

## Monitoring Protocol

- Getting set up
  - All nest boxes should be mounted on poles and equipped with the snake guards (stovepipes) and raccoon guards (Noel guards). No perch on the box.
- When to Monitor
  - Once per week April through August during the same three-day period (e.g. Fri/Sat/Sun or Sat/Sun/Mon).
  - Monitor during calm, mild or dry weather to prevent the chicks from being chilled when you open the door. Don't monitor in the rain – it's not much fun and the eggs/chicks can get chilled when you open the door.
- How to Monitor
  - Begin with reviewing the **Nestbox Monitoring Form** (one per nestbox) to see what happened the previous week. Double check that you have the right checksheet for the box you're checking, then enter today's date.
  - Approach each box quickly and quietly.
  - Take note if adult birds are present and what they are doing.
  - Tap on the side of the box but do not stand in front of the box in case an adult flies out.
  - Open the box. (Note: do not open the box when the nestlings are 13 days or older. This may cause them to fledge prematurely. When in doubt of the age – do not open the box.) The female may stay sitting on the nest when you open the box. If she does not leave, do not disturb her, just note it on the form.
  - When you are able to look into the nest take note of the following:
    - Species (BB=bluebird, TS=tree swallow, CH=chickadee, TT=tufted titmouse, HW=house wren, HS=house sparrow)
    - empty box, partial nest or complete nest (note: if you see a definite house sparrow nest, remove it)
    - the number of eggs or nestlings present (try to get an accurate count)
    - approximate age of the nestlings (use chart and calendar to estimate age)
    - # fledged
  - Close the nest box, tighten screw/latch, make sure box is securely closed. Walk away quickly to allow the parents to return to the box.
  - After you have walked away, fill information into the Nestbox Monitoring Form and include any comments that may help other monitors on your team. Be as clear as possible. Note any repairs needed to the box as appropriate. And, note problems that you see in the comment section of the data sheets. Problems or other comments may include:
    - Ant, mite or blowfly predation
    - Bees or wasp competition
    - House wren competition

- Cat or raccoon predation
- Snake or mice predation
- Tree Swallow competition (pair the box)
- House sparrow competition/predation (remove the nest)
- Chemical/pesticide spraying in the area
- Excessive heat, cold, rain
- Unusual human activity, vandalism
- Infertile eggs
- Eggs that disappear
- Albino chicks or adults or excessive white feathers on any of the birds
- Squirrel or woodpecker at the box, hole or gnawed side
- Bat or flying squirrel inside the box
- If there's a problem you can't figure out, document it as "unknown" and call it to the attention of others

EXAMPLE: It's April 20th and you've already gone out monitoring one week previously. You are going on your monitoring walk and are at box #1. This would be the sheet specific to box #1. You notice that there is a bluebird darting above your head and look inside to see a complete nest with 2 eggs in it. There's also a cat "monitoring" the area. Luckily you have the proper guards on the nest box pole so you're not too worried about the cat just yet. Here's what you'd fill in:

**Nestbox Monitoring Form**  
(example of data entry for a box on your trail)

Month	Day	Species Seen	Empty Box	Partial Nest	Complete Nest	# Eggs	# Young	Age of Young	# Fledged	Comments
4	5	BB		X						male flying above box
4	12	BB			x	2				male and female sitting on box

After completing the entries for this week on this sheet, you move to the next box, do your checking, and fill in the entries on the Nestbox Monitoring Form for Box #2.

- After the chicks have fledged from the nest, clean out the box so it's ready for use again.
- After the monitoring has been completed for the year, the nest boxes should be prepared for winter. This could include removing any old nests, cleaning out the boxes, placing some new dried grass in the bottom of that box as insulation, or other winterizing activities.

- The final activity for the season is to report the data. To do this, the Trail Leader completes the **Trail Summary Form**. This sheet tallies all of the species, the number of nests, eggs, hatched and fledged for the season. The Trail Summary sheet should be completed as quickly as possible at the end of the season and sent to the Loudoun County Coordinator by September 15<sup>th</sup> so that the data for all of the Loudoun County trails can be compiled and sent to the Virginia Bluebird Society in a timely manner.

Happy Bluebirding!