



TEXAS BLUES

The Newsletter of the Texas Bluebird Society

Volume 1 Issue 2

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The Birds are Nesting, and That Means Monitoring Time

Welcome to the April / May edition of Texas Blues, your newsletter about bluebirds and their management here in Texas. With the approach of the spring season, Eastern and Western Bluebirds are beginning to select nest sights and develop nests. For the bluebird trail this means it is time to start monitoring.

The importance of monitoring is found in the ability of the trail monitor to reduce predation. It also allows the trail monitor to notice potential difficulties before they develop and react to them appropriately.

This edition of Texas Blues focuses on monitoring. Some of our trail monitors have put together lists of materials to take on the trail with you, things to watch for, technical assistance on monitoring your trail and other tips to help us be more responsible, better fitted hosts for our feathered guests.

Please remember, Texas Blues is your newsletter. Comments and questions are always welcomed by the editor, authors and volunteers that help put this together. Your submissions for future newsletters are also welcome. These should be sent by email to:

Mark.klym@tpwd.state.tx.us

Please share this newsletter with your friends, family and other bird enthusiasts who may be interested in bluebirds. Let's help ensure *Bluebirds over Texas – one nestbox at a time.*

Smart Monitoring... by the Eastern Bluebird Nesting Cycle

For each monitor, the optimum monitoring schedule will be a combination of the monitor's available time and a thorough understanding of the bluebird nesting cycle. An understanding of the nesting cycle will help the monitor determine when it is critical to monitor, when it is critical not to monitor and what to look for. So let's look at the phases of the nesting cycle (Source –*The Bluebird Monitor's Guide* by Berger, Kridler, Griggs):

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Did You Know:

House Sparrows present a serious problem for bluebirds and other cavity nesters.

House Sparrows are very aggressive at claiming cavities. They evict native birds and take over their nests. They frequently kill nesting adults and nestlings and destroy eggs. House Sparrows are classified as pests, and as an imported species are not protected by federal law.

As responsible bluebird trail monitors, we should take actions to protect native birds from House Sparrows.

- Note and evict any House Sparrows choosing our nestboxes. Dispose of nest and eggs away from nestbox.
- Trap adult House Sparrows*. The birds may be humanely euthanized or they may be disabled by trimming the primary wings. Dead sparrows may be frozen and given to raptor rehabilitators whose names are listed on the Texas Parks & Wildlife website. (Do not consider relocating the bird as this just relocates the problem.)
- Habitat for House Sparrows, particularly feeders using high volumes of millet seed, needs to be reduced.

These simple steps will allow our native cavity nesters, like the bluebirds, an opportunity to nest.

**An effective Universal Sparrow Trap is available from VanErt Enterprises. www.vanerttraps.com \$7.00, plus postage. Traps will be available during TBS Spring Event.*

Texas Bluebird Society Spring Event Saturday April 20, 2002 Sulphur Springs / Wills Point

**\$15.00 registration fee for members
includes BBQ dinner & nestbox**

*form must be received by Monday, April 15th

9:00 – 1:00

Field Trip, Wills Point Bluebird Festival

2:30 – 8:30

Symposium, Best Western Sulphur Springs

Best Western Trail Dust Inn is offering a discount on lodging for reservations made by April 15th. Mention Texas Bluebird Society. 800.980.2378

Questions?

Contact Pauline Tom, tbs@austin.rr.com
or 512.268.5678

Registration Form is included with this newsletter
and on www.texasbluebirdsociety.org

Please keep records!

As you monitor, please keep records that include the information that will be requested on "Texas Bluebird Society 2002 Nest Summary" at the end of nesting season.

2002 SEASON SUMMARY

_____ # Nestboxes Monitored _____ # Nestboxes with no native bird nesting activity

SPECIES	# Nesting Attempts	Total # Eggs	Total # Young	Total # Fledged (left nest)	# Eggs & Birds Destroyed by HOSP*	# Eggs & Birds Lost due to Other Reasons
E. Bluebird						
W. Bluebird						
Titmouse						
Wren**						
Chickadee						
Other						
TOTAL						

*HOSP is bandler's abbreviation for House Sparrow. Do not allow House Sparrows to nest. House Sparrows are a serious threat to native birds as they may destroy eggs, nestlings & adults

** "Wren" includes Bewick's Wren & Carolina Wren. House Wren nesting area is in tip of Texas Panhandle.

Once a week when you monitor record findings using these categories. At the end of the season, you will be able to compile the summary. Your field worksheet for each nestbox might look like this:

WEEKLY FIELD WORKSHEET										NOTES:	
Date	Native Bird(s) Seen	Empty Box	Sparrow Nest Removed	Partial Nest	Complete Nest	# Eggs	# Young	# Fledged	# Destroyed by HOSP*		Species (codes below)

* HOSP is bandler's abbreviation for House Sparrow

For those who are willing to keep more detailed records and provide the data as a citizen scientist for Cornell's "The Birdhouse Network" (\$15/yr), there is an on-line form available at <http://birds.cornell.edu/birdhouse/> (there is no www in their address) -By Pauline Tom

Speaker's Bureau d.rhode@attbi.com

Membership in Texas Bluebird Society costs only \$10/yr. A form can be obtained from www.texasbluebirdsociety.org or by sending stamped self-addressed envelope to Texas Bluebird Society P.O. Box 40868 Austin, TX 78704



Smart Monitoring... by the Eastern Bluebird Nesting Cycle
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Pre-Nesting

Prior to nesting activity, the monitor should check for "re-engineering" of the entrance hole, which needs to be the correct size for the target species and smooth with no sharp splinters or cracks. The monitor should also check for paper wasp nests, which would prevent the bluebird from nesting. Be attentive to birds perching on the nestbox.

Nest Building

If you see both the male and female going in and out of the nestbox, they plan to nest there. The female does the final selection of the nestbox and builds the nest with the male nearby. Eastern Bluebird nest building normally takes less than a week. If you find a partial nest during monitoring, knowledge of the various species nesting materials will help you determine the species of the bird nesting. The monitor should have a plan for dealing with non-target species such as house sparrows. Consider multiple nestboxes to provide habitat for more than one native cavity nesting species.

If the nest is built on top of an old nest, the finished nest should be 3" below the entrance hole. If the new nest is too high, remove all or a portion of the old nest from below. Regular monitoring during the nest-building phase will ensure habitat for target cavity nesters.

Egg-Laying

Egg-laying usually starts shortly after the female completes the nest, but females may delay starting their first clutch for weeks after nest completion. The female will not start until she is confident the eggs won't be harmed by cold. The female lays one egg per day until the clutch is complete. (Since incubation does not begin until completion of egg-laying, normally all the eggs hatch the same day.) An average Eastern Bluebird clutch is 3-5 eggs. (Earlier clutches tend to be largest.) Occasionally the female builds a nest but never lays eggs in that nest. Save the abandoned nest as an emergency nest replacement. The male is rarely seen near or entering the nestbox during the egg-laying phase. Since egg-laying normally occurs in the morning, it is best to monitor in the afternoon to keep from frightening the female and causing a dropped egg.



Chickadee Nest

Bluebird Nest
(built over a Chickadee nest)

(Note egg size difference)

Incubation

The incubation period for Eastern Bluebirds is normally 12 to 14 days. The eggs don't begin to develop until the female begins incubation. The female does all of the incubation and usually starts when the last or next-to-last egg is laid. The female Eastern Bluebird spends an average of two-thirds of the daylight hours and all night on the nest. Eggs can remain viable for several weeks if incubation is delayed. Eggs that are poorly incubated and allowed to cool are not harmed, but may take an additional 5-6 days longer than eggs kept at optimum temperature. The female may leave the nest to feed or her mate may bring her food. Weather can impact incubation. A wet nest may chill the eggs enough to threaten the embryos. If an egg is seriously chilled, the membrane on the inside of the shell may thicken to the extent that the chick may not be able to get out. A cold snap may also cause so much stress that the female will abandon her eggs. On the other extreme, when summer temperatures stay in the 90's, the hot air temperature may start incubation, resulting in a staggered hatching and later a staggered fledging. Although the monitor may find that the female remains on the nest when the nestbox is opened during the incubation period, monitoring during incubation should be done early enough in the day to allow a frightened female adequate time to return to the nest before dark.

Hatching to Fledging

It normally takes 16-22 days for Eastern Bluebird nestlings to develop and fledge. The number of days to fledging can be affected by weather (cold is longer) and how well fed the chicks have been. The nestlings often hatch just after dawn and all of the young birds may hatch within the space of a half-hour. It seldom takes more than a day for all to hatch. They escape from the eggs on their own without parental assistance. The female often eats the eggshells to recycle the calcium. The male and the female start feeding soft insects within an hour of hatching. In the first couple of days the nestlings are very fragile. They cannot regulate their body temperature for the first six days or so. They rely on mother to keep them warm. Baby birds don't yet have their "life-saving" feathers. While a cold wet nest is a threat, this is seldom a problem in our Texas climate. Un-hatched or infertile eggs occur in 10-15% of nests. By the fourth or fifth day the monitor may remove un-hatched eggs to maintain nest sanitation. The female will usually remove a dead nestling, but if not, the monitor should do so to maintain sanitation. During this phase the monitor should watch for fire ants and other insects that may threaten the young birds. On cold, rainy days refrain from monitoring. If the female is frightened from the nest, the young may become chilled. Similar to the incubation phase, monitoring should not be done late in the day. In the last 1-2 days before fledging, the nestlings can be seen peeking out the nestbox. Monitor with caution at the end of the development period to minimize the risk of premature fledging.

Post-Fledging

It takes 10-14 days for the young to begin drop-feeding for themselves. During this period the parents carry food to the fledglings hidden in the trees. If another nestbox is available nearby, the female may prepare her second nest before the first is vacated. Then the raising of the kids becomes dad's job.

The Monitoring Process

So how does the monitor use the knowledge of the nesting cycle in monitoring the nestbox? As I prepare to monitor a nestbox, I check the monitoring record. Then I mentally construct a "most advanced", "least advanced", and "in-between" picture of what I might find in the nestbox...and monitor accordingly.

Example: When I last monitored nestbox #23, I found a nearly complete Eastern Bluebird nest. Now it's 9am, 7 days later, what might I find? 1) "Most advanced" – female has completed nest, laid 5 eggs and is now incubating. 2) "Least advanced" – female has completed nest, but has not yet begun laying eggs. 3) "In-between" – female has completed nest and is in the process of egg-laying.

Conclusion: If either the "Most advanced" or "Least advanced" is true, a normal monitoring visit is okay. If the female is incubating, she has plenty of daylight to return to the nest. BUT, if the "In-between" case is true, the egg-laying female might be frightened away and forced to "drop" the egg. Therefore, my decision would be to return to monitor the nestbox after lunch, which would be no risk in any of the three possibilities. – *By Doug Rohde*



Bluebirds Across Texas...one nestbox at a time

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Handy Monitoring Items

Gear you might carry:

Binoculars—Start monitoring when approaching the nest by observing the parents and other birds in the area with binocs. Also no need to carry a **magnifying glass** to check band numbers (if you should find a banded bird)...just turn your binocs around and look through them backwards!

Monitoring forms/notebook and pen

Extra **nest** or bag of dry **grass** for emergencies

Tanglefoot or **grease** for poles (for deterring fire ants or predators)

Gloves—latex, rubber or leather. Even with gloves, wash hands after handling materials or birds

Pancake spatula or **putty knife**—great for removing nests, and kills wasps too

Small **mirror** for looking in nestboxes—less intrusive than a face peering in, and great for short monitors/taller nestboxes. Shine a **flashlight** at the mirror when the inside of the nestbox is too dark to see easily

Paint brush to sweep out debris

Plastic grocery **bags** with 2 handles. They can hook on your box and help as 3 hands. Always remove old nests, sparrow victims, etc. and place in bag with a twisty tie. Put in your trash; never leave along the trail to attract predators.

Portable **sparrow traps**, and large clear bag for removing sparrow from trap- or mesh paint strainer for 5-gallon can.

Long-handled spoon like those used to eat ice cream sundaes—for removing unhatched eggs without breaking. The egg will roll right into the bowl of the spoon. Even with top opening boxes, you can use the spoon to roll the egg up an inside corner of the box.

Materials for Nestbox Repair—on person or in vehicle:

Sandpaper to fine-tune door openings and to smooth entrance holes a bit

Extra **screws, nails, clamps**, etc

Hammer and/or **screwdrivers**, depending on how nestbox is constructed

Leatherman or Swiss-Army-type **knife** with screw drivers, etc., on it
duct tape

To leave both hands free while holding all this gear:

Fishing vest (all those handy pockets!) **or**

Small **backpack** with outside pockets **or**

Fanny pack if you only carry a few things with you

Possible items to keep in vehicle:

Baby wipes—to clean hands after handling young birds during a nest change

Roll of **paper towels**

Plastic bottle of **Clorox** solution, in case you encounter white-footed mice (Hanta virus)

Cell-phone for safety traveling alone, calling rehabber, etc.

Tool bag or **tool box** to put all these goodies in

The name and # of nearest **rehabber** (obtained through www.tpwd.state.tx.us and click on the rehabilitator link on the bottom right)

These suggestions come from some seasoned monitors, and in some cases offer creative solutions to problems! You may not need or want all of these items, depending on your situation. – *By Kate Oschwald*