

From Joanne Fellows

Savannah Sparrow, *Passerculus sandwichensis*



Savannah Sparrow is one of the most numerous songbirds of North America.

Awinter visitor, the Savannah Sparrow is one of the most numerous songbirds of North America. It has some unique markers that identify this streaky brown bird. Look for a short tail, small head and a yellow spot before the eye.

It is named for Savannah, Georgia where the first specimen was collected by the nineteenth century ornithologist Alexander Wilson.

This sparrow has a tendency to return each year to the area where it hatched. This is called natal philopatry and is used to identify the many subspecies of the Savannah Sparrow.

A squirrel is a squirrel is a squirrel?

w. odum

(Hmm . . . well, maybe)

Eastern gray squirrel—enature.com

Several species of squirrels make their home in Texas, such as the **Eastern gray**, **flying**, and **rock**, but the one with the widest distribution is the **Fox squirrel**. It prefers an open, park-like woods where large mature trees shade the forest floor and prevent the under-brush from flourishing, but it can adapt to a variety of forest habitats. It is most abundant in the eastern third of the state, and distribution in the wild is about one squirrel for every two or three acres. Since a fox squirrel ranges over an area of at least ten acres during any one season and may cover forty acres during a year's time, the territories of several often overlap. It is not uncommon for squirrels to share winter food supplies (TPWD.Texas.gov). They are also abundant in urban neighborhoods with trees (Wikipedia).



The location of the gray squirrel's large eyes allows it to see all around with little movement of its head. (TPWD)

A small **Eastern gray squirrel** (*Sciurus carolinensis*) has a bushy tail edged in white. Belly is whitish. Gray back may have a red-brown tinge. Black-morph individuals and albinos can be quite common in some areas. Tail is typically browner than the Western Gray Squirrel, lacking any silvery tint. Habitat is forests and woodlands, Cities, suburbs and towns and ranges on Plains, Great Lakes, New England, Mid-Atlantic, Southeast, Florida, Texas, California, Northwest, Eastern Canada

Gray squirrels feed on acorns, other nuts, flowers, seeds, buds, bark, and fungi. Abundant, diurnal, and considered game animals in many states. It is the most commonly seen mammal in the eastern United States. Introduced in many western cities. Favors hardwood or mixed forests, including residential areas. (www.enature.com/fieldguides)



Fox squirrel stealing a meal — Alex Lieban

Rugged areas such as cliffs, canyon walls, boulder piles, and highway fills are good habitat for the **Rock squirrel**. (TPWD.Texas.gov)

Rock squirrel (*Otospermophilus variegatus*)—Wikipedia



The **Flying squirrel** is always on the move when awake and burns energy at a terrific rate. As they are for most squirrels, nuts are an important part of its diet, and the flying squirrel stores them in a tree cache. It also eats berries, tender buds, grasshoppers, moths, bugs, acorn grubs, and other such items. It eats very little green vegetation.

Since this squirrel is so small, it can easily use a woodpecker's nest as a den site. However, if no cavity is available, it will build a nest of leaves and twigs. In those areas where Spanish moss is available, a ball of it may contain and conceal such a nest. The young are born from March to May in litters of three to six, about forty days after breeding takes place. They are about the size of a quarter at birth and weigh less than half an ounce. Flight training begins when they are a few weeks old, and in a short time they are gliding through the trees. The flying squirrel matures slowly and will not be ready to breed for more than a year. (TPWD.Texas.gov)

Northern flying squirrel (*Glaucomys sabrinus*)



www.nwf.org/wildlife/wildlife-library/mammals/flying-squirrels.aspx



UNT Facebook

Albino squirrel lived at UNT from 2004– 2007 before being killed by a Red-tailed hawk.



D. Smith, NN editor's daughter, took photo of Red squirrel as he "barks" at her from his home at her home in Springfield, IL.

Red squirrels (*Tamiasciurus hudsonicus*) are not found in Texas but make an interesting comparison. American red squirrels are also referred to as **pine squirrels**, **North American red squirrels**, **chickarees**, and **fairy diddles**. They are medium-sized diurnal mammals that defend a year-round exclusive territory. The diet of these tree squirrels is specialized on the seeds of conifer cones. Recently, American red squirrels have been expanding their range to include primarily hardwood areas. (Ask.com)

Red Squirrels are very vocal. They bark at intruders, including humans, and can bark continuously for more than an hour if they are annoyed. They also chatter, especially to stake out a territory and protect their stored food supply (conifer cones, which they harvest in great numbers) from other squirrels. (www.mnh.si.edu)

For more information on squirrels see: Ilo Hiller 1990 – Squirrels: *Introducing Mammals to Young Naturalists*. The Louise Lindsey Merrick Texas Environment Series, No. 10, pp. 53-61. Texas A&M University Press, College Station.

Project Managers are Adelaide & John Bodnar; pictures by Jon Reynolds.

Benthic Collection and Texas Stream Team Water Testing February 2015

On a bright sunny day in early February, nine Master Naturalists met for the monthly collection of Benthic macroinvertebrates from four sites around the City of Denton. In addition water samples were collected and tested for pH, Conductivity and Dissolved Oxygen as part of the Texas Stream Team Program at Texas State University.

This Master Naturalist project is part of the City of Denton's Watershed Monitoring Program. Assessing the water quality is important as the streams that flow through Denton flow into Lewisville Lake, which is the drinking water source for Denton.

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1) The water was very cold so John Bodnar wears gloves as he collects samples for Dissolved Oxygen from Cooper Creek. Also pictured Veronica Ruangskul, with D-net, Raquel Bryson, Kay Crowe, Vin Merrill, Marilyn Turnage and Adelaide Bodnar.

2) John Bodnar and Kay Crowe transfer a sample from the D-net to a collection Tray at Cooper Creek.

3) Adelaide Bodnar tests for Conductivity at Cooper Creek.

4) Vin Merrill, Veronica Ruangskul and Kay Crowe pick aquatic insects from a collection tray at Pecan Creek and place them in alcohol, for later identification.

5) Measuring water turbidity in Pecan Creek, using a Secchi Disk in the creek (John Bodnar) and a Transparency tube on the bank (Veronica Ruangskul). Also pictured Adelaide Bodnar, Vin Merrill, Kay Crowe and Raquel Bryson.



3)



5)

4)



It's All About Bats

From Bob Ross



Scott Kiester

Elm Fork Chapter member, Scott Kiester, gave a wonderful presentation, "It's All About Bats" at Trophy Club on April 4th. Scott presented to a full room of Trophy Club citizens and EFC members.

Scott gained experience in the area of bats when he was a bridge host at the Houston Bat Project located at the Waugh Street Bridge over Buffalo Bayou in Houston. Citizens come to watch the estimated 300,000 bats depart from under the bridge.

Scott noted that a bat is a mammal and that they are unique among mammals in that they can fly. Most females have one baby (pup) per year and the pup begins flying within 60 days. Scott relayed other interesting aspects about bats in that they are not blind, have good hearing, have spatial reasoning, have sharp, chiseled-like teeth and their wings are made of thin skin or membrane. There are 1100 species divided into two groups: Megachiroptera (big bats) and Microchiroptera (little bats).

Scott explained how bats find food in the dark by utilizing their echolocation. Bats can echolocate effectively up to 60 feet by clicking five times per second. It is estimated that bats eat four billion insects per night. The two most common bats living in North Texas are the Eastern Red bat and the Big Brown bat.

Scott cautioned that people should not pick up a bat that is on the ground. He suggested calling animal control because they know how to handle such a situation. Many people think bats are rabid, but according to Scott, only one-tenth of one percent of all bats are rabid. He continued by stating that the most rabid animal in Texas is a skunk.

Scott finalized his presentation by explaining that the three most common things that cause bats problems are: habitat loss, DDT from Mexico (where it is still legal to have and use), and white nose syndrome. This syndrome is prevalent in colder climates causing bats to have fungal growth on their muzzle and it is not found in Texas.

Scott was informative and entertaining, holding his audience captive with knowledge. He will be this month's speaker at the April General Meeting informing everyone about Leopard Frogs.



Scott during Q&A session