

Help Track our Nuthatch Reintroduction on Jonathan Dickinson State Park

The squeak of the Brown-headed Nuthatch has returned to *Jonathan Dickinson State Park*. This small songbird was eliminated from the park over 60 years ago, but a reintroduction attempt was launched in late August when biologists from Tall Timbers Research Station released 10 juveniles near the Elsa Kimball Environmental Education and Research Center. The birds were taken from Sebastian River Preserve State Park, and at least two pairs had established territories near the Ed Center.



We're hoping local birders and park visitors will help track of the reintroduction effort using binoculars, keen ears, and a specially designed phone app to report any sightings you have of these newest members of the park's birdlife. Here's how....

Background

The Brown-headed Nuthatch is a small songbird that weighs about as much as 2 quarters (10 grams). It is smaller than a sparrow, but it has a loud, distinctive call that can be heard from 100+ m. The primary call sounds like a squeaky rubber ducky toy, but the birds have an elaborate repertoire of softer contact notes, warning calls, and even sex-specific vocalizations that can be used to distinguish males from females. If you're unfamiliar with the nuthatch, use this [link](#) to learn more about their calls and other identification keys.

Gathering Location Information

If you hear their squeak, let us know! Recording locations where you see or hear nuthatches as you explore the park can help monitor the progress of the reintroduction. We know some nuthatches may roam some distance away from release site. You may happen upon the very spot where a dispersing bird has decided to stake its claim and provide us with key information needed to track those individuals.

We created a mobile form (described below) that can be used on smart phones and tablets to record the locations where you see or hear nuthatches (as well as the number encountered and other information). You may also simply drop a pin using your smartphones mapping functions and send the pin to jcox@talltimbers.org. We'll follow up on youe observations and others during our frequent visits over the coming months.

Color-marked Individuals

If you have a steady hand and a good pair of binoculars, you can also provide information on the specific individuals you see. Each nuthatch was given a unique combination of colored leg

bands before they were released. One leg will have a single colored metal band (with a unique number). The other leg will have a single colored plastic band (see **Figure 1** on next page). The metal bands are longer and have a distinctive sheen when seen through binoculars. The plastic bands are wider and lack the sheen. There are 4 types of colored metal bands and 7 types of colored plastic bands used:

Orange metal
Purple metal
Green metal
Silver metal

Black-white plastic
Blue plastic
Green plastic
Orange plastic

Red plastic
Red-white plastic
White plastic

Figure 1. The color bands are recorded separately for the left leg (LL) and the right leg (RL). The four nuthatches shown clockwise from the upper left would be recorded as (1) white plastic (LL), orange metal (RL); (2) silver metal (LL), red-white plastic (RL); (3) white plastic (LL), green metal (RL); and (4) purple metal/orange plastic.

The birds shown are “upside down” compared to how they will be seen in the field. That is, the legs are flipped with the bird’s left leg appearing on the right side of the photo and right leg appearing on the left side of the photo. It will be much easier to keep track of the left and right legs once you have an opportunity to watch birds from the ground.



White plastic/orange metal



Silver metal/red-white plastic



White plastic/green metal



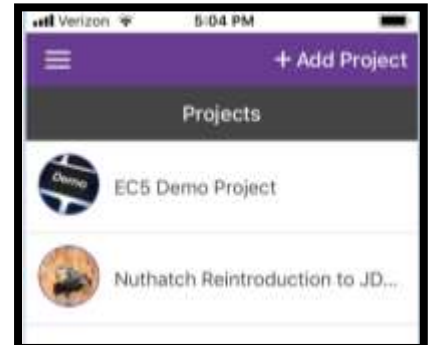
Purple metal/orange plastic

Mobile Form

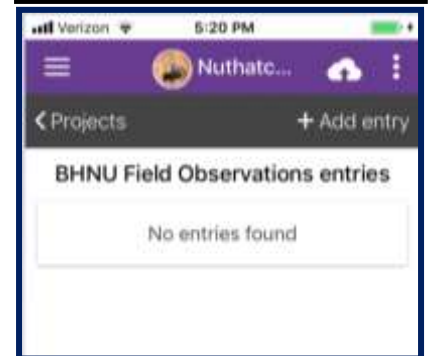
To help keep observations consistent, a mobile form was developed that anyone can download and use with tablets and mobile phones. The form was developed using *Epicollect*, a free software package used to collect information for hundreds of citizen-science projects worldwide

Step 1: download Epicollect5 from Google Play or the Iphone AppStore

Step 2: Once downloaded, click the “add project option” on the upper right hand corner and then search for “nuthatch”. The *Nuthatch Reintroduction to JDSP* project will appear and can be downloaded to your phone. Once this is completed, your *Epicollect App* should list 2 projects available on your device as shown to the right. The *EC5 Demo Project* is a default project that helps to show some of the features of *Epicollect*.



Step 3: Launch the *Nuthatch Reintroduction* form and the screen should provide you with a new window where field observations can be entered (shown to right). BHNU is the four-letter acronym that bird watchers often use for **B**rown-**h**eaded **N**uthatch. *Epicollect* collects and stores data on your phone or tablet, so there will not be any entries until you collect and save your first observation of nuthatches on JDSP (described below). The level of detail you provide can be as simple as hearing or seeing a single individual or as complex as actually getting information on the leg color bands.



If you encounter nuthatches, it's best to spend time watching the birds carefully and recording field observations on a notepad or field notebook before entering the information into the mobile form. Following an individual or a group for several minutes before stopping to enter data is fine, too, because we don't need extremely precise locational data at this stage. Accumulating records within 100 m of where the birds are initially encountered will help tremendously.

Once you are ready to enter an observation, hit the “Add entry” button and you'll be prompted to work through a set of 5 different windows labeled **Steps 1-5**

Step 1 provides places to enter the *Date*, *Time*, *Number Seen*, and *GPS* location of the observation. Date and Time are automatically calculated. The number seen has to be at least 1 individual (we're interested only in locations where birds are seen or heard) but may be as many as 5.

To capture the GPS location, tap on the “Update location” and the lat-long coordinates as well as the estimated precision will be collected and shown. *If the precision is greater than 150 m, please press the Update location” button again and then again until the precision is less than 100 m.*

Steps 2-4: The next 3 windows provide places to record the color band combinations for up to 3 individuals observed at this location. If don’t record the color bands, skip through to step 5, but if you do....

The 11 different types of color bands (4 metal; 7 plastic) are listed as options for each leg. Scroll to the correct one and then press “Done” when you have it selected. The “??” option shown is for situations where you identify the color leg bands on one leg but then do not get the color lband recorded for the other leg. Just having one leg correctly identified is often sufficient, so do the best you can and record just exactly what you see (or don’t see) each time. Once you’re done, you can click the “Next” button to scroll over to add leg band combinations for up to 2 more different individuals.

Step 5: the final window provides a place for additional notes you might have as well as to list any specific behaviors observed.

Allopreening: occurs when one individual strokes the head, neck, back, and shoulders of another individual. Typically observed during morning hours and also may go on for 10+ minutes.

Seed caching: individuals placing a seed under a scale of bark on a pine tree.

Tool usage: individual using a stick or pine needle to probe beneath a bark scale or in the bundle of needles that occur at the tips of limbs.

Excavation: working on a cavity in a dead limb or bole.

Roost site: birds seen entering or leaving a cavity in a tree (early in AM or late in PM). This time of year those are potential roost sites

FINAL IMPORTANT STEP

Once you have logged your observations, hit the “Save entry” and then hit the “Upload now” button to move the data onto the Internet. You can store lots of observations on your phone and then sync them at a later time, but those observations will reside on your phone until you transfer them to the web. Once the data have been uploaded, you can also delete the observations on your phone to clear space. You can also look at the data you have collected along with data that others have collected on the project’s web site:

<https://five.epicollect.net/project/nuthatch-reintroduction-to-jdsp>