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Bill Pranty

Michael A. Mcmillian

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STATUS OF THE WHITE-TAILED KITE IN NORTHERN AND CENTRAL FLORIDA

BILL PRANTY¹ AND MICHAEL A. MCMILLIAN²

¹8515 Village Mill Row, Bayonet Point, Florida 34667-2662

²MacArthur Agro-Ecology Research Center

300 Buck Island Ranch Road, Lake Placid, Florida 33852

Abstract.—The White-tailed Kite (*Elanus leucurus*) historically was a rare breeding resident of central Florida, but it nearly became extirpated by the mid-20th century. Kite reports in the state have been increasing since the 1960s. Most reports from 1961 to 1972 occurred in the central peninsula. From 1973 to 1990, however, most kite sightings and all 13 nests were found in the eastern Everglades in south Florida. Since 1991, reports of White-tailed Kites, mostly from central Florida, have increased further. In 1996 kites resumed nesting in the region after a 66-year absence. The possibility of kites expanding their nesting range into northern Florida is discussed.

Eisenmann (1971), Pruett-Jones et al. (1980), Gatz et al. (1988), and Dunk (1995) documented the dramatic decline and subsequent recovery of the White-tailed Kite (*Elanus leucurus*) throughout its range. Titian Peale added the species to the Florida list when he collected a specimen near St. Augustine in 1824 or 1825 (Curnutt and Hoffman 1992). Howell (1932:163) called the kite “a rare and local resident” that seemed “on the verge of extinction” in the state. Kites continued to be reported sporadically through the 1950s (Sprunt 1954, 1963), but the last nesting record until recently was in 1930 (Stevenson and Anderson 1994). Kale (1974) summarized most Florida reports of White-tailed Kites up through 1972 and documented their increase since 1961.

In September and October 1984, at least one adult White-tailed Kite was observed on Weston Road in eastern Broward County (Atherton and Atherton 1985). On 30 September 1984, a juvenile was seen along the same road (D. Goodwin, L. Snyder, and B. Pranty *in* Powell 1986), so breeding may have occurred in the area that year (Pranty 1992). In 1986, King (1987) documented the kite’s return as a breeding species when he found three nests in the Everglades in Bro-

ward County. Curnutt (1989) described a kite nest found in Everglades National Park in Dade County in 1988. Curnutt and Hoffman (1992) noted an increase in White-tailed Kite sightings in south Florida from 1973 to 1990, especially during 1989-1990. In October and November 1990, a communal roost of 14 kites was found west of Homestead in Dade County (Cox 1991). In this paper, we document a continued increase in kite sightings from 1991 to 1996, mostly in central Florida.

METHODS

We reviewed the seasonal bird reports in the *Florida Field Naturalist* and *American Birds/National Audubon Society Field Notes* from January 1991 through December 1996 for published White-tailed Kite sightings. We sought information on unpublished reports by posting a request for assistance in the Summer 1996 Florida Ornithological Society Newsletter, but we received only one notice of a single kite sighting from south Florida. Personal contact with a number of observers resulted in seven additional kite reports in central Florida. In Figure 1 and Appendix 1, we have added five kite sightings in 1997, but these are excluded from other tabulations. Following Robertson and Woolfenden (1992), we define central Florida as the area from Citrus, Sumter, Lake, and Volusia counties south through Sarasota, DeSoto, Highlands, Okeechobee, and St. Lucie counties.

RESULTS

Kale (1974) listed a rate of 0.26 White-tailed Kite reports in Florida from 1900 to 1949, and 0.91 reports per year from 1961 to 1972. He listed 8 reports prior to 1900, 10 from 1900 to 1949, 2 from 1950 to 1960 (both in 1954), and 11 from 1961 to 1972. Kale (1974) apparently excluded the two 1954 reports from his ratios, and obtained an incorrect figure for the ratio of kites observed from 1900 to 1949. The correct rate is 0.20. With additions of other pre-1973 reports published in Curnutt (1989) and Stevenson and Anderson (1994), we compiled 13 White-tailed Kite reports in Florida prior to 1900, 19 from 1900 to 1960, and 14 from 1961 to 1972. Thus, Kale's (1974) data can be amended to 0.31 reports per year from 1900 to 1960, and 1.16 reports per year from 1961 to 1972. Curnutt and Hoffman (1992) compiled 38 kite sightings from 1973 to 1990, a rate of 2.11 reports per year. For this paper, we compiled 67 sightings from 1991 to 1996, which results in a rate of 11.16 reports per year. This rate is greater than a five-fold increase from the period from 1973 to 1990, and the total number of sightings from 1991 to 1996 (67) approaches the total number of kite reports from the previous 165 years (84).

On the 1991 Lake Placid Christmas Bird Count (22 Dec.), B. Pranty and three others found a White-tailed Kite at Scarborough Ranch in southern Highlands County. This observation was the first in the county since 1964 (Stevenson and Anderson 1994), but numerous

others followed quickly. We compiled 17 reports of one or two White-tailed Kites in Highlands County from 1991 to 1996.

We compiled 21 additional reports of White-tailed Kites in other counties in central Florida from 1991 to 1996: seven in Brevard, one in DeSoto, one in Okeechobee, seven in Osceola, three in Polk, and two in Sarasota (Figure 1 and Appendix 1). None of the reports in central Florida in 1991 and 1992 were during the breeding season, but in 1993 birds were reported in spring and summer in Brevard, Highlands, and Osceola counties. The trend of increasing number of reports during the breeding season continued through 1996. In "late spring" 1994, a pair of adult kites and one juvenile were observed in southern Brevard County (B. Wetmore *in* McMillian and Pranty 1997), the first indication of breeding in the region since 1930. White-tailed Kites built a nest in southern Highlands County in 1996 (McMillian and Pranty 1997).

Curnutt and Hoffman (1992) pointed out that prior to 1973, 61% ($n = 19$) of the White-tailed Kite reports in Florida were from the middle third of the peninsula, while only 22% ($n = 7$) were from the southern third. From 1973 to 1990, only 23% ($n = 9$) of the kite sightings were in central Florida, while 69% ($n = 27$) were in south Florida. The south Florida reports included 13 nesting attempts, while all reports in central Florida were outside the breeding season. From 1991 to 1996, however, 56% ($n = 38$) of the White-tailed Kite reports in the state occurred in central Florida, while only 35% ($n = 24$) were in south Florida.

DISCUSSION

There are a number of biases and problems when attempting to calculate the number of kite reports in Florida over a period of more than 100 years (e.g., differences in observation and reporting methods, and multiple sightings of the same bird or birds in recent years). Although the number of observers in Florida certainly has increased in recent decades, this alone probably does not explain the increase of over 500% in kite reports between the periods 1973 to 1990 and 1991 to 1996.

Furthermore, the increase of White-tailed Kite reports in Florida beginning in the 1960s corresponds with a great increase in range and numbers of the species throughout its North and Central American range during the same period (Eisenmann 1971, Pruett-Jones et al. 1980, Gatz et al. 1988). Dunk (1995:3) describes White-tailed Kite breeding habitats as "low elevation grassland, agricultural, wetland, oak-woodland, or savannah habitats. Riparian areas adjacent to open areas also [are] used." Kite reoccupation of formerly occupied areas, and recent expansion into previously unoccupied areas, may relate to the creation or improvement of rangeland and cropland habitats as humans cleared forests and irrigated arid lands (Eisenmann 1971, Pru-

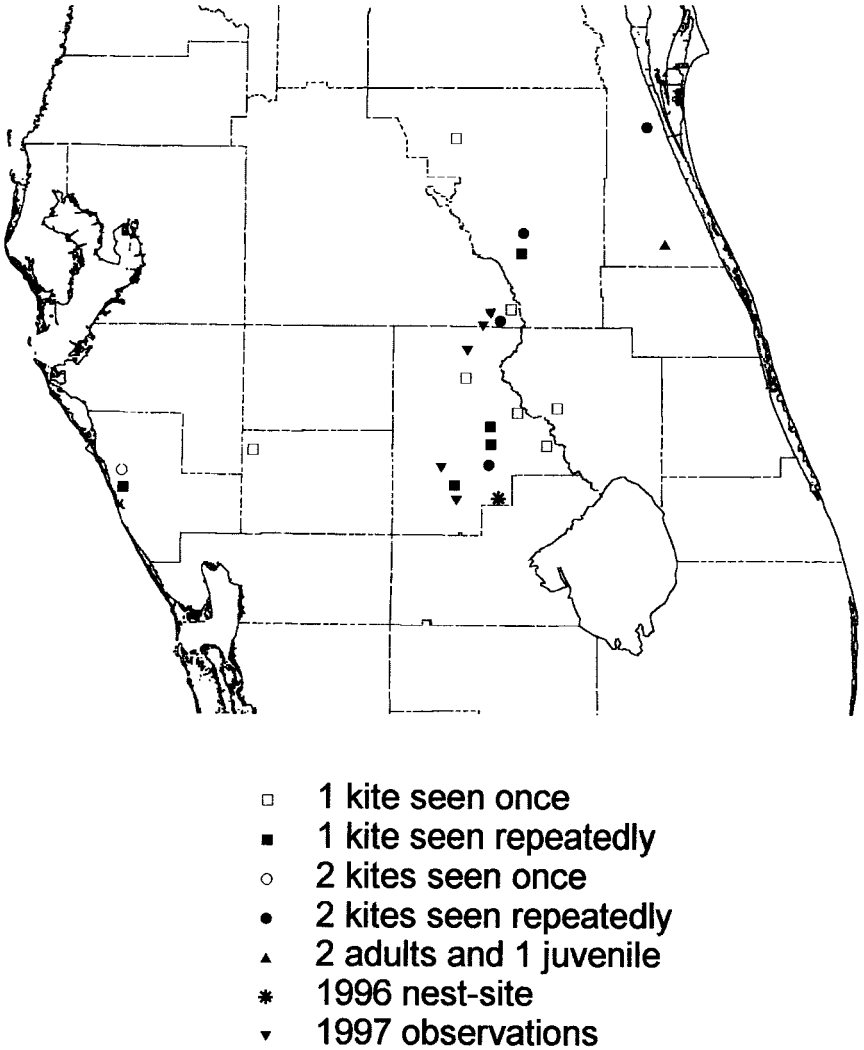


Figure 1. Distribution of the White-tailed Kite in central Florida, 1991 to 1996.

ett-Jones et al. 1980, Gatz et al. 1988). In Florida, the amount of rangeland and cropland habitats increased from 2.5 million ha (17%) in 1936 to 4.2 million ha (30%) in 1987 (Kautz 1993). The majority of the increase since 1959 was due to widespread conversion of forested lands in central and south Florida to cattle pastures (Kautz 1993).

Curnutt and Hoffman (1992:5) documented a “major increase” in White-tailed Kite reports in the eastern Everglades from 1987 to 1990,

the latter two years occurring during a severe drought in the region. They wrote that shorter hydroperiods might benefit this species, and suggested that water management practices designed to aid the recovery of the Snail Kite (*Rostrhamus sociabilis*) might adversely affect White-tailed Kites in that region.

It is not clear whether migration, nomadism, vagrancy, or a combination of these factors is responsible for the recent increase in White-tailed Kite sightings in Florida. (We consider it unlikely that a breeding population could have been overlooked in the southern half of the peninsula for 60+ years). In an attempt to determine the source of the birds that have reoccupied Florida in recent years, we compiled all kite reports in the state outside their current breeding range (Figure 2 and Appendix 2). Of 20 reports that have been published from northern Florida from 1824 to 1996, one report lacks a date, eight reports occurred in fall (August, October-November), seven in winter (December-February), four in spring (March-April), and none in late spring and summer (May-July). Dunk (1995:3) states that there is "no information" that White-tailed Kites migrate anywhere in their extensive range. Based on the summary of observations in north Florida (Figure 2), we agree with Curnutt and Hoffman (1992) that small numbers of White-tailed Kites from western North America move eastward in fall along the Gulf coast to winter in central and south Florida, and possibly return to the West in spring.

Movement of some western-breeding birds to Florida has been noted for over 100 years (Ridgway 1874, McAtee et al. 1944, Curnutt and Hoffman 1992). Over a dozen species that breed in the Rocky Mountains, western plains, or southwestern deserts regularly move eastward or southeastward to winter in Florida. These birds include Swainson's Hawk (*Buteo swainsoni*), Franklin's Gull (*Larus pipixcan*), White-winged Dove (*Zenaida asiatica*), Groove-billed Ani (*Crotophaga ani*), Buff-bellied Hummingbird (*Amazilia yucatanensis*), Rufous Hummingbird (*Selasphorus rufus*), Vermillion Flycatcher (*Pyrocephalus rubinus*), Ash-throated Flycatcher (*Myiarchus cinerascens*), Scissor-tailed Flycatcher (*Tyrannus forficatus*), Sprague's Pipit (*Anthus spragueii*), and Bronzed Cowbird (*Molothrus aeneus*) (McAtee et al. 1944, Curnutt and Hoffman 1992). To this list we add Black-chinned Hummingbird (*Archilochus alexandri*).

Based on recent nesting attempts in Louisiana and Mississippi (*in* Dunk 1995), expansion of the White-tailed Kite as a breeding species into northern Florida seems plausible. In June 1997, Brian Millsap (pers. comm.) observed an adult kite in suitable nesting and foraging habitats 8 km west of Live Oak in Suwannee County. This is the first observation of a White-tailed Kite during the summer months in northern Florida.

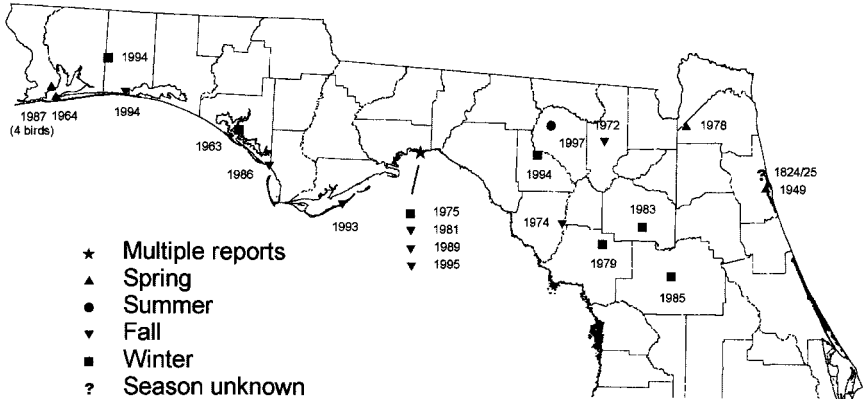


Figure 2. Distribution of the White-tailed Kite in the Florida Panhandle and north Florida, 1824 to 1997. The symbols in Lafayette and Marion counties have been placed randomly because specific locations of the kites in these counties were not indicated in the literature.

Rangeland and cropland habitats in Florida decreased 10% from 1980 to 1987, as these lands were converted to urban and suburban areas (Kautz 1993). Additional areas of “open space” undoubtedly will continue to be lost to development in the next 25 to 30 years. Nevertheless, we expect that the White-tailed Kite will continue to increase its range and numbers in Florida, especially in the central peninsula.

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Appendix 1. White-tailed Kite reports in central Florida, 1991 to 1996, grouped by location. Unless noted otherwise, all reports were published originally in the Field Observations Committee reports in the *Florida Field Naturalist* (Cox 1992, Pranty 1992-1997).

County	Location	Number ¹	Date(s)	Observer(s)
Brevard	SR-509 ca. 0.8 km W of I-95	2a	1991, frequent	<i>vide</i> Herb Kale ^a
"	"	1a	17 Nov 1991	Dick Novier (pers. comm.)
"	Cocoa CBC	1	19 Dec 1992	<i>vide</i> Marianne Cherrington
"	S of Palm Bay W of SR-507	1-2a	Jun 1993 ff	Bruce Wetmore
"	"	2a	30 Dec 1993-16 Jan 1994	Bill and Shirley Hills
"	"	2a, 1j	"late spring" 1994	Bruce Wetmore (pers. comm.)
"	"	1a	10 Dec 1994-12 Feb 1995	Bill and Shirley Hills
DeSoto ^b	SR-70 ca 18 km W of Arcadia	1a	11 Nov 1994	John Fitzpatrick
Highlands	Archbold Biological Station	1a	14 Jan 1992	Jill Goldstein ^c
"	"	1a	22 Jan 1992	Jack Hailman ^c
"	"	1a	19 Mar 1996	Chris Jonas
"	"	1a	9 Mar 1997	Ron Smith (pers. comm.)
"	Avon Park Air Force Range (Cannady Grade)	1a	late Jan 1997	Dave Barber (pers. comm.)
"	Buck Island Ranch	1a	16 Oct 1995 ff	Mike McMillian et al.
"	"	2a, 3n	21 Mar-19 May 1996	Steven Christman et al.
"	"	1a	16 Dec 1996	Mike McMillian
"	CR-721, 5-8 km S of US-98	1a	23 Jun 1993	Doug Stotz
"	E of Sebring	1a	18 Jan 1995	Bruce and Marion Kittredge
"	Placid Lakes Estates	1a	15 Mar 1997	Curt Adkisson (pers. comm.)
"	Scarborough Ranch area	1a	22 Dec 1991	Bill Pranty et al.

¹Number of individuals and age class: a = adult plumage, j = juvenile plumage, n = nestlings.

^aStevenson and Anderson (1994).

^bListed erroneously as Manatee County in *Florida Field Nat.* 23:47.

^cArchbold Biological Station, unpubl. data.

^dPeter Vickery pers. comm.

Appendix 1. (continued) White-tailed Kite reports in central Florida, 1991 to 1996, grouped by location. Unless noted otherwise, all reports were published originally in the Field Observations Committee reports in the *Florida Field Naturalist* (Cox 1992, Pranty 1992-1997).

County	Location	Number ¹	Date(s)	Observer(s)
Highlands	Scarborough Ranch area	1a	27 Dec 1992	Bill Pranty et al.
"	"	1a	3 Feb 1993	Don Ford
"	"	1a	26 Apr 1993	John Fitzpatrick
"	"	2a	27 Dec 1993	Wes Biggs et al.
"	"	2a	27 Dec 1994	Bill Pranty et al.
"	"	2a	27 Dec 1995	<i>vide</i> Glen Woolfenden
"	SE shore of Lake Istokpoga	1a, 2a	10, 11 Feb 1996	Steve McGehee et al.
"	US-98 at Istokpoga Canal	1a	19 Jul 1996	Laurie and Paul Gray
Highlands and Polk	Avon Park Air Force Range (Alpha Range)	1a	30 May 1997	Nathalie Hamel (pers. comm.) and Allison Mains (pers. comm.)
Okeechobee	Basinger: Walker Road, ca. 1 km N of US-98	1a	ca. Aug-Sep 1996	Paul Gray (pers. comm.)
Osceola	Kissimmee Park Road	1a	7 Feb 1996	Wes Biggs
"	Three Lakes WMA (middle)	2a	1993-1995	Sue Riffe et al.
"	"	2a	22 Feb 1995	Steve McGehee and Vicky Dreitz
"	"	1a	22 Jan 1996	Dianne Williams and Wes Biggs
"	Three Lakes WMA (S part)	1a	Mar-Jul 1995	Greg Shriver ⁴
"	"	1a	22 Mar 1996	Peter Vickery et al.
"	"	1a	Winter 1996-1997	Tylan Dean (pers. comm.)
Polk	Avon Park Air Force Range (Tick Island Marsh)	2a	21 Jun 1996	Tylan Dean and Cammy Collins
"	"	1-2a	Fall 1996-Feb 1997	Tylan Dean (pers. comm.) et al.

¹Number of individuals and age class: a = adult plumage, j = juvenile plumage, n = nestlings.

²Stevenson and Anderson (1994).

³Listed erroneously as Manatee County in *Florida Field Nat.* 23:47.

⁴Archbold Biological Station, unpubl. data.

⁵Peter Vickery pers. comm.

Appendix 1. (continued) White-tailed Kite reports in central Florida, 1991 to 1996, grouped by location. Unless noted otherwise, all reports were published originally in the Field Observations Committee reports in the *Florida Field Naturalist* (Cox 1992, Pranty 1992-1997).

County	Location	Number ¹	Date(s)	Observer(s)
Polk	Avon Park Air Force Range (Blood Grade)	1a	4 Jun 1997	Dave Leonard (pers. comm.) and Allison Mains (pers. comm.)
"	River Ranch Acres (just W of Kioco WMA)	1a	31 Jan 1996	Larry Riopelle (pers. comm.) and Nathalie Hamel (pers. comm.)
Sarasota	Osprey	2a	20 Oct 1991	Robert Dye
"	Oscar Scherer State Park	1	Early Jan-23 Jan 1995	Arnold Rawson

¹Number of individuals and age class: a = adult plumage, j = juvenile plumage, n = nestings.

²Stevenson and Anderson (1994).

³Listed erroneously as Manatee County in *Florida Field Nat.* 23:47.

⁴Archbold Biological Station, unpubl. data.

⁵Peter Vickery pers. comm.

Appendix 2. White-tailed Kite reports from the Florida Panhandle and north Florida, 1824-1996.

County	Location	Number ¹	Date(s)	Reference
?	near St. Augustine	1	1824 or 1825	T. Peal <i>in</i> Cumutt and Hoffman 1992
St. Johns	near St. Augustine	1	12 Mar 1949	C. H. Pangburn <i>in</i> Sprunt 1954
Bay	Panama City	1	8 Jan 1963	Stevenson and Anderson 1994
Santa Rosa	Gulf Breeze	1	17 Apr 1964	Stevenson and Anderson 1994
Columbia	near Lake City	1a	1 Aug 1972	Stevenson and Anderson 1994
Dixie?	near Old Town	1	10 Nov 1974	Stevenson and Anderson 1994
Wakulla	St. Marks NWR	1	2 Feb 1975	Stevenson and Anderson 1994
Duval?	near Baldwin	1	4 Mar 1978	Stevenson and Anderson 1994
Levy	Bronson	1	14 Dec 1979	Stevenson and Anderson 1994
Wakulla	St. Marks NWR	1	1 Nov 1981	Stevenson and Anderson 1994
Alachua	Paynes Prairie SP	1	12 Feb 1983	Stevenson and Anderson 1994
Marion	?	1	1 Feb 1985	Stevenson and Anderson 1994
Bay	Mexico Beach	1	18 Oct 1986	Stevenson and Anderson 1994
Escambia	Pensacola	4	16 Mar 1987	Stevenson and Anderson 1994
Wakulla	St. Marks NWR	1	29 Nov 1989	C. and R. Christen <i>in</i> Stevenson and Anderson 1994
Franklin	St. George Island	1	23 Oct 1993	D. and E. White <i>in</i> Pranty 1994
Okaloosa	Fort Walton Beach	1	29-30 Oct 1994	B. Atherton et al. <i>in</i> Pranty 1995a
Lafayette	northern	1a	11 Dec 1994	D. and K. Dees <i>in</i> Pranty 1995b
Okaloosa	north of Holt	1	30 Dec 1994	R. Larson <i>in</i> Pranty 1995b
Wakulla	St. Marks NWR	1	30 Oct 1995	G. Weymouth <i>in</i> Pranty 1996

¹Number of individuals and age class: a = adult plumage, j = juvenile plumage, n = nestings.