

Painted Buntings on the Rebound?

Citizen Science Helping Solve Mystery

by Leah Fuller

The latest “State of the Birds” report, released March, 2010, warns that almost a third of our 800 North American bird species are either endangered, threatened or in significant decline. However, new data collected here in the Carolinas indicates things may be looking up for the Painted Bunting.

Backyard birders along coastal North Carolina and coastal and inland South Carolina frequently spot a vividly colored, finch-like bird at their feeders. “They often mistake it for an escaped, exotic bird—but it’s actually a native species,” says Dr. Jamie Rotenberg, a UNC–Wilmington professor who specializes in bird conservation. He says Wilmington—and the entire Cape Fear Coast—are within the breeding range of the Painted Bunting (*Passerina ciris*).

The adult male Painted Bunting is easily identifiable by his red breast, green back and indigo-blue head. Females, and young males up through their second year, are a bright, parrot green. This green

color serves as the perfect camouflage for nesting female Painted Buntings and their young in the low-lying, dense vegetation they commonly inhabit. This type of vegetation, known as “shrub-scrub,” is becoming harder to find along coastal Carolina, as development and changes in agricultural practices have eliminated a large portion of this habitat. Breeding Bird Survey (BBS) data collected for the Patuxent Wildlife Research Center showed that Painted Bunting populations in the southeast were declining at about 3.2% per year over the 30-year period ending 1999.

So in early 2005, Rotenberg and other enthusiasts created the Painted Bunting Observer Team (PBOT) as a grassroots campaign to learn more about the health of the Painted Bunting population in the Carolinas. Because Painted Buntings are easily attracted to backyard feeders, organizers hoped Wilmington area birders could report sightings at their feeders and help figure out what was happening to the colorful bird. By that summer, the group had grown to 60 volunteers who routinely emailed sightings and photos to the team’s web site (www.paintedbuntings.org).

Today, PBOT has more than 600 members in North and South Carolina and Florida who have reported over 30,000 sightings to the PBOT web site. This open and collaborative approach to research, known as “citizen science,” allows the team to learn about Painted Bunting populations in a variety of locations that might not otherwise be included in traditional research: urban, suburban; private and public areas.

This method also serves to spread information about conservation of the colorful birds and their vital habitat to a large audience of active and invested birders across the region. Citizen science is not new to bird studies;



photo by Buddy Campbell

This female Painted Bunting shows her fledgling what a great food source a backyard feeder can be. Both male and female Painted Buntings are green through their second year, after which the males will molt into their colorful adult plumage, while the females remain green.

other successful collaborations between researchers and backyard birders include Audubon’s Christmas Bird Count, and the Cornell Laboratory of Ornithology’s Great Backyard Bird Count.

Since the spring of 2006, researchers have also banded over 2300 Painted Buntings to help identify and track individual birds more effectively. Each



photo by Debra Carr

Painted Buntings will find something to eat in most basic seed mixes but, like this male, they enjoy white millet the most. The male Painted Bunting is easy to spot with his indigo blue head, green back and red breast.



Sat., May 22:
Painted Bunting
Workshop
9:15–10:30 a.m.
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bird is carefully caught, then banded with a unique combination of three colored bands and one numbered aluminum band provided by the North American Bird Banding Program before being released. Sightings and recaptures of the banded birds reveal specific information such as lifespan, migration patterns, and reproductive success.

Painted Buntings are neotropical migratory birds that remain in the Carolinas from mid-April through the end



photo by Debra Carr

John Stanek, a member of the PBOT banding team, collects a Painted Bunting from the cage trap to take body measurements and carefully attach two bands to each leg before releasing the bird.

I often like to say "I'd be a fool if I didn't have my feeder clean and filled by April Fool's Day!" Our Painted Buntings return to the Carolinas around mid-April every year, so the first few weeks of April are always a great time to make sure your feeder and birdbath are clean and full. Painted Buntings are not picky eaters, but they will reward you with many visits if you provide white millet in the feeder. Most importantly, leave some of that low-lying shrub-scrub vegetation that is emerging in your yard for these beautiful birds to nest in!

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of September. The extent of their travels is easy to see with the new banding program. In the winter of 2009 a homeowner in Stuart, Florida reported a banded bunting at her feeder. After checking records, Rotenberg found the bird had been originally captured and banded the previous summer on Bald Head Island—nearly 700 miles away.

"Banded birds also help PBOT volunteers answer one of their own most frequently asked questions—Are these the same birds returning to my feeders each year?" says Rotenberg. By spotting these uniquely marked individual birds, he says PBOT volunteers can now answer that question for themselves. "That bird returned to the same feeder in Stuart this year."

In order to make reliable estimates about the health of the Painted Bunting population, PBOT's banding program will continue for at least 3-4 additional years. Meanwhile, preliminary banding results for North Carolina show a significant trend towards increasing populations. In addition, PBOT volunteers in North Carolina are reporting bird ratios at their feeders of about 1/3 adult males to 2/3 females and young males—a healthy proportion. If any one of these age groups or sex groups were declining, those ratios would be skewed. To corroborate the PBOT data, more recent BBS data from Patuxent now shows the same trend. "The good news is tempered by the fact that we don't know why the population is rebounding," says Rotenberg. "Is it more bird feeders across the landscape? Is our supplementary feeding helping the populations?" Volunteers hope to answer these questions, one sighting at a time.



photo by Debra Carr

Painted Buntings can be timid around larger birds, especially on the feeder. This female feels more comfortable approaching a feeder decorated with artificial vines that provide some cover for her. She is banded with silver over pink on her right leg and purple over green on her left.

Leah Fuller is the PBOT Program Coordinator, and is the technician for ornithology at the NC Museum of Natural Sciences. If you are interested in helping track Painted Buntings, please visit the PBOT web site (www.paintedbuntings.org) and consider becoming a Citizen Scientist. The site is also the place to view the more than 1,900 photos that PBOT volunteers have posted since the program began.



photo courtesy of the Painted Bunting Observer Team
Jamie Rotenberg uses calipers to measure a bird's bill. Before banding, each bird is measured for weight, fat, bill and wing length, and assessed for age, sex, molt and general condition. If the captured bird is already banded, these measurements are retaken and compared to the previous measurements to determine growth and health.