



Oxley Nature Center

January/February, 2016

Volume 231

The White-footed Mouse

by Stacey Hannebaum

Oxley Nature Center:

-The Interpretive Building will be open Monday through Saturday, 10:00 a.m. - 4:30 p.m. and Sunday, 12 noon - 4:30 p.m.

-Gate and parking lot are open daily, 8:00 a.m. - 5:00 p.m. except most City holidays.

-Hiking trails are accessible during Mohawk Park hours, 7:00 a.m. - 9:00 p.m.

Redbud Valley Nature Preserve is closed:

all Mondays and Tuesdays.

-Open Wednesday through Sunday, 8:00 a.m. - 5:00 p.m.

Hiking after these hours is not allowed.

-Interpretive building is open Wednesday through Sunday, 11:00 a.m. - 3:00 p.m.

-Closed most City holidays.

** Holiday Closings:

Oxley Nature Center and Redbud Valley Nature Preserve:

-Friday, January 1, and Monday, January 18.

-Sunday, February 21 through Wednesday, February 24.

Program information:

- 918-669-6644

- Oxley@cityoftulsa.org

- Website at <http://www.oxleynaturecenter.org>.

*Register for classes 48 hours in advance.

-Children under 12 must be accompanied by an adult unless otherwise stated.

-Most programs are stroller/wheelchair accessible.

-Our new mailing address is: Box 150209, Tulsa, OK 74115

When you think of examples of animal life that inhabit woodland, how often does a mouse make your list? For many people, a mouse is more often associated with an unwanted visitor who shows up in the house from time to time. The mice in your house are almost always *Mus musculus* (common name: house mouse), an invasive species from Europe with beady little eyes and a gray body. However, there are hundreds of other species of mice, which inhabit almost every habitat type you can think of in the world.

As a graduate student at The University of Tulsa, I study *Peromyscus leucopus*, commonly known as the white-footed mouse. I am interested in the movement patterns and capabilities of this common North American species and how these correlate with genetic-relatedness patterns and spatial structure across a landscape. The questions I am investigating include: Do individuals prefer a certain habitat type? If so, is that habitat type similar to that in which it was born and raised? What landscape features (streams, habitat type, roads, etc.) act as barriers to movement? Do males move more often and farther than females? Do females exhibit philopatry, with home ranges that are near to or overlap with sisters, aunts, and mothers?

In order to investigate such questions, I needed an easily accessible site containing many habitat types, a variety of landscape features, several acres, and of course, many white-footed mice. During my search for such a place here in Tulsa, I came across Mary K. Oxley Nature Center and was impressed that it contained everything I was looking for and much more! I shared my research ideas with Eddie and was granted permission to use Oxley as my study site.

The prairie next to the Interpretive Building and its surrounding woodland became as much my home this past year as the University of Tulsa campus. Every three weeks, I set 152 small live traps in an 8 X 19 trap grid with 20 meters between each trap. Each trap was baited with oats and hay and monitored over a period of 4 nights, as the white-footed mouse is nocturnal. At sunrise each morning, I set out to check every trap. Upon capture, I would dump the contents of the trap into a handling bag, where I could identify the species caught and measure its weight. The vast majority of the time I caught my target study organism, but I also caught the occasional short-tailed shrew, woodland vole, and cotton rat, and far stranger things like a leopard frog, speckled kingsnake and crayfish. After weighing the mouse, I would pull it out of the bag to identify its sex and reproductive condition. I also used calipers to measure the length of its tail and right hind foot. Finally, I would inject a microchip, called a passive integrated transponder (PIT) tag, into the scruff of the neck to identify the mouse in the future and take a small tissue biopsy from the tail for genetic analysis. The mouse was then released.

From February to November, I have made 397 captures of 82 white-footed mouse individuals. Analyses are in progress, so I cannot yet provide answers to the questions I mentioned earlier but I can report a couple of striking patterns. First, I did not catch any white-footed mice in the prairie. This was surprising because the white-footed mouse is considered a habitat generalist and has been observed in grassland habitat. Could the cotton rats and Texas mice that were only caught in the prairie be preventing the white-footed mouse from settling there – a principle called competitive exclusion? Second, mice did not cross the rarely used road that runs parallel to the prairie. This is less surprising, as roads are known to act as barriers to the movement of many species, but is still amazing considering how little the road is used by vehicles. Do mice avoid crossing this road because it exposes them to predators? As you can see, scientific research often leads to more questions!

This study has been an extremely fun and insightful experience, which would not have been possible without Oxley Nature Center and its amazing staff and volunteers that help keep it available to the public. Oxley is not only an amazing place where people, young and old, can come to enjoy the wonders of nature and view wildlife; it is also a powerful resource for scientific research and exploration.

Nature Center Happenings

Volunteer Luncheon and Awards Celebration

Volunteer and Oxley staff, families, and friends celebrated our fall season with an awards luncheon December 5. We gathered to honor our volunteer staff and share a meal. We love this time to get together to visit with one another!

Two volunteers reached significant milestones:

30 Seasons Award: Sharon Cairns

20 Seasons Award: Jane Knoten

Six volunteers received their three year pins:

Meg Bilyeu, Sarah Bridgeman, Scott Carmen, Dennis Hebert, Bill Huggins, Janet O'Leary, and Susan Stowe.

Our volunteer staff serves Oxley in many capacities. With their dedication, hard work and enthusiasm, we are able to "Inspire the Wonder" in school children, maintain our trails and acreage, provide public programs and so much more.

Volunteer Roundup in February

Oxley Nature Center is sponsoring a volunteer roundup on **Thursday, February 11, from 10:00-12:00 noon or 7:00-9:00 p.m.** Join us to learn about the many different volunteer opportunities we have to offer.

We will have question and answer sessions, staff and volunteers to visit with and refreshments. Afterward we'll go on a short trail hike.

Have you got some time to share? Please call 918-669-6644 to register. We look forward to hearing from you!

A joy shared is a joy doubled -Goethe

Volunteer Naturalist Training Begins in March

Do you enjoy being outdoors sharing the experience of nature with others? We are offering Volunteer Naturalist training beginning March 1st. We are looking for weekend, evening and weekday volunteer staff. Training sessions will take place throughout March. You will become familiar with our trail system as you explore the varied prairie, wetland, and forested areas. We emphasize leadership skills and interpretation methods.

Upon completion of training, you will join other naturalists, each guiding a small group of visitors on weekday, evening or weekend tours. If you are 18 or older, please call for more details about the training schedules. No previous experience is necessary .

Weekday sessions: March 1st-31st, two days a week (Tuesdays and Thursdays) from 9:00 a.m.-12 noon.

Evening and weekend sessions: nights from 6:30-8:30 p.m. and/or weekend days from 1-3:00 p.m. Please call for more details about the training schedules. These schedules are flexible. 918-669-6644

Full Moon Walks at Oxley Nature Center

\$3 requested donation per person, all ages welcome ** Please register in advance **

Full Wolf Moon

Saturday, January 23, 7:00-8:30 p.m.

Our full moon walks are something to howl about! Start your New Year right with a night exploration outdoors. We'll stalk quietly to see what we can discover.



Full Snow Moon

Friday, February 19, 7:00-8:30 p.m.

It is not quite the full moon (that is the 22nd). Will there be snow? Bundle up in layers and join us for a walk along the trails. What will we find?

Programs and Special Events

January

2 "Saturday Morning Birding" **Ages: All**
Saturday **8:00-9:45 a.m.**
Free **registration not required**

Join us for birding at Oxley.
Bring binoculars if you have them.



6 "Basket Guild" **Ages: 13 to Adult**
Wednesday **6:00-7:00 p.m.**
Free **registration is required**

Join us for a basket-making class that meets once a month at Oxley. We are experimenting with different techniques and materials. This is for all skill levels.

11 "It Looked Like Spilt Milk"
Ages: 1-5 years with caregiver
Monday **10:30-11:30 a.m.**
Free **registration is required**

Students will learn about different types of clouds and how they are formed. We will walk and watch for different shapes in the clouds, then recreate them in the classroom. Meet at Oxley for this Natural Babies class.

16-17 "Winter Bird Feeder Survey"
Ages: All
Saturday-Sunday **9:00-12:00 noon**
Free **registration not required**

Join us at Oxley or Redbud Valley for the Oklahoma Department of Wildlife Conservation Winter Bird Feeder Survey. Data collected help scientists learn more about some of the 52 species of birds that frequent our feeders, a great way to learn your birds. The survey takes place January 14-17. We will have naturalists available on the dates and times listed above to assist the count.

23 "Botany Walk" **Ages: All**
Saturday **10:30-12:00 noon**
Free **registration not required**

Meet at Oxley for a winter botany walk.

February

3 "Basket Guild" **Ages: 13 to Adult**
Wednesday **6:00-7:00 p.m.**
Free **registration is required**

Join us for a basket-making class that meets once a month at Oxley. This is for all skill levels.

6 "Saturday Morning Birding" **Ages: All**
Saturday **8:00-9:45 a.m.**
Free **registration not required**

Join us for birding at Oxley. Bring binoculars if you have them.

8 "Exploring a Bird's Nest"
Ages: 1-5 years with caregiver
Monday **10:30-11:30 a.m.**
Free **registration is required**

The birds are already starting to think it is spring and soon we will all be hearing welcome courtship songs. We will take a look at some nests see if we can build one. Meet at Oxley for this Natural Babies class.

13-14 "The Great Backyard Bird Count"
Ages: All
Saturday-Sunday **9:00-12:00 noon**
Free **registration not required**

Join us at Oxley or Redbud Valley for the Great Backyard Bird Count. Data collected help scientists learn more about bird populations, ranges and habitat needs. This is a great way to learn about birds that visit your feeders. The GBBC takes place February 12-15. We will have naturalists available on the dates and times recorded above to assist with the count.

27 "Botany Walk" **Ages: All**
Saturday **10:30-12:00 noon**
Free **registration not required**

Join us at Oxley for a winter botany walk.

Certified Interpretive Host Training Workshop

When: February 20 & 27 8:00 a.m. -5:00 p.m.

Where: Oxley Nature Center Instructor: Donna Horton

The National Association of Interpretation's Certified Interpretive Host program offers a two day professional certification designed for new hires, seasonals, volunteers, maintenance workers, receptionists, law enforcement or anyone who has public contact but does not present formal interpretive programs to the public. It covers the basics of interpretation, how to provide great customer service and hospitality, and how you can use informal interpretation to support your agency's mission as you interact with visitors. Must be 16 or older.

For information contact: Donna Horton, Trainer @ DonnaHortonCIT@att.net, 918-587-0522.

Certified Interpretive Guide Training Workshop

When: March 14-17, 2016, 8:00 a.m.-5:00 p.m. daily

Where: Oxley Nature Center Instructor: Donna Horton

The National Association of Interpretation's Certified Interpretive Guide program offers professional certification designed for anyone who delivers interpretive programs to the public. From the theoretical foundations of the profession to practical, hands-on-training, we learn how to design and present programs that help audiences make connections. Must be 16 or older.

For more information contact: Donna Horton, Trainer @ DonnaHortonCIT@att.net, 918-587-0522.



Participate in the 2016 Winter Bird Feeder Survey

Download the data sheet from wildlifedepartment.com

Choose two consecutive days between **January 14-17** and conduct counts of the birds visiting your backyard feeders. Record the highest one-time count of each species.

Use okwinterbirds.com as a guide to 52 species of birds that frequent backyard feeders!

Submit your data via e-mail to melynda.hickman@odwc.ok.gov or mail to P.O. Box 53465, Oklahoma City, OK 73111 by February 1

Juvenile White-crowned Sparrow

Or join us at Oxley or Redbud Valley on January 16-17 from 9:00-12 noon and help us count!

Project Learning Tree Workshop

Saturday, March 12, 9:30-3:30 p.m.

\$20 fee for curriculum materials

To register contact Deidra Wakeley, Science teacher and facilitator: wakelde@tulsaschools.org

K-12 public, private, and home school teachers, Boy and Girl Scouts, 4-H, and Campfire leaders will all learn to use strategies and techniques to teach topics such as forests, wildlife, water, community planning, and energy. Through hands-on, interdisciplinary activities, PLT helps young people learn "how to think, not what to think", about complex environmental issues. Participants should bring a sack lunch, dress comfortably, and be prepared to go out on the trails for activities.

Thank you, Wild Birds Unlimited!

Wild Birds Unlimited Nature Shop assisted Oxley in setting up our new feeding stations at Oxley Nature Center and Redbud Valley Nature Preserve.

With the donation of their 'Advanced Pole System', we are able to hold more feeders and offer more varieties of food. This system will be easier to manage and clean.

Stop by, observe the birds, and ideas about what system and feeders might suit your yard and feeding situation.

Feed the Birds

Attracting winter birds to backyard feeders can be a source of great enjoyment. To attract a wide range of birds, we recommend placing multiple pole feeders around your yard. Feeders should be about 10 feet from cover, such as an evergreen or a brush pile, to dilute the concentration or density of birds in one area. This kind of spacing helps provide protection from predators such as cats.

Black oil sunflower and thistle seed are two good seed choices for tube feeders. A variety of mixed seed is also available. For ground feeding birds such as juncos, doves and some sparrows, black oil sunflower and proso millet are good choices. It is important to clean feeders to prevent bacteria and mold from becoming a problem. Rake up old seed hulls and droppings under feeders to prevent the spread of disease.

Add fresh water to this formula, and you have everything you need to attract a variety of beautiful birds to your yard, guaranteed to brighten your winter days! Now sit back and watch the drama unfold, as cardinals, doves, chickadees, goldfinches, blue jays, woodpeckers and other characters delight with their unique social behaviors. Nature's theater at its best!