



### Conservation Message of Hackberry Flat:

- understanding that sportsmen & women pay for wildlife conservation
- understanding the values of wetlands & wetland restoration
- understanding the wet and dry management techniques of the wetland
- understanding the wildlife dependent on this wetland and how they use the habitats
- understanding the historical events associated with Hackberry Flat



### Staff at Hackberry Flat

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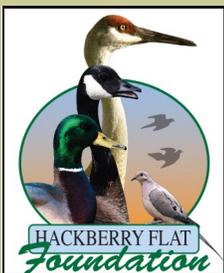


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# Hackberry Flat Annual Report, July 2012—June 2013

Frederick, Oklahoma



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July, 2013

## Hackberry Flat Wetland—Adaptations to the Dry Period!

Just like the plants and animals that call Hackberry Flat “home”, the staff at Hackberry Flat has to adapt to the current dry period that our area is experiencing. From management activities to classroom topics, the approach has been different but productive. In the classroom we have managed to keep 7 Southern Plains crayfish alive for over a year. We set up several aquariums with wetland soil, added water and crayfish, and then watched. The amount of soil moved and soil configurations created by the crayfish is staggering. The crayfish have become the ambassadors of our classrooms and other events. Adults and children alike were amazed at how these wetland “critters” were able to manipulate so much soil. On Hackberry, any rain we’ve had that provided even a tiny pool of water in the basin has suddenly come to life with crayfish, crayfish snakes and plankton;



Crayfish Aquarium. On left, lines are drawn with dry erase markers & dated to show how the configuration of mud has changed from day to day. On right is a bird’s eye view of the same aquarium with the industrious crayfish posed on top. If you look closely, you can see the tracks of the crayfish.

proof that the crayfish are in their underground burrows surviving and waiting for the next significant rainfall event. Though waterbirds are not visiting Hackberry due to lack of water, grassland birds are still finding plenty of insects to feed their young. Scissor-tailed flycatchers, barn swallows, grasshopper sparrows, and common nighthawks to name a few, are having reproductive success. Texas horned lizards are observed on a regular basis. A pair of barn owls raised a clutch of 8 which suggests there are plenty of rodents in the area. While we try to patiently deal with the drought, wetland organisms demonstrate their ability to survive the climatic extremes of the

prairie while underground.

## Enhancements at the Center

Thanks to the **Hackberry Flat Foundation**, the nature trail below the Center now has interpretive signs leading visitors to the bird blind across the boardwalk. The design and layout for each sign was created by Cliff Casey, a graphic design artist. Each sign has its own unique message and is interactive. For example, one sign provides the recipe for Hackberry Flat Gumbo which presents “ingredients” needed to create a food source for wetland-dependent wildlife. Visitors are asked to match the name of an ingredient to a picture. By turning a wheel in the center, another sign shows what crayfish, Hackberry’s VIPs (Very Important Prey), are doing during wet and dry periods at Hackberry Flat. A series of flip boards on a third sign explains what happens in a just

a square foot area of mud in a wetland. Another sign is a mock-up of a **website** “home page” providing a list of amenities, lodging opportunities, etc. at Hackberry for traveling (migrating) waterfowl and shorebirds. Along the boardwalk, tracks of some common wildlife can be followed and may perhaps even tell a story.

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**Wildlife Management on Hackberry Flat July, 2012– June, 2013**

**Kelvin Schoonover**

Last year we were talking about the weather and here we go again. The coffee shop talk is all about the weather and whether or not it will ever rain again. Well, we have had several inches of rain throughout the year as small showers that offered ground moisture but very little run off. With the lack of run off the reservoir is severely low with minimal water (less than a couple of surface acres) and no water available for wetland units.

This is the first year since Hackberry Flat was constructed that there was no water available for flooding any wetland units.

We kicked off dove season with a good crowd of dove hunters. There was a decent number of doves and lots of young people with parents, grandparents, friends and family that made the opening day of dove season a success. Deer season was also a success with several nice bucks and does taken during archery and primitive deer season on Hackberry Flat. Waterfowl season was a different story. There was no wetland habitat available over the fall/



View of Reservoir. June, 2013



Richard Tomlinson with Bobcat Skid-Steer he helped purchase through a donation.

winter migration resulting in low waterfowl numbers and no waterfowl hunters. However, the drought that has engulfed us has also allowed us to get into some areas that are infested with saltcedar and remove them. Look out saltcedars here we come! The Southwest Region was fortunate to receive a donation from a Tillman County resident and with matching funds from a wildlife grant purchased a Bobcat Skid-Steer with a Marshal tree saw. This machine is a tree's worst nightmare. The machine was designed mainly to remove Easter Redcedar, however it works well on unwanted saltcedars, mesquite, etc.



Prescribed burn. March, 2013

I was contacted by a research biologist from Alberta, Canada working with Ferruginous Hawks. He had captured 7 hawks at Calgary, Canada and attached GPS tracking devices on them to record migration patterns. I was con-

tacted when one of the hawks stopped transmitting. I was given last known coordinates of the signal and was able to locate the transmitter, but not the hawk. We made several attempts to locate the hawk near Davidson, OK. The GPS transmitter recorded daily flights of where the hawk had been for about 2 weeks. We were able to assist by providing information about habitat description and prey items to determine what might have attracted the hawk to the area.

A prescribed burn was conducted at Hackberry Flat near the Hackberry Flat cemetery. The native grass field was burned to enhance vegetative growth while reducing litter. We had help from other ODWC personnel in the region as well as Andy Bennett from Tillman County NRCS.

Spring came and new growth was slow due to moisture. However, we did plant several acres of sunflower, milo, and millet food plots with limited success.

The forecast for July is for several nice rains and cools day which helps us to believe that just around the corner will be a drought buster rain. Rains that will cause the coffee shop talk to change to "when is it going to stop raining".

**Quail Study on Hackberry Flat**

The OK Dept. of Wildlife Conservation is participating in a 3-year study with the Rolling Plains Quail Research Ranch to identify types and occurrences of infectious diseases and parasites in western populations of bobwhite quail. Biological samples are taken from 10 wildlife management areas in western Oklahoma, including Hackberry Flat WMA. Samples are analyzed for assorted diseases including quail fever, pox and bronchitis, avian influenza virus and West Nile virus. Other associated studies will look at quail parasites and bacterial and fungal pathogens. Each WMA is sampled twice a year for 3 years. In 2011, 168 quail from these WMAs were banded and released. Of the birds trapped in Oklahoma, 40% were adults. Results from 2012 will be available in the near future.



Ferruginous Hawk with transmitter backpack

University of Alberta, Calgary Canada

**Maintenance and Upkeep**

- Lawn around Center was treated with herbicide
- 1 AC Unit repaired
- Outside bathrooms cleaned once a week; Center cleaned once a month
- Lawn mowed as needed
- Birdfeeders and water features were maintained for wildlife
- Interpretive signs and nature trail were maintained

## School Children discover that wetlands aren't always wet!

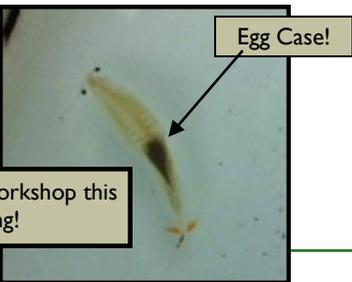


Randy Stotler

Though the number of schools visiting Hackberry Flat was down this year, the students that visited Hackberry Flat had a great time. We focused on prairie wildlife, particularly mammals. We captured rodents, learned about mammal eyes, ears and color of fur. We also talked about the crayfish in their burrows protected from drought. Following are the schools that visited Hackberry Flat::

- Tipton Schools 8th—12th grade (18)
- Frederick Middle School TAG Program students (28)
- Frederick High School Biology AP class (10)
- Hobart Schools 1st grade (75+)

One of the fairy shrimp netted during a teacher workshop this summer. It is actually a little over 1" long!



### Teacher Workshops

In February, we hosted a **Mammal Workshop** for educators provided by the **Oklahoma Conservation Commission**. Educators, park naturalists and refuge volunteers attended the workshop. They studied skins, skulls, teeth and tracks. It was a huge hit with the participants. In June, we hosted for the third year the **SENSEational Science Teachers Workshop**. We added a new dimension to their understanding of wetlands by focusing on the dry cycle and the importance of this supposedly "bust" period. Each educator took home a bag of dry hackberry wetland mud to create their own wetland in a jar. There had been just enough rain just prior to the workshop to create a small pool in the wetland and when netting we discovered large fairy shrimp, graham's crayfish snake, clam shrimp and crayfish. These teacher workshops have helped bring students to Hackberry Flat as word gets around about the classrooms offered.

## Saturday Morning Programs

Game Warden Ted Hasty offered 2 Hunter Education Classes both of which successfully produced many new certified hunters! In December we opened the Center on 2 different Saturdays with an Outdoor Gift Shop for shoppers who needed ideas for the outdoors people on their list. On the second Saturday, Santa Claus made a visit to the Center and a local resident, Roxie Hill and her family provided refreshments and a children's Christmas ornament.

**Scheduled Programs**  
July 2012—June 2013

- August**—Hunter Ed Class
- October**—Hunter Ed Class
- December**—Christmas Open House with Santa
- January**—Raptor Program
- April**—Hackberry Flat Day

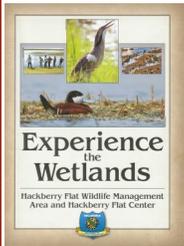
In January we offered a Raptor Program which was a big hit! Though cold and windy we observed 7 different species of raptors including hawks, owls and falcons.



Terry McKee

## Center Enhancements (Con't. from page 1)

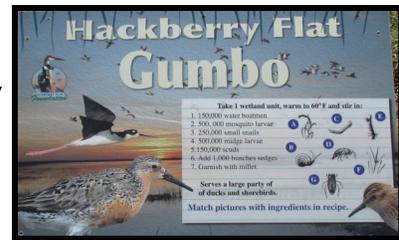
The Hackberry Flat 12-page booklet was revised and provides even more information for visitors and educators than the original booklet. It includes historical information, specific information on hunting and bird watching at Hackberry Flat, an excellent map and driving tour, how to schedule field trips and a bird checklist. It is also available to download from the Hackberry Flat webpages. Teresa Ezersky, a student pursuing a Masters of Education in Parks & Recreation Management at Southwestern OSU, designed a series of informational "slides" for the new



digital display. The display can be viewed through a window on the back patio at the Center. This project helped Ms. Ezersky successfully acquire her Masters degree. The digital display is updated frequently to reflect new schedule of events and timely species spotlights. Our teaching collection has also been enhanced with the addition of bat study skins donated by University of Central Oklahoma. The bats represent the more common species found in western Oklahoma.



On the digital display, this slide depicts the "Bird of the Week." Other slides include upcoming events, info about Hackberry Flat & the Center, ODWC, and other related items.



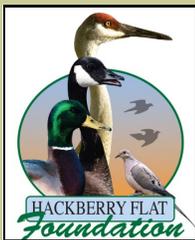
One of the new signs on Nature Trail

**Birds Seen on  
Hackberry Flat Day**

- Great Blue Heron
- Northern Harrier
- Red-tailed Hawk
- Swainson's Hawk
- American Kestrel
- Northern Bobwhite
- Snowy Plover
- Killdeer
- Greater Yellowlegs
- Lesser Yellowlegs
- Upland Sandpiper
- Semipalmated Sandpiper
- Western Sandpiper
- Least Sandpiper
- Baird's Sandpiper
- Pectoral Sandpiper
- Wilson's Phalarope
- Long-billed Dowitcher
- Mourning Dove
- Black-chinned Hummingbird
- Scissor-tailed Flycatcher
- Barn Swallow
- Horned Lark
- House Wren
- Northern Mockingbird
- American Pipit
- Blue Grosbeak
- Dickcissel
- Clay-colored Sparrow
- Vesper Sparrow
- Lark Bunting
- Lark Sparrow
- Savannah Sparrow
- Cassin's Sparrow
- Grasshopper Sparrow
- White-crowned Sparrow
- Red-winged Blackbird
- Yellow-headed Blackbird
- Eastern Meadowlark
- Western Meadowlark
- Common Grackle
- Brown-headed Cowbird
- American Goldfinch

**Butterflies Seen on  
Hackberry Flat Day**

- Dainty Sulphur
- Common Checkered Skipper
- Pearl Crescent
- Mourning Cloak
- Red Admiral
- American Lady
- Painted Lady
- Checkered White
- Hackberry Emperor
- Monarch
- Pipeline Swallowtail



**Hackberry Flat Day—April 20, 2013**

Over 200 visitors attended Hackberry Flat Day which was one of those spring days in southwest Oklahoma where the wind was truly sweeping down the plains. For most of the day the wind was sustained at 17 mph with gusts up to 37 mph. ODWC and many of our amazing partners provided a variety of activities related to the outdoors despite the winds. First, we appreciate our fellow **ODWC employees**: JD Stauffer for helping with shotgun shooting, Ryan Ryswyk for the sportfish of Oklahoma aquarium, Jena Donnell for conducting a birding tour and filling in for others to take breaks, Kristen Gillman for conducting the new scavenger hunt and bird optics course, Ted Hasty for conducting a birding tour, and Jeff Neal for the Duck ID exhibit. Brandon Brown provided the Oklahoma Streams exhibit and video of his outstanding underwater scenes. And of course we would also like to thank the following partners for helping make Hackberry Flat Day a success.: **Alabaster Caverns State Park, Quartz Mountain Nature Park, the OK Conservation Commission and the Washita Battlefield National Historic Site** for providing fun, interactive exhibits. The **Friends of Hackberry Flat** acted as hosts to the visitors and ODWC family members, **April Ryswyk** (Ryan's wife) maintained reservations for the birding tours and answered lots and lots of questions from the visitors. The **Treasure Lake Job Corps** helped families build bluebird houses to take home, which was a very popular activity. The **Red River Transport** provided a touring van and a wonderful bus driver. A special Thank You to **Girl Scout Troop from First Christian Church** for helping visitors enjoy the Goose-Knocking activity, which was also a big hit. The **Hackberry Flat Foundation** provided refreshments and lunches for all the volunteers and exhibitors! The **First United Methodist Church Youth Group** provided a concession as a fundraiser for their mission projects. And as always, a special thank you to **Carol and Dennis Stayer** for having oversight of the event and capturing Hackberry Flat Day by camera!



All Photos provided by Carol Stayer