Florida Field Naturalist 31(1):6-7, 2003.

SITE FIDELITY AND CROWN PLUMAGE IN WINTER SWAMP SPARROWS IN CENTRAL FLORIDA

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Swamp Sparrows (*Melospiza georgiana*) are common winter residents of central and north Florida from October to April (Stevenson and Anderson 1994), and some previous work has been done on its winter site-fidelity in Florida (Legere et al. 2000). In 1998 we established a banding station to monitor bird populations at Rock Springs Run State Reserve located north of Orlando, FL. We operated the station once or twice weekly from late September until early May each year from Fall 1998 to Spring 2002, opening nets approximately 30 minutes before sunrise. We kept the nets open until 10:00 or 11:00 depending upon wind and number of captures. Vegetation around the nets varied from longleaf pine (*Pinus palustris*) to saw palmetto (*Serenoa repens*) with blackberry (*Rubus* sp) thickets and wax myrtles (*Myrica cerifera*).

During the period fall 1998-spring 2002, we usually had 20 nets set on each of the 115 dates of banding. During this period we captured 131 unbanded Swamp Sparrows and made 165 recaptures involving 66 of these birds.

On 17 December 2000, we captured two Swamp Sparrows and banded them with serially numbered U.S. Fish and Wildlife aluminum bands. I will use the last two digits here as identifiers for discussion. Number 45, sex and age unknown, was caught at 09:30; number 46, an adult of unknown sex, was caught at 11:00, four meters away. The same sparrows were caught at 06:30 on 13 December 2001 in adjacent nets within 10 m of their original capture sites. On its second capture, number 45 had a bright rufous crown with no stripe, while the crown of number 46 had some rufous with black streaking. We captured two other swamp sparrows with entirely rufous crowns at the banding station during December 2001.

Pyle (1997) suggests that from March through August an adult male Swamp Sparrow has an entirely rufous crown, while an adult female has a crown with some or no rufous with slight brown or black streaking. He does not describe the appearance of the adult crown during September to February. Rising (1996) also suggests the adult in winter plumage has a streaked crown, and field guides (e.g., Sibley 2000) generally picture a non-breeding adult with a striped crown. Mowbray (1997) indicates that the definitive basic plumage acquired during August and September includes a black forehead, and a rusty crown that is sometimes streaked with black and that is divided by a grayish median stripe. He suggests that males are significantly brighter than females.

The capture and recapture of numbers 45 and 46 on the same dates and in close proximity each time suggests the possibility that Swamp Sparrows may bond for longer than one breeding season, although it is possible that the captures were simply a result of these individuals holding adjacent winter territories or home ranges. The rufous crown of # 45 suggests a male, while the streaked crown of # 46, a female. The entirely rufous crown of # 45 and two other Swamp Sparrows indicate Swamp Sparrows are not necessarily striped or streaked during the winter non-breeding season.

Legare et al. (2000) similarly report Florida winter site-fidelity records for Swamp Sparrows suggested by recaptures of Swamp Sparrows the following year within 50 to 500 meters of the previous capture site. Fifty-two percent of banded Swamp Sparrows returned from one breeding season to the next in Rhode Island (Ellis 1980) and 26 percent of wintering Swamp Sparrows returned in Mississippi (R. Holberton, cited *in* Mow-

bray 1997). Of 20 Swamp Sparrows caught during our 2000-2001 season, eight were recaptures from the previous season. Six of the eight recaptures were of birds that had been captured in the same net in the previous year.

Multiple recaptures of other individuals also suggest strong winter site-fidelity. From 26 October 1999, when banded, to 3 April 2000, one Swamp Sparrow was caught seven times, five times in the same net. This same bird was also recaptured twice in 2000/2001 and six times in the 2001/2002 season. Another Swamp Sparrow was caught in the same net three times from 13 November1999 to 9 April 2000. The nets that recaptured the birds were next to wax myrtles and in a broken line 50 meters long. There were no recaptures of Swamp Sparrows in nets not near wax myrtles.

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