

# ANNUAL BIRD NESTING SURVEY SUMMARY

For two years the BRAW Form 21 has been modified to attempt to eliminate problems related to recording data, but 10% of the reports are still being turned in with mistakes. We are therefore altering the form once again to attempt to eliminate these mistakes. We are asking that you record all eggs laid and chicks hatched that resulted in the first successful set of fledglings in Column 1 (includes eggs laid but not hatched and eggs hatched but not fledged) and only then move on to Column 2. In column 2 put all eggs laid and chicks hatched that resulted in a second set of fledglings (includes eggs laid but not hatched and eggs hatched but not fledged) and only then move on to Column 3. In column 3 put all eggs laid and chicks hatched that resulted in a third set of fledglings (includes eggs laid but not hatched and eggs hatched but not fledged). A worksheet example is found on the reverse side of this sheet. We ask that you provide complete data (including eggs and hatchlings). Moreover, BRAW monitors are expected to collect data from each of the songbirds below and to protect their nests. Data sheets with incomplete information on either bluebirds or other songbirds will not be included in the BRAW Annual Report.

Please return this completed form by September 15 to BRAW, Inc., c/o Dr. Kent Hall, 200 Pine Bluff Rd., Stevens Point, WI 54481.

Any reports received after Oct. 10 will not be included in the Annual Report.

Name \_\_\_\_\_

Address: \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone (\_\_\_\_\_) - \_\_\_\_\_

Email Address: \_\_\_\_\_

County where boxes are located? \_\_\_\_\_

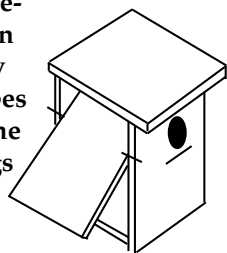
Use a separate Survey Summary form for each county.

Total Boxes Monitored: (Sum of used & unused) _____
Number of bluebirds fledged: _____
Number of boxes unused by any species (including House Sparrows) during the current season: _____
Number of boxes with at least one bluebird egg laid in them: _____
Number of boxes with a House Sparrow Problem: _____

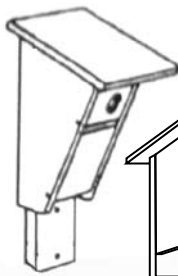
Songbird Data*	All Bluebird Nesting Attempts			Tree Swallow	House Wren	Black-capped Chickadee
	All 1st Fledged Nests of Chicks	All 2nd Fledged Nests of Chicks	All 3rd Fledged Nests of Chicks			
<b>All Nest Attempts:</b> Number of nests in which at least one egg was laid.						
<b>Egg Count:</b> Total number of eggs laid for all nests, including those that don't hatch.						
<b>Hatchlings:</b> Total number of eggs hatched for all nests.						
<b>Fledglings:</b> Number of young birds that fledged from all nests.						
<b>Successful Nest Attempts:</b> Number of nests in which at least one young bird fledged from a nest						

\* Put data TOTALS only in the above data rectangles

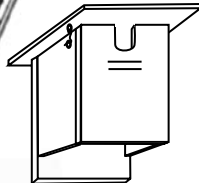
Many box types are being used by Wisconsin bluebirders. But only the following box types had averages above the 3.5 bluebird fledglings per box for the 2006 season: NABS-Style, Peterson and K-box.



NABS style



Peterson



K-box

Type of mounting system used: \_\_\_\_\_ T-shaped fence post \_\_\_\_\_ U-shaped fence post \_\_\_\_\_ Conduit/Rebar

Do you use predator protection for your mounting system? \_\_\_\_\_ PVC \_\_\_\_\_ Aluminum \_\_\_\_\_ Other \_\_\_\_\_ None

\_\_\_\_\_ The USFWS guidelines for active nests were followed while monitoring the nests of all songbird species during my/our study (please check).

## Worksheet Example of Form 21

For two years the BRAW Form 21 has been modified to attempt to eliminate problems related to recording data, but 10% of the reports are still being turned in with mistakes. We are therefore altering the form once again to attempt to eliminate these mistakes. We are asking that you record all eggs laid and chicks hatched that resulted in the first successful set of fledglings in Column 1 (includes eggs laid but not hatched and eggs hatched but not fledged) and only then move on to Column 2. In column 2 put all eggs laid and chicks hatched that resulted in a second set of fledglings (includes eggs laid but not hatched and eggs hatched but not fledged) and only then move on to Column 3. In column 3 put all eggs laid and chicks hatched that resulted in a third set of fledglings (includes eggs laid but not hatched and eggs hatched but not fledged). We ask that you provide complete data (including eggs and hatchlings).

Moreover, BRAW monitors are expected to collect data from each of the songbirds and to protect their nests. Data sheets with incomplete information on either bluebirds or other songbirds will not be included in the BRAW Annual Report.

Songbird Data*	All Bluebird Nesting Attempts			Tree Swallow	House Wren	Black-capped Chickadee
	All 1st Fledged Nests of Chicks	All 2nd Fledged Nests of Chicks	All 3rd Fledged Nests of Chicks			
<b>All Nest Attempts:</b> Number of nests in which at least one egg was laid.	Box #1: 4 Box #2: 3 Box #3: 1 Box #4: 1 Box #5: 1 <b>Total: 10*</b>	Boxes #1, #2 and #3 have no data for this column Box #4: 1 <b>Total: 1*</b>	Boxes #1, #2, #3 have no data for this column Box #4: 1 <b>Total: 1*</b>	Box #3: 1 <b>Total: 1*</b>		
<b>Egg Count:</b> Total number of eggs laid for all nests, including those that don't hatch.	Box #1: 4,4,4,4 = 16 Box #2: 4,4,4 = 12 Box #3: 3 Box #4: 6 Box #5: 5 <b>Total: 42*</b>	Box #4: 5 <b>Total: 5*</b>	Box #4: 4 <b>Total: 4*</b>	Box #3: 6 <b>Total: 6*</b>		
<b>Hatchlings:</b> Total number of eggs hatched for all nests.	Box #1: 4 Box #2: 4,4,4 = 12 Box #3: 3 Box #4: 5 Box #5: 0 <b>Total: 24*</b>	Box #4: 5 <b>Total: 5*</b>	Box #4: 3 <b>Total: 3*</b>	Box #3: 6 <b>Total: 6*</b>		
<b>Fledglings:</b> Number of young birds that fledged from all nests.	Box #1: 4 Box #2: 4 Box #3: 3 Box #4: 5 Box #5: 0 <b>Total: 16*</b>	Box #4: 5 <b>Total: 5*</b>	Box #4: 2 <b>Total: 2*</b>	Box #3: 5 <b>Total: 5*</b>		
<b>Successful Nest Attempts:</b> Number of nests in which at least one young bird fledged from a nest (Usually is less than all nest attempts)	Box #1: 1 Box #2: 1 Box #3: 1 Box #4: 1 Box #5: 0 <b>Total: 4*</b>	Box #4: 1 <b>Total: 1*</b>	Box #4: 1 <b>Total: 1*</b>	Box #3: 1 <b>Total: 1*</b>		

**\*Only TOTALS from rectangles are to be put on the front page of the report; do not list individual boxes**

**Box #1:** Bluebird: 4 eggs failed; 4 eggs failed; 4 eggs failed; 4 eggs hatched & fledged


**Box #2:** Bluebird: Clutch of 4 eggs hatch but 4 chicks die; clutch of 4 eggs hatch but 4 chicks die; clutch of 4 eggs hatch and a brood of 4 chicks fledge

**Box #3:** Tree Swallow: 6 eggs, 6 chicks, 5 fledglings; Bluebird: 3 Eggs; 3 chicks; 3 fledged (monitors often put this information under the 2<sup>nd</sup> column, but it is the first bluebird nest in the box and goes in column #1)

**Box #4:** Bluebird: 6 eggs, 5 chicks, 5 fledglings; 5 eggs, 5 chicks & 5 fledglings; 4 eggs, 3 chicks & 2 fledglings

**Box #5:** Bluebird: 5 eggs only; this was not a successful nest, as no fledglings were recorded.

**BRAW management practices that are thought to have improved Eastern Bluebird production on the Audubon and other Bluebird Trails.**

<p><b>Location, Location, Location:</b></p> <ol style="list-style-type: none"> <li>1) Need a territorial forage area of 1-3 acres of predominantly open habitat</li> <li>2) Ideal sites: short, sparse grass with interspersed trees: cemeteries, golf courses, parks, roadsides, bike trails, RR tracks</li> <li>3) Boxes should be totally exposed to sunlight from sunrise until noon; thereafter, shading is permissible</li> <li>4) <b>Perch sites:</b> <ol style="list-style-type: none"> <li>a) Perch sites: a) One or more trees (10' ideal) within 100' (preferably closer) to the front or to one side of nest box (most hunting starts on a perch and these trees are vital for use as survival perches when chicks first fledge)</li> <li>b) Fences (barbed, electric, wooden)</li> <li>c) Electrical wires (no more than 30' high preferred), clothes lines</li> </ol> </li> <li>5) Noisy sites okay (interstates, other roadways, railroads, temporary air shows, church picnics)</li> <li>6) Roadways with limited traffic can be ideal nest box sites and adults and young chicks are rarely killed by traffic.</li> </ol>	<ol style="list-style-type: none"> <li>3) Chicks starving/lethargic: foster into nests with chicks of similar age, + or - 2 days [place with slightly younger, if possible]: 85% reared by adoptive parents in a 4-year study by the Aldo Leopold Audubon Society in central WI</li> <li>4) House Wrens only: The first week leave partial or complete nests in tact. If still no egg nest cup the 2nd week destroy dummy nest. Repeat if necessary. If egg cup or eggs are found in the 2nd week allow natural cycle to continue.</li> </ol>
<p><b>Relocation:</b></p> <ol style="list-style-type: none"> <li>1) Change the nest box position if there has been no bluebird nesting attempt in a season OR</li> <li>2) Change by the end of the following April (75-90% of nest boxes have been occupied by bluebirds by then); if no nesting has occurred by the end of April your 2nd nesting season, it is sign that your site is unappealing to bluebirds. But moving them to better nest sites still gives you a 50:50 chance of occupancy for the season.</li> </ol>	<p><b>Predator Guard on Mounting Pole/Post:</b></p> <ol style="list-style-type: none"> <li>1) Do not put boxes on wooden fence or electrical posts. The cheapest and most convenient mounting system uses 3/4" electrical conduit. Cut 10' conduit to 6'-8" lengths. Flatten 4" at end and bury 18" of conduit. To the remaining 5' conduit attach two 3/4" clamps and screw to box. Two 3/4" pieces can be joined with a coupler to make a 6'-8" post.</li> <li>2) The most effective way to trap House Sparrows is with a Van Ert trap (<a href="http://www.vanerttraps.com/">www.vanerttraps.com/</a>). Usually, the male can be trapped and disposed of, a superior technique to removing the female (see the following). A less effective method for trapping sparrows is recommended by the Purple Martin Conservation Association. Let sparrow hens lay eggs. When they are warm to the touch, hens have started incubating them. Hens can then be caught on the nest by hand at night and disposed of. When capturing the hen take care not to break the eggs. Remove eggs and all nesting material and place the eggs back on the nesting platform and crush them. The male will come to the nest before sunrise and eat all the egg shells, in an apparent attempt to get rid of any negative evidence for attracting another female. Usually, however, the broken eggs spook the male and he does not attract another female, leaving the box available for a songbird nest attempt.</li> </ol>
<p><b>Box Style/Dimensions:</b></p> <ol style="list-style-type: none"> <li>1) In "the wild", bluebirds prefer to occupy old woodpecker holes that are not usually very large</li> <li>2) Shallow, narrow boxes work best:             <ol style="list-style-type: none"> <li>a) 4-5" below the bottom of the hole as maximum depth</li> <li>b) 4 x 4", 4 x 5" nesting platform (inside dimensions)</li> </ol> </li> <li>3) No vents or keep vents closed until June 1 to prevent windchill from killing eggs and/or chicks</li> <li>4) Oval hole small enough to keep out starlings &amp; cowbirds</li> <li>5) Don't use predator guards on box fronts (too thick for bluebirds) or perches on boxes (used by predator birds such as sparrows &amp; kestrels). Instead, use a predator guard on your mounting post or make the mounting post your predator guard (3/4" electrical conduit preferred).</li> </ol>	<p><b>Direction of Opening:</b></p> <ol style="list-style-type: none"> <li>1) Keep away from prevailing westerly winds (cools boxes)</li> <li>2) Use the same direction for all boxes</li> <li>3) Cornell University has determined that directing the opening of a nest box to the <b>northeast, east or southeast</b> improves the fledging rate of Eastern Bluebirds in northern latitudes. Apparently, boxes pointed in that direction, heat up more quickly in the mornings in cold weather but do not collect as much heat from a southern exposure in summer.</li> </ol>
<p><b>Spacing:</b></p> <ol style="list-style-type: none"> <li>1) Space no closer than 100-200 yards (1-3 acre territories); encourages Tree Swallow occupation if boxes are placed closer than this</li> <li>2) Pairing reduces bluebird and increases swallow production/box</li> </ol>	<div style="text-align: center;">  <p><b>Bluebird Restoration Association of Wisconsin</b></p> <p><a href="http://www.braw.org">www.braw.org</a></p> </div>
<p><b>Nest, Egg &amp; Chick Removal for bluebirds, chickadees, Tree Swallows (1,2,3) and House Wrens (4): Procedures approved by USFWS in Dec., 2006</b></p> <ol style="list-style-type: none"> <li>1) Partial or complete nests w/o eggs: 1st week; 2nd, 3rd, 4th weeks, no change, then remove; restart week count if more building occurs; if wet, remove, replace with dry, fine grass or pine needles (white pine preferred)</li> <li>2) touch eggs each week; if they are warm, they are being incubated; if they then turn cold, they have been abandoned and are dead; remove cold eggs with nest and the same or a different hen will usually be back building a nest within a week or two.</li> </ol>	



