

Blackbrush (*Coleogyne ramosissima*), typically produces a large quantities of seed every seven to ten years, and this year happens to be one of those years. By producing a lot of seed at one time, some of it survives predation by ant and rodents. In an effort to conserve this keystone species and vegetation community, Interagency partners and volunteers have been collecting seed from this rare event for use in future restoration efforts.

Blackbrush, a dense shrub growing up to two feet tall, is a major component of a transitional vegetation community between lower elevation creosote scrub and the higher elevation sagebrush pinion/juniper steppe in the Mojave

Desert. These shrubs also form the transition between the Mojave and the Great Basin Deserts, and in Nevada this vegetation community provides important winter forage for desert bighorn sheep.

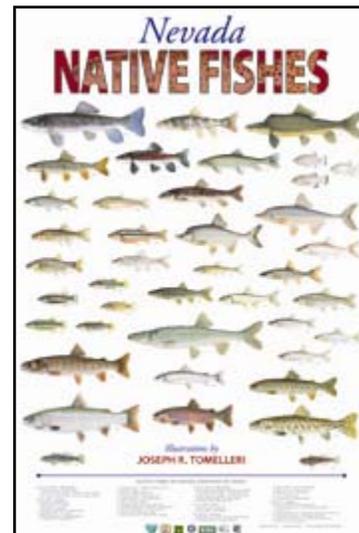
Over the last years, frequent wildfire and invasion by non-native plants has taken a toll on the blackbrush. Resource managers are hoping that by collecting some of this year's banner crop of seed, they will be able to mimic the natural dispersal process, use these seeds to revegetate burned areas, and also use them in restoration of areas within the Desert National Wildlife Refuge in southern Nevada.

Native Nevada Fishes Poster Now Available

This spring, a new poster featuring 41 of Nevada's native fish species rolled off the presses. The poster features the artwork of Joseph Tomelleri whose exquisite attention to detail and unparalleled mastery of color, textures and hues, has earned him world-wide recognition as a pre-eminent illustrator.

In addition to the colorful artwork, the poster contains biological facts about the species. It was developed in partnership with the Service, U. S.

Geological Survey, Bureau of Land Management, Forest Service, Department of Conservation and Natural Resources, Nevada Natural Heritage Program, Nevada Department of Wildlife, and the Nevada Biodiversity Initiative. Copies of the poster will be available at special events. Individuals can however, obtain copies of the poster by contacting the Service at the address on the back of this newsletter.



Partners Team-Up to Restore Dixie Valley Tui Chub

The Fallon Naval Air Station, Nevada Department of Wildlife, U. S. Geological Survey, Nevada Natural Heritage Program, Stillwater National Wildlife Refuge, and the Service have teamed up to restore three ponds in the Dixie Valley about 40 miles northeast of Fallon. Efforts are underway as part of Fallon Naval Air Station's 2006 Integrated Natural Resources Management Plan.

Restoration of the ponds began in April 2008, with the majority of the work being focused on Turley Pond. Turley Pond is the only pond in the area to currently have a population of Dixie

Valley tui chub. By removing cattails to create open water and removing non-native species such as bullfrogs and mosquitofish, it is hoped the tui chub will be able to successfully reproduce. Once the tui chub numbers increase they will be moved to Casey and Dempsey ponds which they were known to previously inhabit. Additional restoration will include noxious weed removal (e.g., tamarisk, Russian knapweed, and Russian olive), bank erosion repairs, pond excavation, removal of dominant emergent vegetation, and fencing repairs.



Restoration work at Turley Pond.

Golden Eagle Soars Again

When a call came for help from Dave Bardine, Manager of the Mt. Wilson Guest Ranch northeast of Pioche, in Lincoln County, Nevada, last summer, Service employees came to the rescue. Merry Maxwell, Pahranaagat National Wildlife Refuge Manager, and Service Biologists Christiana Manville, and Fred Edwards, teamed up with Alicia Styles of Bureau of Land Management's Caliente Field Station to transport an injured

golden eagle to the North Las Vegas Animal Hospital.

After a month recuperating at the Wild Wing bird rehabilitation center in Las Vegas, the mended eagle was ready for release. Most of those involved in his rescue and rehabilitation were present for his release near Mt. Wilson and watched as the eagle, again soared over the landscape.



Merry Maxwell, Refuge Manager and Dave Bardine, Ranch Manager, release golden eagle.



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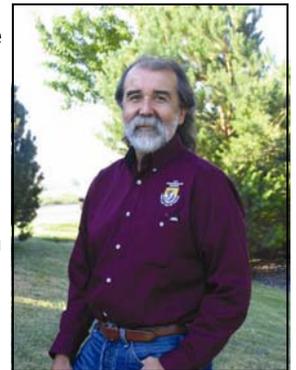
We're on the web!

<http://www.fws.gov/nevada>

A Message From The Field Supervisor

Finding opportunities to connect people with nature is a high priority for the Fish and Wildlife Service. This spring, we were fortunate in establishing a new partnership with Washoe County Schools and The Nature Conservancy to get students in northern Nevada out to explore their local environment. We are hoping to expand on these new partnerships and will be looking for additional opportunities throughout Nevada to connect people with nature.

One of our partners, Gary Scoppettone, USGS, has been recognized nationally for his work in conserving Nevada's native fish species. I also want to acknowledge him for the contributions he has made to increase our understanding of native fish and their habitats. His work with us developing this scientific knowledge helps us make informed management decisions regarding Nevada's native fishes.



One of our highlights this spring was the completion of the first Nevada native fishes poster. After a number of years in the making, this beautiful poster featuring drawings by Joseph Tomelleri and facts about the native fish in Nevada is now available for distribution. I would like to thank our partners, the U. S. Geological Survey, Bureau of Land Management, Forest Service, and Nevada's Department of Conservation and Natural Resources, Natural Heritage Program, and Nevada Department of Wildlife for their contributions to this effort.

I hope you enjoy the photos and find reading about our activities and accomplishments this spring. I welcome your comments on our newsletter and invite you to send suggestions for future editions to Jeannie Stafford, Public Affairs Officer, at the address above.

Sincerely,

Robert D. Williams