

# Verified Winter Record of Scarlet Tanager at Charleston, SC, and a Review of the Winter Status of Scarlet Tanager in the Southeast United States

DOUGLAS B. MCNAIR<sup>1</sup> and JOSE ESCOBAR<sup>2</sup>

*Abstract:* An immature female Scarlet Tanager (*Piranga olivacea*) remained in a suburban subdivision at James Island, Charleston County, S.C., from 28 December 1990 to 13 January 1991. Photographs document this first verified winter record for the southeastern United States. A review of winter season (20 November-20 March) sight reports in the Southeast suggests that, at best, the Scarlet Tanager is a very rare winter vagrant. However, none of these sight reports have been adequately documented.

The sixth edition of the A.O.U. Check-list (1983) did not list a single winter record of the Scarlet Tanager in the southeastern United States. In this article, we document the first verified winter record of this species in this region, from South Carolina. We also compile and attempt to evaluate all known late fall and winter reports of the Scarlet Tanager from the southeastern United States.

## Methods

On 28 December 1990, Jose Escobar (hereafter JE) discovered an immature female Scarlet Tanager at his bird feeder on James Island in Charleston, South Carolina. The bird was watched daily thereafter by JE until 13 January 1991, when last seen. Several other individuals saw the tanager, including McNair (hereafter DM). JE took numerous photographs of the bird on 28-29 December 1990 (Ch. Mus. Acc. No. 1991.3). Our description of the bird is based on these photos and our detailed field notes. We observed the bird at leisure under a variety of light conditions and from as close as 3 m.

On 3 January 1991, we conducted two independent tests of a playback for a response by this individual to a call note of an adult male Scarlet Tanager (recorded by DM near Mt. Pisgah picnic area, Great Balsam mountains, North Carolina; archived at Fla. Mus. Nat. Hist.). The function of this "tshick" chip note is unknown, but it probably serves as a contact call or is used during mild aggressive encounters. The Scarlet Tanager was foraging in natural habitat more than 50 m from the backyard of JE prior to each playback. Each time the recording was played at a set volume for 2 min, unless the Scarlet Tanager responded earlier; tests were conducted about 20 min apart.

On 3 January 1991, we also conducted three independent tests for a response to playback of the typical calls of an adult male Summer Tanager (*P. rubra*) (recorded by DM at the Sandhills Game Lands, Richmond County, North Carolina; archived at Fla. Mus. Nat. Hist.), using the same protocol as above.

The latest specimen evidence of Scarlet Tanager in fall for the southeastern United States, i.e., west to Louisiana and north to Maryland, is one immature male from the District of Columbia, 13 November 1896, U.S. Nat. Mus. (153988), one from Lexington, Virginia, 17 November 1967 (Kain 1987), two (adult male, immature female) killed at the WCTV tower, Tallahassee, Florida, 9 November 1978 and 12 November 1965 (TTRS 3617 and 3687), and one immature male collected at Hialeah, Dade Co., Florida, 18 November

1972 (TTRS 3354). This specimen evidence is consistent with sight report data which indicate the Scarlet Tanager usually departs from the southeastern U.S. by mid to late October, occasionally lingering to early November (Stewart and Robbins 1958, Imhof 1976, Moore 1986, Post and Gauthreaux 1989, Aud. Field Notes 15:34, 1961; Aud. Field Notes 16:25, 1962; Am. Birds 25:48, 1971; Am. Birds 39:45, 1985; Am. Birds 41:79, 1987). The latest records for southeastern Louisiana are 10 November 1985 and 13 November 1983 (Am. Birds 40:129, 1986; Am. Birds 38:214, 1984).

We have no verified evidence that Scarlet Tanagers return to the southeastern U.S. prior to late March. Consequently, we dismiss undocumented winter season sight reports for adult males in complete alternate plumage since their occurrence is extremely unlikely, i.e., at Anne Arundel, Maryland, on 2 January 1955 (Stewart and Robbins 1958; Aud. Field Notes 9:114, 1955), and at Arlington, Virginia, on 8 March 1954 (Aud. Field Notes 8:244, 1954) (C. Wilds, *in litt.*).

Otherwise, our minimal criteria for initial consideration of a Scarlet Tanager report in the southeastern U.S. from 20 November through 20 March, a period for which verified evidence is heretofore lacking, is that locality, date, and observer be known. We have listed reports for north and south Florida separately because south Florida is a distinct avifaunal region in the United States and continental cold fronts are less frequent here (Bock and Root 1981, Chen and Gerber 1990). We have dismissed winter season reports for which observers are unknown, i.e., three CBC's in Florida, one in North Carolina. We solicited further details on all remaining winter season reports, especially data on age and sex. Based on correspondence received, especially information on observer reliability, we also have not listed some sight reports for which documentation is inadequate, i.e., nine in Florida (Bailey 1925:113; Fla. Nat. 12:35, 1939; Aud. Field Notes 13:289, 1959; Aud. Field Notes 21:193, 1967; Aud. Field Notes 22:433, 1968; Aud. Field Notes 23:40, 1969; Aud. Field Notes 23:472, 1969; Am. Birds 37:557, 1983; Am. Birds 42:255, 1988; L.A. Atherton and H.M. Stevenson, *in litt.*; DM, pers. exam.), and one in Louisiana (Am. Birds 37:652, 1983; anonymous, *in litt.*). For all but two above rejected sight reports, no information was provided on the age and sex of the birds.

## Results

*Verified Winter Record, South Carolina.*—Overall, the tanager's color was olive-green (Fig. 1). The upper parts were dull olive-green with no contrast between upper tail coverts, rump, back, nape, or crown. The under parts were slightly yellower, particularly on the under tail coverts and parts of the breast. A portion of the lower belly and flanks were dingy whitish-gray. The thin olive-green orbital ring was distinct and almost complete. The lores were pale olive-green, without a trace of dusky color. The remiges, rectrices, and upper wing coverts were dusky brownish with an olive-green wash. Under certain light conditions and at some angles, the rectrices and remiges could look fairly dark and the olive-green wash was much less apparent. The outermost primary coverts and primary tips were the darkest portion of the entire wing, although the upper wing coverts lacked black feathers. The primaries and secondaries had narrow olive-green margins on the vanes. More prominent were green-yellow tips to the greater and median wing coverts, which formed two narrow and distinct

wing bars. Most prominent were broad yellowish-white margins to the tips of the tertials. The under wing coverts were whitish.



Fig. 1. Female Scarlet Tanager in Charleston, S.C. 28 December 1990 to 13 January 1991. Original color photograph by Jose Escobar.

Some body feathers were evidently missing or growing in a few spots on the throat, chin, uppermost breast, and middle flanks, which suggested that the tanager was molting.

The notch was present but not easily discernible on the relatively short stubby *Piranga* bill, which was generally pale (light yellowish-flesh color); most of the upper half of the upper mandible was horn color. The mouth lining was pale (light yellowish-flesh color). The eyes were black. The legs were slate-gray.

The predominant habitat where the tanager was found is altered maritime hammock forest, dominated by live oak (*Quercus virginianus*) and loblolly pine (*Pinus taeda*). A 10 ha undeveloped area, comprised of a small stand of loblolly pines and a dense mixture of hardwoods, shrubs, and vines, lies adjacent to the home of JE. The backyard is planted with numerous ornamental and native shrubs and trees. The bird focused its activities on the undeveloped area, where it roosted 2–3 m above ground in a grapevine and shrub tangle 5–10 m from numerous feeders placed in the backyard. The tanager initially fed throughout the day on the ground or at the feeders on whole sunflower seeds, which it easily shelled and ate. It also ate bananas. Beginning 6 January, waxworms (*Galleria mellonella*) and mealworms (*Tenebrio molitor*) were provided on trays *ad libitum*. The tanager immediately switched to feeding on both species of worms, particularly the waxworms. It did not discontinue feeding on sunflower seeds, although it ceased to feed on any fruits. For 4 h of timed observations, JE observed the bird to feed on the worms at the rate of 10–15/h up until 13 January, the last day it was seen. The tanager ate alongside Brown Thrashers (*Toxostoma rufum*), Northern Mockingbirds (*Mimus polyglottos*),

Northern Cardinals (*Cardinalis cardinalis*), Rufous-sided Towhees (*Pipilo erythrophthalmus*), and some smaller species; sometimes, it was aggressive toward both these large and smaller species. It was rarely deterred from feeding, even by the numerous Boat-tailed Grackles (*Quiscalus major*). The tanager also foraged away from the feeders, gleaning and sallying for insects at various heights in the undeveloped area and, prior to 6 January, feeding on turf lily (*Liriope muscari*) berries in the backyard. It also drank water from birdbaths. The tanager was never heard to utter a single vocalization, under any circumstances.

The tanager never responded at a distance to playbacks of the "tshick" chip note of the Scarlet Tanager. Only when already present near the feeders did she peer at the speaker.

It also never responded at a distance on 31 December 1990 and 3 January 1991, when we played back the "chip-burr" calls of a Scarlet Tanager (the recording was poor, the protocol was not standardized, and the tests were not independent). Only when present near the feeders did she peer at the speaker. Once, she flicked her wings four times in apparent agitation.

In contrast, the Scarlet Tanager's response to each playback of the Summer Tanager's typical calls was dramatic. Within 2 min or just after the tape finished, it flew in directly and at its closest approach perched on a tree branch 3 m above ground and peered at the speaker 7 m away. The bird did not approach closer when we resumed playing the Summer Tanager calls at a lower volume.

*Winter Season Reports.*—From 1953 to 1991, we found 16 reports of Scarlet Tanagers from 22 November to 8 March in seven states in the Southeast from Maryland to Louisiana; six (37.5%) of the reports are from Florida (Table 1). Other than our South Carolina record, only one other report has additional supporting evidence: a male was banded in late November at Nashville, Tennessee. Of the 16 reports, only one occurred prior to 1960. Almost half are from the 1960s and 1970s and the remaining half are from 1980 to the present. Few reports occurred after the end of the CBC period. Half of the reports are of birds sexed or aged: four males and four females. Of these, only two were aged: one immature female at Charleston and an adult male at Guilford County, NC.

## Discussion

*Verified Winter Record.*—The whitish under wing coverts, seen by JE, are diagnostic for the Scarlet Tanager (Pyle et al. 1987), although we have no photographic documentation for this character. However, the overall olive-green color without any contrast on the upper parts, distinct dusky brownish upper wing coverts, and relatively short stubby bill also confirmed that our bird was a Scarlet Tanager (Dwight 1900, Mengel 1963, Pyle et al. 1987, Kaufman 1988). Based on the absence of any black feathers in the upper wing coverts, we concluded that it was a female (Dwight 1900, Pyle et al. 1987). Based on the lack of strong contrast of the remiges and rectrices compared to the body plumage, presence of distinct and narrow green-yellow wing bars, and retention of some dingy whitish-gray feathers on the lower belly and flanks, we concluded that the female was an immature in first basic plumage (op. cit.). This combination of all above characteristics eliminated the possibility of our bird being a Summer, Western (*P. ludoviciana*), or a hybrid *Piranga* tanager. Except for our re-

cord the latest verified records of the Scarlet Tanager in the southeastern U.S. have occurred in mid November. In addition, a banding record (male) occurred on 27 November in Tennessee.

<u>State</u>	<u>County</u>	<u>Date</u>	<u>Sex/Age</u>	<u>Observer(s)</u>	<u>Reference</u>
TN	Davidson	27 Nov 74	M(banded)	K. Goodpasture	AB 29:73, 1975
MD	Worcester	27 Dec 53	U	C. Clagett E. Baldwin	AFN 8:102, 1954 Stewart & Robbins 1958
VA	James City	Early Dec 84	U	A. Springe, <i>fide</i> B. Williams	AB 39:156, 1985 Kain 1987
NC	Halifax	22 Nov 87	U	M. Lynch	Chat 52:95, 1988
NC	New Hanover	28 Nov 61	U	P. Mebane	Chat 26:25, 1962
NC	Guilford	28–29 Dec 88	M, ad.	H. Link H. Hendrickson	Chat 54:28, 1990
NC	Wilkes	30 Jan–1 Feb 72	F	W. Smith	Chat 36:67, 1972
SC	Charleston	28 Dec 90– 13 Jan 91	F, imm. (photo)	J. Escobar D. McNair	This study
LA	Plaquemines Parish	28 Dec 65	U	J. Gee	AFN 20:297, 1966 Lowery 1974
LA	Jefferson Parish	2 Jan 84	M	G. Dubus J. Whelan	AB 38:679, 1984
N FL	Santa Rosa	22 Nov 72	F	R. Duncan	AB 27:629, 1973
N FL	Duval	25 Nov 74	U	J. Cocke	AB 29:47, 1975
N FL	Hillsborough	7 Feb 87	F	K. McGowan	AB 41:274, 1987
N FL	Duval	8 Mar 82	M	V. Markgraf	AB 36:845, 1982
S FL	Monroe	23–28 Dec 85	U	J. Ondrejko F. Hames	AB 40:273–274, 1986
S FL	Monroe	1 Jan 61	U	J. Bull	AFN 15:175, 1961

None of the late fall and winter season sight reports have been properly documented, despite the scarcity of this species in the Southeast during this period. Unfortunately, we believe that many of the sight reports included in Table 1, as for other undocumented sight reports rejected *a priori* because they failed to meet minimal criteria or other considerations, are of no value. Many CBC reports are without any supporting details on the sex and age of the birds observed. Therefore, we reject all these reports unless properly documented in appropriate journals.

We suspect that at least some of the records in Table 1 were misidentified Summer Tanagers. Summer Tanagers may closely resemble female Scarlet Tanagers in many characteristics of the latter's plumage, a problem not stressed in available field guides or in Isler and Isler (1987) (DM, pers. exam.; J.V. Remsen, *in litt.*). Teulings (1973) documented the perplexing plumage variability of some Summer Tanagers banded in North Carolina. Consequently, the apparent previous lack of recognition of great plumage variability in Summer Tanagers has probably contributed to under appreciation of identification difficulties and some confusion as Scarlet Tanagers. Plumage variability in Scarlet Tanagers has not been examined critically. The possibility of confusing Scarlet Tanagers for other species also remains.

Both Scarlet and Summer tanagers overlap extensively and compete in use of habitat and other ecological resources, which includes aggressive male responses to each other's natural or recorded songs (Shy 1984a, 1984b). Our silent winter season female Scarlet Tanager responded strongly to playbacks of the typical call notes of the Summer Tanager, a response consistent with the song playback results of Shy (1984a). Therefore, it must not be assumed that a silent, unidentified *Piranga* tanager of either sex that responds to playbacks of a call note of a known *Piranga* species is necessarily that known species. To complicate matters, in one instance a Scarlet Tanager incorporated the typical call note of the Summer Tanager into its own repertoire. On 2 May 1987, R.F. Ringer observed a Scarlet Tanager in Worcester County, Maryland, to give the typical call notes of both species, "picky-tuck, chip-burr", which was repeated several times (Am. Birds 41:414, 1987). Because of the frequency and intensity of aggressive interactions between these species, copying of the other species' call notes may be more frequent than this one instance suggests. If otherwise unidentified winter season Scarlet or Summer Tanagers in the Southeast utter the typical call note, observers should remain alert to the possibility of heterospecific vocal copying.

In conclusion, we find it difficult to evaluate the significance of our analysis of late fall and winter season Scarlet Tanager reports in the southeastern U.S. In addition to the one banding report, we suspect that some of the sight records are also valid. Some of these late reports may pertain to injured birds. A male reported to occur at Jefferson Parish, Louisiana, was rumored to be injured (J.V. Remsen, *in litt.*). Injured or not, the Scarlet Tanager is a casual to very rare species in the southeastern U.S. during the late fall and winter season, and none is known to have survived, unlike the Summer Tanager, which occurs regularly during winter in the Southeast and occasionally survives (AOU 1983; DM, pers. exam. of Aud. Field Notes, Am. Birds, and state bird journals; H.M. Stevenson, unpubl.). The normal winter range of the Scarlet Tanager is in South America (AOU 1983). Species with such winter distributions are ex-

tremely unusual in winter in the southeastern U.S., in contrast to species that winter in Middle America and the West Indies, such as the Summer Tanager.

*Acknowledgments.* We thank J.W. Hardy, Curator of Ornithology, Florida Mus. Nat. Hist., Univ. Florida, for archiving the tanager recordings of DM and T. Engstrom, Tall Timbers Research Station, Tallahassee, Florida, for lending us specimens of the Scarlet Tanager. R.L. Zusi, Curator of Birds, U.S. Natl. Mus., supplied us details on the specimen collected in 1896 at the District of Columbia. We thank the late H.M. Stevenson for sharing unpublished data with us. We finally thank L.A. Atherton, C. Wilds, D.M. Forsythe, H.P. Langridge, H. E. LeGrand, Jr., J.C. Ogden, K.C. Parkes, J.V. Remsen, H.M. Stevenson, and an anonymous individual for their critical reviews. N. Pringle typed Table 1. Reports in Aud. Field Notes, Am. Birds, The Chat, and Fla. Nat. are not referenced below. This paper is dedicated to the late Henry M. Stevenson.

#### Literature Cited

- American Ornithologists' Union. 1983. Check-list of North American birds, sixth ed. Washington, D.C., Am. Ornithol. Union.
- Bailey, H.H. 1925. The birds of Florida. Williams and Wilkins Co., Baltimore.
- Bock, C.E. and T.L. Root. 1981. Winter abundance patterns of landbirds in the United States and southern Canada. *Am. Birds* 35:891-897.
- Chen, E. and J.F. Gerber. 1990. Climate. pp. 11-34 in *Ecosystems of Florida*, R.L. Myers and J.J. Ewel (eds.). Univ. Central Orlando Press., Orlando, FL.
- Dwight, J., Jr. 1900. The sequence of plumages and moults of the passerine birds of New York. *Annals New York Acad. Sci.* 13(1):73-360.
- Imhof, T.A. 1976. Alabama Birds. Univ. Alabama Press.
- Isler, M.L. and P.R. Isler. 1987. The tanagers: natural history, distribution and identification. Smithsonian Inst. Press.
- Kain, T. (ed.). 1987. Virginia's birdlife: an annotated checklist. 2nd ed. Virginia Avifauna No. 3. Virginia Ornithol. Soc.
- Kaufman, K. 1988. Notes on female tanagers. *Am. Birds* 42:3-5.
- Lowery, G.H., Jr. 1974. Louisiana Birds. Louisiana State Univ. Press.
- Mengel, R.M. 1963. A second probable hybrid between the Scarlet and Western tanagers. *Wilson Bull.* 75:201-203.
- Moore, T. 1986. A late Scarlet Tanager in north Fulton County. *Oriole* 51:71
- Post, W., and S.A. Gauthreaux, Jr. 1989. Status and distribution of South Carolina Birds. *Contrib. Charleston Mus.* 18.
- Pyle, P., S.N.G. Howell, R.P. Yunick and D.F. DeSante 1987. Identification guide to North American passerines. Slate Creek Press, Bolinas, CA.
- Shy, E. 1984a. Sympatry and allopatry of song in North American tanagers. *Behav. Ecol. Sociobiol.* 15:189-195.
- Shy, E. 1984b. Habitat shift and geographical variation in North American tanagers (Thraupinae: *Piranga*). *Oecologia* 63:281-285.
- Stewart, R.E. and C.S. Robbins. 1958. Birds of Maryland and the District of Columbia. *North Am. Fauna.* No. 62. U.S. Fish Wildl. Serv.
- Teulings, E. 1973. Plumage variations in the Summer Tanager. *Chat* 37:40-42.

<sup>1</sup> *The Charleston Museum, 360 Meeting Street, Charleston, SC 29403.*

<sup>2</sup> *660 Shortwood Street, Charleston, SC 29412.*