

## **Painted Bunting Research Summary**

### **By Sarah Latshaw**

#### **Habitat:**

- Previous research has shown that painted buntings prefer scrub/shrub habitat near the marsh. Preliminary findings on Kiawah show similar preferences.
- Males seem to prefer singing high in trees (especially live oaks) & could be very aggressive, running off other males entering his territory. Males develop their distinctive plumage at 2 years of age and typically live 4-5 years.
- Although very territorial, the males would often share feeders...Seems to be a communal area for feeding.
- Females stayed low (6' or less) in the thick shrubs, their green bodies blending well with the lush vegetation. They use corridors of vegetation along lot edges for food, nesting and protection.

#### **Nesting/Fledgling:**

- Previous studies have shown that females tend to build nests ~3-6 feet high in scrubs. The one nest found in the Kiawah study was measured at ~3.5 feet high.
- We also found the buntings seemed to be somewhat adaptable, building the nest in an ornamental shrub near a construction site
- Females moved the fledglings from the nesting site after they could fly and fed them for ~1 week.
- Males would follow the female. One was seen chasing off other males
- Buntings are seedeaters except when they feed insects to their fledglings.
- A bunting expert thought the females probably fed marsh crickets to the buntings. Footage from the nest (filmed by the Town of Kiawah) showed she fed crickets, as well as a variety of other insects. One of the insects being a very large walking stick.

#### **Predation/Parasitism:**

- Painted Buntings are thought to be predated mainly by snakes and raccoons. Brown-headed cowbirds are also known to drop their eggs in PB nests and leave them to care for the cowbird young. In the Kiawah study, a Cooper's Hawk was seen swooping down and taking a fledgling. No other predators were seen.

#### **Telemetry Technology:**

- Previously banded buntings were more easily found, than those that were not previously banded. The ones not banded probably flew in from nearby Hummocks.
- The thinner thread used in the project, was removed easier than the thick thread. One transmitter fell off (and was recovered) because the female seemed to be able to untie it.
- Batteries of the transmitters died sooner than projected.
- Heavy construction made it difficult to pick up signals of the radio-tagged birds because of interference.

**Note:** The pilot project gave us good information on how well telemetry technology would actually work on Kiawah Island. However, because of the small sample size, the information learned is only a glimpse into the natural history of these birds and is not conclusive. Although previous research has been conducted in the US, much of it reflects old information conducted

on the western population of buntings. Only a few projects have been carried out on the eastern population since the late 1990's. Little has been done on developed areas or with a focus on habitat preferences in an effort to develop management plans. There is a high potential that Kiawah Island supports a breeding population of painted buntings comparable to those found at sites listed by the Audubon Society as Important Bird Areas (IBA). North Carolina's Bald Head/Smith Island IBA supports 35-40 breeding pairs, and at Florida's Fort George and Talbot Islands IBA, 78 singing males were detected and over 100 birds were banded in 2000. Over 70 painted buntings were banded on Kiawah Island in 2007 in a banding effort in only a few areas of Kiawah Island.