



# TEXAS BLUES

The Newsletter of the Texas Bluebird Society

Volume 2 issue 3

June / July 2003

## THIS NEWSLETTER FEATURES...

Keith Kridler, naturalist, shares an entry from his nature journal. David Shiels, scientist, provides instructions on conducting scientific experiments. What's the connection? Observations like Keith's are the first step in the scientific method described by David. YOUR observations may be the starting place for your own scientific experiment.

Data collection is a key ingredient to a successful experiment. Read about our plan for collection of 2003 nesting results, which is focused on collecting your nestbox summary information once for use by all.

Finally, sometimes it's nature that adds a different slant on bluebirding. See the article on this page about snake predation. Take caution as you open nestboxes to monitor. Snakes are occasionally found curled up in a nestbox – with 4 or 5 lumps showing evidence of a (nest)box lunch.



## David Shiels makes Presentation at Wills Point Bluebird Festival



During David Shiels' presentation at the 2003 Bluebird Festival, he explained the nestbox with a HeatShield that he donated. Plywood 'shields' are attached to each side and the top of the nestbox leaving a one-half inch air space. This allows for air to flow between the HeatShield and the nestbox. The result is a cooler nestbox, potentially extending the successful nesting season in hot Texas summers!

## Snakes are active!

Keith Kridler of Mount Pleasant recorded on May 6<sup>th</sup> in a journal note, "We mowed this weekend and there were no rats anywhere on the property. Huge snake population here after so many years of the rodent explosion. So we will be hearing about more losses as the weather warms up. I saw four snakes on Sunday going down to the bottom to start the water pump on one trip." We have, indeed, heard about the losses.

Thanks to Lylse Mockler for providing the photo (to the left) after recent snake incidents on their wildlife habitat property near Waxahachie. She found this Rat Snake caught in a Krueger Snake Trap ("ruffled up" mesh nursery netting attached around the pole with a wire). The snake had successfully circumvented an 8" Kingston Predator Baffle (plans are on [www.texasbluebirdsociety.org](http://www.texasbluebirdsociety.org)).

The baffle is effective in deterring snakes and raccoons; it does not always prevent predation. Tracks through a ring of grease on the pole will give clues to a predator's identity so you can take corrective actions to prevent future predation not only at that nestbox but throughout your trail. (Lylse switched from t-post mounting to EMT mounting and raised baffles at least 6" for an additional degree of protection.)

A snake trapped in the Krueger trap will not reach the nestbox contents, but it might cause the parents to abandon eggs or call the young to prematurely fledge as it hangs beneath the nestbox.

## ***an entry in the nature journal of Keith Kridler, Mount Pleasant Texas***

**April 6, 2003**

Shawn and I took the canoe out on Monticello lake (hot water power plant lake of 1,800 acres) and installed nestboxes for tree swallows on available snags. We saw one prothonotary warbler in the brush along the shore on the way back in. We saw two black vultures feeding on carrion right at the shore line about 300 yards away and decided to see how close we could get before they flew. We carefully stalked them with the canoe and by advancing everytime they went back to feeding and stopping whenever they got scared we ended up with Shawn getting to sit about 5 feet from them for over twenty minutes while they worked over a wild hog someone had shot quite some days ago. Did you know that these cavity nesting birds can "Woof" just like a dog? Did you know that talking did not bother them but motion did? They moved several times close enough to him that he could have reached out and touched them.

Besides all of the usual birds we saw the largest number of really huge snakes in one place that I have ever experienced, at least six snakes were larger around than my arm in one area of thick cat tails ...they were also seen at less than 10 feet away to just a matter of inches! We trapped a snapping turtle so large in shallow water that I could not lift it or even roll it with the paddle.

While checking roadside nestboxes I found another male bluebird road kill along HWY 271 and he is a magnificent blue shade! Had he bounced another 6" off someone's car I never would have found him. I am seeing record numbers of chickadee's, titmice and flying squirrels trying to nest. I am installing nestbox temperature data loggers for Cornell and in less than two hours I found 9 bluebirds nests with either 2 or 3 eggs just being laid which is what they are shooting for in the study. I only found 4 empty nestboxes and 3 of them contained active small wasp nests. Bluebirds are hatching out and a majority are incubating already. I logged 222.3 miles since Thursday "Bluebirding".

I found a titmouse nest with 9 eggs about 1/2 a mile from where there were 10 eggs in a nest two years ago. I have 6 or 7 titmice with 6 eggs in their nests which is high egg count averages for them along my trail. Flying squirrels took over four more nestboxes along one road during the last two weeks....I will take a camera back to one box where the flying squirrels had killed a male bluebird before March 22 and used the blue feathers mixed into their nest. Yesterday just about two weeks later in this same box they have killed another TWO male bluebirds and also one male house sparrow.....There is DEADLY competition for nestboxes that we seldom see. IF tiny flying squirrels can kill three bluebirds and a house sparrow in just two weeks in one box then what happens to a bird when they hop into a natural nest cavity with fox or gray squirrels in the box? THIS is why you see birds cautiously tip into and out of an entrance hole MANY times when they are inspecting a nestbox! Don't forget snakes often hide in cavities and eat the birds investigating the "cavity".

Last year in my yard a "moss" nest appeared and several days later I found a Carolina Chickadee dead in the box and I felt several eggs which I left at the time to consider fostering them into another nest (sparrows) for incubation and them moving them to another chickadee nest upon hatching...(This by the way is illegal:-)))The very next day I went back to move the eggs and found a TUFTED TITMOUSE sitting on 5 titmice eggs....I felt certain over the next couple of weeks that a tufted titmouse had returned to find the chickadee in the box with the titmice eggs and killed it during the battle for the nestbox....Saturday in a box that raised chickadees last year I found a chickadee that had been dead for several days laying beside a "moss" nest. I felt eggs under the hair and pulled the nest out of the box only to have the eggs drop through the bottom of the nest and crack....They contained warm live embryo's of TITMICE. An adult titmouse immediately appeared to scold me. Once again I feel certain that the titmouse had killed the chickadee while trying to defend her nest from an invading chickadee.

At two boxes Sunday I drove up to see a bluebird or a pair of them on a nestbox. Thinking I would find more bluebird eggs in both instances I was surprised to find a highly defensive titmouse guarding each box with her eggs. I added 12 more nestboxes where we are having competition.

I lost a female house sparrow to an attack in a Gilwood box last week so that is 2 House Sparrows killed in boxes, five bluebirds killed by flying squirrels and one loss of a chickadee to a titmouse in competition to other cavity nesters in the last month. Throw in the two "road killed" males this spring and breeding birds are dying just before they pass on what they have learned to their young. Many of the nests in boxes show signs of different species bringing nesting material in at the same time and mixing it into the nests. I am finding bluebirds sitting in House Sparrow nests and House Sparrows sitting in bluebird nests. I checked one of my wood duck boxes and found at least nine eggs so it is time to start checking the bigger nestboxes too. I'll let you know if my "buzzard" nestbox gets occupied:-))) KK

# CONDUCTING SCIENTIFIC EXPERIMENTS

## A BEGINNER'S GUIDE TO SUCCESS

By: R. David Shiels

Anybody can conduct a scientific experiment as long as he follows a careful, methodical, and well thought out plan. Many of our ancestors hundreds of years ago, had no formal scientific education but did have an overwhelming curiosity about why things work, or, don't work. The controversial scientist, Charles Darwin, actually had a theology degree, rather than a degree in evolutionary biology. His works over the decades in the 1800's, changed the scientific world forever. He was curious about birds, worms, worm mold, aquatic life, and, of course, the evolution of life over time.

To conduct experiments, one just has to be curious and follow the scientific method.

### THE SCIENTIFIC METHOD

The scientific method has four steps: 1.) Observation and description of phenomenon, 2.) Formulation of hypothesis to explain the phenomenon, 3.) Application of the hypothesis from step two to explain the existence of other outcomes or new observations, and 4.) Enactment of properly conducted experimental tests by several different experimenters.

**Observation** - First, one needs a problem. State the problem like, "nestbox temperatures during the nesting season influence the length of the nesting season".

**Formulation** - What can one do to answer the question or solve the problem? Get out a pad of paper and write down as many ideas as possible. Create multiple working hypotheses to explain the hypotheses. Involve family and friends in creating ideas.

**What else could it be?** What other outcomes are possible?

**Experiment** - Be consistent when conducting the experiment. Take lots of notes. Be ready to start over if the first ideas don't pan out. Be patient too. Remember, there is no such thing as failure, there is just another, better, way, maybe. Test results must be defendable at a later date. Use good equipment.

**Publish** – Publish the findings. Don't be afraid to write it up and send it to colleagues to be critiqued. The best way to refine one's efforts is to be challenged by others in the field. This is the only way to improve one's methods.

**Last but not least** - Remember why you are doing your study in the first place. You are searching for the truth. Most scientists conduct their work to improve in a field of study. Your goal should be to discover something that has a positive impact on creation.

Interested in conducting experiments on your own by recording nestbox temperatures?

The temperature recording unit that David Shiels used for his HeatShield project was ordered through the Sharper Image catalog.

"Dataloggers" are available through quite a few on-line companies. These mini-computers the size of a nickel record the temperature at regular intervals. A special scanner is needed to retrieve the recorded data.

Participate in research by monitoring weekly and sharing nesting data at season end.

- Submit detailed nestbox observations

Those who are willing to submit detailed nestbox observations on each nesting in each nestbox may be interested in joining Cornell's Birdhouse Network.

- Submit a season summary

This year TBS will share collect the same data that is collected online through North American Bluebird Society (NABS) TransContinental Bluebird Trail. This change was implemented in order to share the information (for research purposes) with NABS. It will only be necessary to enter the data a single time. It's our hope that every member will submit results. ARE YOU KEEPING GOOD RECORDS? It's part of the scientific method!!

Saturday, August 9  
**2003 TBS Mid-Year Event**  
**Gulf Coast Bluebird Symposium**  
*a joint venture with*  
*Golden Triangle Audubon Society*  
**Keith Kridler, featured speaker**  
Beaumont's Tyrell Park Garden Center  
9:00 – 5:00

Registration \$7.00  
(Pre-Registration is available)

A Reservation is Required for the Fish Fry at noon (\$8.00)  
(form enclosed)

---

## **Saturday, November 15<sup>th</sup>** **TBS Annual Convention**

**LCRA Riverside Conference Center  
near Bastrop's Fisherman Park**

**Doug LeVasseur, Keynote Speaker**

Reserve accommodations now! (On a UT football weekend rooms sell out.)

For lodging at Holiday Inn Express, phone 512 321-1900.

Contact the Bastrop Chamber of Commerce for a complete list of accommodations.  
[www.bastropchamber.com](http://www.bastropchamber.com) or 512 321-2419

**From Susan in NW Houston who got started with a bluebird trail with help and encouragement from Texas Bluebird Society:** I am still filled with sense of wonder and accomplishment. I helped create something. I have never "bred" anything before. no children. so....these new babies are here because of you and I guess, me. such a feeling to do something like this.

Texas Bluebird Society  
P.O. Box 40868  
Austin TX 78704

### **FIRST CLASS MAIL**

*Bluebirds Across Texas...  
one nestbox at a time*

TO:

### **President's Corner**

You might remember that, when last I wrote, I had the hope represented by five blue eggs in the nestbox in my front yard in Mountain City.

Now when I walk outside I'm often saying ,“Hope”, as I call the name of that momma bluebird. All five of her eggs hatched and all five “fledged” (flew from the nest). She's now incubating her second clutch - four eggs!

Hope pretty well has me trained. When she sees me come into the kitchen she pokes her head out and flies to the top of the nestbox knowing that I won't be able to resist putting some mealworms in the hanging feeder. Sometimes she chooses to pick up quick food to go – poking about a dozen mealworms into her beak and flying into the box to eat while doing her work of sitting on the eggs.

Some say that giving human names to birds cheapens them and I respect that. With this first pair in my yard, I just couldn't resist.

The male is named Keith – after Keith Kridler, my mentor, who provided me with the information about bluebirding in Texas that made it possible for me to be successful in bringing bluebirds to the little city out in the country where I live.

Peace, Joy & HOPE!!!  
PTom [president@texasbluebirdsociety.org](mailto:president@texasbluebirdsociety.org)

Permission is granted for this publication to be reprinted and distributed along with TBS Membership Form.

**Texas Bluebird Society**  
P.O. Box 40868 Austin TX 78704

e-mail [info@texasbluebirdsociety.org](mailto:info@texasbluebirdsociety.org)

website [www.texasbluebirdsociety.org](http://www.texasbluebirdsociety.org)

President: Pauline Tom 512-268-5678 (home)

annual memberships are \$10.00 / individual OR \$15 / household