NOTES

Florida Field Naturalist 18(1): 10-12, 1990.

Harlan's Hawk Over-winters in St. Lucie County, Florida

SUSAN R. BLACKSHAW[1] AND PETER POLISSE
Ankona Raptor Research, Inc.,
9803A South Indian River Drive, Ft. Pierce, Florida 34982
[1]Current address: 10951 Wetland Way, Jensen Beach, Florida 34957

On 1 January 1988, while participating in the Fort Pierce Christmas Bird Count, staff members of Ankona Raptor Research, Inc., observed an unusually marked hawk on a utility pole at SR 70 and Header Canal, St. Lucie County, Florida. The bird was lured, trapped and banded (US Fish and Wildlife Service band number 1387-02672). Color photographs were taken and the bird was released at 0900 h.

At the time, the bird was believed to be a Krider's Hawk (*Buteo jamaicensis kriderii*) because of the white tail with narrow rufous sub-terminal band. However, after careful scrutiny of photos, examination of study skins at the Laboratory of Ornithology at Cornell University and consultation with Brian Toland, we determined the bird to be a light morph Harlan's Hawk (*B. j. harlani*). The Harlan's tail has "dark gray longitudinal mottling, usually with a terminal band" (Clark 1987: 71), whereas, the Krider's tail lacks this mottling and presents an overall paler appearance.

On 16 January 1989 a light morph adult Harlan's Hawk was again observed at SR 70 and Header Canal by Peter Polisse and Tony Leukering. The bird was wearing a USFWS band on the left leg and was identical in all aspects to the bird captured in 1988. On the morning of 28 January 1989 Brian Toland and Ankona Raptor Research staff members again observed the bird in its usual area. The bird remained on territory throughout February and departed sometime between 11 and 18 March 1989. The reappearance of this individual demonstrates wintering site fidelity, a characteristic of Harlan's Hawk (Lavers 1975).

The normal breeding range of Harlan's Hawk is southwestern Alaska. Core wintering area is the Great Plains of the southcentral United States. However, Harlan's have been seen during the winter in every state west of the Mississippi River except Nevada, with a few reports from Massachusetts and South Carolina (Mindell 1985). "*Harlani* makes the longest migration of any Red-talled Hawk subspecies" (Mindell 1983).

Harlan's and Krider's Hawks, along with other Red-tailed Hawk subspecies (*calurus* and *borealis*) appear with varying frequency during the winter in Florida. We observed three Krider's in eastcentral Florida during 1988-89 winter field work. Brian Millsap (pers. comm.) reports seeing both Harlan's color phases during the winter 1988-89.

ACKNOWLEDGMENTS

Capture and initial observations were made by Peter Polisse, Susan R. Blackshaw and Fred Schaeffer of Ankona Raptor Research, Inc., and Mark Williams of Owings Mills, Maryland. We wish to thank Brian Toland for identification assistance, and Brian Millsap and James Rodgers for their help in reviewing the manuscript.

Figure 1. Dorsal view of Harlan's Hawk showing the typical tail pattern. The breast and belly are entirely white.

LITERATURE CITED

CLARK, W. S., AND B. K. WHEELER. 1987. Hawks. Boston, Massachusetts: Houghton Mifflin Co.

LAVERS, N. 1975. Status of Harlan's Hawk in Washington, and notes on its identification in the field. Western Birds 6: 55-62.

MINDELL, D. P. 1983. Harlan's Hawk (*Buteo jamaicensis harlani*): a valid subspecies. Auk 100: 161-169.

MINDELL, D. P. 1985. Plumage variation and winter range of Harlan's Hawk (*Buteo jamaicensis harlani*). American Birds 39: 127-138.

Florida Field Naturalist 18(1): 12-14, 1990.

Coyote Distribution in Florida

JOHN B. WOODING AND THOMAS S. HARDISKY[1]
Florida Game and Fresh Water Fish Commission,
4005 South Main Street, Gainesville, Florida 32601
[1]Current address: Pennsylvania Game Commission,
2001 Elmerton Avenue, Harrisburg, Pennsylvania 17110-9797

In the 1960s, coyotes (*Canis latrans*) extended their range into the southern states east of the Mississippi River (Gipson 1978). This expansion has been in part natural, but also has been directly influenced by humans, who have imported coyotes from other states and released them in the southeast to be chased with hounds (Hill et al. 1987). In 1981, Brady and Campell (1983) determined the distribution of coyotes in Florida. More recently, increasing reports of coyote sightings and suspected coyote depredations on livestock and watermelon crops suggest that coyotes have become more numerous and widespread in Florida.

In 1988, we conducted a mail survey to determine the current distribution of coyotes in Florida. Surveys were sent to 428 employees of the Florida Game and Fresh Water Fish Commission. A map was provided for survey recipients to mark specific locations where coyotes or coyote sign had been observed since 1983. Respondents also were asked to shade counties or parts of counties where they had a general knowledge of coyote occurrence.

Of the 428 surveys mailed, 262 (61%) were returned, representing all areas of the state. Based on reports of coyote sightings, sign, or vocalizations, the current distribution of coyotes in Florida was depicted (Fig. 1).

Brady and Campell (1983) documented the presence of coyotes in 18 of Florida's 67 counties. On the distribution map they presented, coyotes occurred in the western panhandle and in scattered locations along the Central Highland Ridge from Hamilton to Orange counties. In the current survey, coyotes were reported present in 48 counties. Coyotes now occur throughout most of Florida, and appear to be well established across the panhandle and into north-central Florida. Although there are scattered reports of coyotes throughout the central peninsula to as far south as Broward and Collier counties, it does not appear that coyotes are firmly established in the central and southern portion of the state.

Although there were slight differences in survey methods between the current survey and that conducted in 1981 (Brady and Campell 1983), it appears that coyotes have greatly