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

To: Texas Bluebird Society Members and other Texans participating in the TransTexas Nestbox Network (by monitoring nestboxes and keeping records)

From: TBS Board of Directors

Re: **NestWatch (www.nestwatch.org,)**

Date: March 28, 2007

NestWatch is a new pilot project funded by the National Science Foundation and in collaboration with the Smithsonian Migratory Bird Center.

Effective immediately, TBS' nesting records will be entered directly into www.nestwatch.org

Getting started 1, 2, 3... (from www.nestwatch.org)

1. Create a NestWatch account, if you have not already done so. It's free and takes just a few minutes.
2. Learn about breeding birds and the nesting cycle. A good place to start is with our Focal Species.
3. Help protect birds by following the Nest Monitor's Code of Conduct.
4. Download the Multiple Nest Visits Worksheet and learn how to record your nest observations:
    - NestWatch Protocol for Monitoring Nests
    - General guidelines for collecting data
    - Recording the data onto the worksheet
        - Habitat Codes used in worksheet
        - Breeding Codes used in worksheet
5. Enter your data online by clicking on the "My Nests" tab above.
6. Don't forget to enjoy the birds and their behaviors!

NestWatch — Multiple Nest Visits Worksheet

This form is for your records — use it to locate and describe your nest site and record up to 10 visits to a nest. Use a separate form for each nest monitored and each new nest attempt. See code descriptions on back for explanation of codes and fields. If response is "Other" enter "OT"; for "Unknown" enter "U."

Year_____ **Species** _____

Nest Site Location and Description (see key on back)

Nest Site Name: _____

Nest Location (nearest street address OR lat/long):

_____

_____

OR

Latitude N _____

Longitude W _____

Zip Code _____

Nest Substrate (circle one: IN ON UNDER)

this substrate: _____

Habitat within one meter _____

Habitat within 100 meters _____

Habitat Modifier _____

Elevation (specify ft. or m.) _____

Height above ground (ft. or m.) _____

Cavity Orientation _____

Cavity Width (specify in. or cm. _____

BREEDING DATA

*For columns 3, 4, 5, and 10, enter "X" if eggs or young are present, but exact number is unknown. If nest contents are not visible, enter "U" for unknown.

	Date/Time		Host Species*			Status/Activity codes			Details (Optional)			Comments
	1. Month / Day (1–12) /(1–31)	2. Time (AM/ PM)	3.* # of Eggs	4.* # Live Young	5.* # Dead Young	6. Nest Status	7. Adult Activity	8. Young Status	9. Mgmt. Activity	10. Cowbird Evidence	11. Observer Initials	12. Comments below
Ex	5 / 12	4 pm	4	0	0	CN	AA	–	No	IE | 0 | 0	MS	✓
A	/									| |		
B	/									| |		
C	/									| |		
D	/									| |		
E	/									| |		
F	/									| |		
G	/									| |		
H	/									| |		
I	/									| |		
J	/									| |		

Outcome of this nest attempt (S, F, U)_____ **Total Number of Fledged young**_____

Record additional details about any visit you made to the nest and the overall outcome of this nest attempt below. Indicate row letter for each visit.

Please enter this information online at www.nestwatch.org by September 30th. THANK YOU!

Nest Site Location and Description Key

Nest Site Name —Unique Name or number for each nest site
Street Address, City *OR* Lat/Long—Enter either the closest street address and city *OR* the latitude or longitude of nest site (in decimal degrees).
ZIP—Enter ZIP or Postal Code where nest site is located.
Nest Substrate —Enter if the nest is in, on, or under one of the following substrates:

- Nestbox/birdhouse
- Building or dwelling
- Post/Pole or platform
- Cavity in snag/dead tree
- Cavity in live tree branch
- Live tree branch
- Dead tree branch
- Bush or shrub
- Cliff or rock
- Ground
- Floating vegetation

Habitat within 1 meter and 100 meters - From the list below, enter habitat type within 1 meter of nest; enter dominant habitat type within 100 meters of nest.

- Human Modified (see descriptions at right)
- Agricultural Area
- Woodland/Forest
- Natural Grassland/Prairie
- Chapparal/Shrubland
- Desert Scrub
- Fresh Water
- Salt Water
- Beach
- Tundra

Habitat Modifier - If you chose "Human Modified" for either habitat type, describe the human modified landscape that the nest is in, from the list below:

- Yard, residential area
- Public park/green space
- Roadside
- Golf course
- Landfill/gravel pit/strip mine
- Cemetery
- Industrial/commercial center area
- Power/Utility Corridor
- School/campus/church/hospital
- Airport
- Campground
- Christmas tree farm
- Orchard/vineyard
- Recently clear cut area
- Recently burned area

Elevation - Enter elevation above sea level; specify feet (ft.) or meters (m.)
Height Above Ground - Measure height of nest from the ground; specify feet (ft.) or meters (m.)
Orientation - For cavity nests only, specify the orientation that the entrance hole faces.
N - North S - South NE - Northeast SW - Southwest
E - East W - West SE - Southeast NW - Northwest
Opening Width - For cavity nests only, enter the width of entrance hole opening; specify inches (in.) or centimeters (cm.)

Multiple Nest Visits (Column) Codes

1-2. Date & Time—Record month, day, and time (to nearest hour) of each nest visit.
3. # Eggs*—Record number of host eggs counted (enter cowbird info in column 10).
4. # Live Young in Nest*—Enter number of live young of host species in the nest.
5. # Dead in Nest*—Enter number of dead young of host species in the nest.
For columns 3, 4, 5, and 10, enter "X" to indicate eggs or young are present, but exact number is unknown. If nest contents are not visible, enter "U" for unknown.
6. Nest Status—Describe status of nest at each visit.

- NO = no nest
- IN = incomplete nest
- CN = completed nest
- DN = damaged nest
- RN = nest removed, remover unknown
- AN = another nest found in same site (begin new attempt)
- NN = non-avian nest found (describe in comments)
- FN = flattened nest with fecal matter

7. Adult Activity—Describe activity of adults seen or heard near nest for each visit.

- NO = no adults seen
- BA = building nest or carrying nest material
- DA = dead adult(s)
- FA = feeding young
- AA = at, on, or flushed from nest
- RA = remained on the nest

8. Young Status—Describe development of young birds.

- HY = hatching young
- NY = naked young
- DY = down present
- PY = partially feathered
- FY = fully feathered young
- YY = fledged young outside of nest
- VY = vocal young, heard only

9. Management Code—Describe human management activities at the nest site for this visit.

- NO = no management activity
- PC = pest control (e.g. wasps, ants, mice, etc.)
- CB = cleaned box/removed host nest
- RC = removed competitor nest/eggs/young
- PN = plugged/closed off nest box
- UN = unplugged nest box
- BY = banded young at nest
- BD = banded adult
- RE = removed unhatched eggs

10. Cowbird Evidence—Record evidence of cowbird parasitism. Include number of cowbird eggs, and live and dead cowbird young, if known. (EX: 2E, 1LY, 1DY = 2 eggs, 1 live young, 1 dead young).
11. Observer Initials—Record initials of nest monitor.
12. Comments—Check box if additional comments are noted.
13. Outcome—Describe outcome as Success (S), if at least one young fledged; Failure (F) if no young fledged; or (U) if Unknown. Include total number of young fledged, if known.

NestWatch Protocol for Monitoring Nests

We recommend a maximum of 8−10 visits spread out over the course of the nesting attempt. As a general rule, if you check nests every 3-4 days, you will be closely following the protocol below.

Intelligent planning of nest checks makes daily visits unnecessary. The protocol described below is intended to gather the most meaningful data without causing unnecessary disturbance to the birds. Although it may be tempting to visit nests more often than suggested, please try to keep disturbances to the nesting area to a minimum.

Nest Building (one visit, if possible) If you are fortunate enough to find an active nest while it is being built, be sure to record the status of the nest on the worksheet.

Egg Laying Period (one or two visits) Make at least one visit during egg laying, preferably in the afternoon. If you find a nest with eggs, go back three days later to determine if the number of eggs has changed. This will help determine first egg date and the egg laying rate. For songbirds, the typical laying period lasts between three and eight days, with eggs laid one per day, usually early in the morning. The female typically begins incubating eggs on the day before she lays her last egg. For example, if two eggs are in the nest on May 10 and four eggs on May 13, then counting backward one egg per day, we know the first egg was laid on May 9. The second egg was laid on May 10, the third on May 11, and the fourth and last egg on May 12.

Whenever possible during nest checks, wait for the female to leave the nest rather than flushing her off. Record the number of eggs, if known, along with any adult activity you observed, on your worksheet.

Incubation Period (two visits) Make two visits, preferably in the afternoon. We suggest one visit at the middle and one at the end of incubation to determine complete clutch size and whether eggs have been lost. Most songbirds incubate eggs for 11 to 14 days. Record the number of eggs, if known, along with any adult activity you observed, on your worksheet.

Hatching Period (one visit) Visit once at or just after hatching to pinpoint the timing of hatching and determine the number of hatched eggs. Most songbird eggs hatch within 24−48 hours of each other. If you see adults carrying food, this is a good sign that eggs have hatched. Check the nest contents and record the number of eggs, observed adult activity, and status of young on your worksheet.

Nestling Period (two visits) Visit once when young are thought to be between five and seven days old to determine their development and survivorship. Visit again three or four days later to get an estimate of the number of young likely to fledge.

Do not open nest boxes or disturb nests with fully feathered young, as this can cause premature fledging. Once the young are fully feathered, you can check the nest from a distance with binoculars to determine if the parents are still actively feeding the young.

Typical songbird nestling periods last approximately two to three weeks. Record your observations for number of eggs (if any), observed adult activity, and status of the young on your worksheet.

Fledging Period (one visit) Visit once to determine success or failure of nests. Do not open nest boxes or disturb nests that have fully feathered young, as this can cause premature fledging. Most songbirds fledge within one to two days of each other.

Check the nest from a distance and look around for the adults. If they go to the nest carrying food, the young have not yet fledged. If they go somewhere else, it is likely they are feeding the young in nearby vegetation.

If you are certain the young have fledged, check the nest and make sure it looks intact, i.e., flattened, and in some cases covered in fecal matter. If it appears disheveled or depredated, describe what you see on your data sheet and look for any signs of the nestlings (feathers, body parts, bones) in the area surrounding the nest site.

If you suspect predation has occurred, try to determine the predator by looking around the nest site for clues. If adults are still present, continue monitoring their activity as they may try to nest again. Record the outcome, estimated number of fledged young, and additional comments for the nest attempt on the worksheet.

Post Fledging Period (one visit) Visit the nest one last time after you are certain that all the young have fledged to determine if any unhatched eggs or dead young remain. Record additional comments for the nest attempt on the worksheet.

Stay alert—birds that raise more than one brood per season may nest again nearby. If possible, try to keep monitoring nests to the end of the season, August or September. If you find another active nest, please follow the same protocol. Use a separate worksheet for each new nest attempt.