# Prothonotary Warbler Nest Box Project and Color Banding Surveys 2023 report

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Total Nest Box Monitoring Hours: 44.5 by Joanne and Craig Simmons, Jessy Oberright

Total Prothonotary Survey Hours: 2 by Rick Smith

## **PROJECT GOALS:**

- Increase conservation efforts at our parks where there is suitable habitat for Prothonotary Warblers (PROW).
- Involve the public by providing volunteer opportunities.
  - Monitor nest boxes
  - Build and install boxes
  - Data entry
  - Boardwalk surveys for color banded birds
- Increase public awareness by having some of the nest boxes visible from trails.
- Provide important data to researchers at Cornell.
- Install & monitor more boxes at additional park properties as they are acquired.
- Long term: determine a study we could do with PROW that may involve banding and perhaps even a nanotag.

#### SKILLS NEEDED

- Ability to collect detailed information and report it using a home computer or the NestWatch smart phone App.
- Can correctly identify nests and birds that are likely to use our nest boxes (Eastern Bluebirds, Carolina Wrens, Carolina Chickadees, Prothonotary Warblers, and Wood Ducks).
- Able to hike at least a mile. Some of our nest boxes are easily accessed and others are more challenging, and the hike could be strenuous.

#### **Optional, but Preferred, Skills**

- Using the NestWatch App, Volunteers can instantly report the nest box data rather than writing it in a notebook and uploading it to the website on their home computers.\*
  - \* Cell phone signal is spotty in some of the parks, so an alternative is to use one of the "Rite in the Rain" notebooks provided to record nesting data and enter it all at once using the app when the volunteer is back at their vehicle. This also helps prevent phones from being dropped into the swamp.
- Able to use hand tools like loppers, pruners, screwdrivers, or drills to make repairs to boxes or to clear branches from the surrounding area.

# **REQUIREMENTS & EXPECTATIONS**

- Volunteers will be exposed to ticks, chiggers, mosquitoes, bees/wasps, poison ivy, bad weather, and other wildlife such as an occasional snake that may be able to reach the box.
- Due to varying challenges with each nest box trail, there are different minimum ages recommended for each. For safety reasons and to insure data is correctly reported, a supervising adult needs to accompany children under age 18.
- Volunteers may work independently or in family teams.
- Understand that "zero" or "no eggs" are important data, and that there could be times when all nest boxes are empty. It also helps establish beginning and end of season dates.
- After the initial training, volunteers should commit to at least one monitoring day per month throughout the nesting season.
- Although dogs are permitted at many of our parks, they should not accompany volunteers during nest box surveys.

## **VOLUNTEER DUTIES**

- From March August, at least once/month, volunteers will check all nest boxes at the site(s) they have committed to.
- They will note stage of nest, number of eggs, age of young, adult behavior, any pests present, and repairs that need to be made. Data will need to be submitted either using the NestWatch App or website.
- Occasionally, nest boxes will need to be replaced or repaired using hand tools or a batteryoperated drill.
- If the volunteer feels comfortable doing so, they may occasionally have to evict ants, wasps or snakes from the nest boxes. So far we haven't had issues with House Sparrows or Cowbirds.
- At Cypress Swamp, volunteers need to wear chest waders to access half of the boxes and will also check the Wood Duck Boxes since they are in the same general area.
- We also have need for volunteers to do trail maintenance along the access paths and trim back branches around the nest boxes.
- MD-DC Breeding Bird Atlas (2020-2024): Volunteers are also encouraged to record their bird sightings and breeding behaviors on eBird for the Maryland-DC Breeding Bird Atlas by using the "MD-DC BBA" portal found under the eBird settings.

#### **VOLUNTEER TRAINING**

- Interested volunteers should attend one of the training opportunities offered at each site they're interested in monitoring.
- Afterwards, they will be qualified to sign up to monitor the nest boxes at that location as often as every 3 days within the nesting season. They do NOT need to requalify every season unless there are major changes to the nest box locations or to the NestWatch App and Website.
- At the beginning of the season, nest box maps and monitoring instructions are emailed to veteran nest box volunteers as a refresher.
- Volunteers can request a "Volunteer Parking Placard"
- Volunteers may be asked to take a nest photo quiz with eggs and various sizes of nestlings to volunteers as part of their qualification.

#### RECOMMENDED STAFF TRAINING

• Gene obtained his own Master Banding Permit through the Bird Banding Lab.

# **PROJECT DATES**

- March: If there are major repairs or new boxes that need to be installed, we usually have a nest box work day to accomplish that. We have a stockpile of nest boxes in the barn by Sixes Rd. Trainings are offered at each site this month too.
- March-June: monthly trainings are offered at each park.
- March August: Nest boxes need to be checked at least once a week but can be checked as
  often as every 3 days at each site. On their monitoring days in 2020-2024, volunteers can also
  record data on eBird for the MD-DC Breeding Bird Atlas. Volunteers will sign up for monitoring
  opportunities using the Galaxy Digital Volunteer Portal.

### 2023 SUMMARY OF ACTIVITIES

#### Ward

This year we once again did not have any successful Prothonotary nests at Ward Farm. There were no nest attempts by Prothonotary Warblers at this site in 2023 and this is most likely due to the habitat destruction associated with the clearing for the staging area and dam updates in the vicinity of this box. We also did not capture any Prothonotary Warblers during our MAPS banding program at Ward Farm which may support the cause being the excessive clearing. Eastern Bluebirds and Carolina Wrens were documented as attempting to nest in some of the boxes as well.

#### **Battle Creek**

We had one successful Prothonotary nest at Battle Creek Cypress Swamp. This box fledged 5 nestlings. Gene was able to band the 5 nestlings with USGS bands (numbers 2880-79526 through 2880-79530). We will no longer use color bands on nestlings as a color banding project on Prothonotary Warblers in Ohio showed extremely low return rates for color banded nestlings due to their low survival rate.

Gene added 2 new nest boxes on new poles near the location where the PROWs were seen attempting to nest in the natural cavity in the cypress knee. Gene also used 1 1/8" entrance holes on these two boxes instead of the 1 ½" entrance holes. The study in Ohio showed PROWs still used this size and it would help keep larger species from using the box; this may be an option to reduce the amount of Eastern Bluebird competition. Neither of these boxes had successful nesting attempts but there was some nesting material in box 15 and also a few Prothonotary body feathers were found in box 14. Eastern Bluebirds and Carolina Wrens were documented as attempting to nest in some of the boxes as well.

Gene did not receive any reports from survey volunteers of color banded Prothonotary Warblers being seen at Battle Creek. Gene also did not observe any this year. However due to the fire at BC the volunteers may not have conducted as many surveys. Gene was not able to do nearly as many surveys as he has in the past due to working at Flag Ponds as the main base.

Gene banded 2 adult PROW at Battle Creek with USGS bands and unique color bands.

- 6/3/23 during a public program, Marker 27, AHY Male, Right leg lower: USGS metal band 2880-79531 Right leg upper: white plastic color band, Left Leg blue plastic color band
- 6/27/23 during Birding Adventures Summer Camp, Marker 9, AHY Male, Right leg lower: USGS metal band 2880-79532, Right leg upper: white plastic color band, Left leg: green plastic colorband

#### Flag Ponds

We had no Prothonotary Warbler nest attempts at Flag Ponds. Carolina Wrens and Eastern Bluebirds were seen nesting in the nest boxes.

## VOLUNTEER RECOGNITION AND APPRECIATION

Gene invited nest box and survey volunteers to nestling banding events but only had one nest to band. Gene also was able to do limited adult trapping days since he was not working at BC. Next year he will invite volunteers out for the adult bandings days as well as a thank you for conducting surveys. Only Rick conducted surveys and he only logged 2 hours. Gene may try to find some Prothonotary Warbler stickers to give to volunteers.

Would like to think of other fun bird related field trips that we could offer as a thank you event.

#### **FUTURE PLANS**

- Install new boxes with smaller holes to hopefully eliminate or reduce competition from Eastern Bluebirds.
- Promote the survey opportunity to more volunteers as well as teen birders in our area.
- Create signage and possible a QR code to be put along the boardwalk or in the nature center to get more visitors to participate in the surveys.



# CALVERT STEWARDS

# **VOLUNTEER PROGRAM**

A partnership between Calvert Nature Society and Calvert County Natural Resources Division

# 2023 Annual Report

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Volunteer Portal: <a href="https://calvertstewards.galaxydigital.com/">https://calvertstewards.galaxydigital.com/</a>
Calvert Nature Society: <a href="www.calvertparks.org">www.calvert County Natural Resources Division:</a>
www.calvertcountymd.gov/NaturalResources





