University of Nebraska - Lincoln DigitalCommons@University of Nebraska - Lincoln

Nebraska Bird Review

Nebraska Ornithologists' Union

3-2011

A Late-Season Breeding Record for the Summer Tanager in Nebraska

Eric C. Hopps

Follow this and additional works at: http://digitalcommons.unl.edu/nebbirdrev

Part of the Ornithology Commons, Poultry or Avian Science Commons, and the Zoology
Commons

Hopps, Eric C., "A Late-Season Breeding Record for the Summer Tanager in Nebraska" (2011). *Nebraska Bird Review*. 1163. http://digitalcommons.unl.edu/nebbirdrev/1163

This Article is brought to you for free and open access by the Nebraska Ornithologists' Union at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Nebraska Bird Review by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

33

A Late-season Breeding Record for the Summer Tanager in Nebraska

Eric C. Hopps 988 11th Street, Suite B Syracuse, Nebraska 68446 eric.hopps@ne.usda.gov

The breeding range of the Summer Tanager (*Piranga rubra*) is well documented and expands across the southern U.S. extending northward to New Jersey and west along and south of the Great Lakes to the eastern edge of the Great Plains (Terres 1991; Robinson 1996). In Nebraska the species is generally confined to the Lower Missouri and Platte River Valleys where it occurs locally (Sharpe et al. 2001). Because the species exists in relatively low numbers across southeastern Nebraska, there are few breeding and nesting records for the state. Fewer than 10 breeding records, including one historical account have been described for Nebraska (Ducey 1988, Mollhoff 2001, Sharpe et al 2001, Mollhoff 2004). Due to the limited number of documented reports, our understanding of the breeding distribution and nesting ecology of the Summer Tanager in Nebraska is incomplete. Here I describe a late-season breeding effort by the Summer Tanager in southeastern Nebraska and provide comments on nesting behavior.

On <u>11 June</u>, <u>2010</u> a singing male Summer Tanager was observed along the Missouri River Valley in Nemaha County, Nebraska, just north of the town of Brownville and within a Wetland Reserve Program (WRP) easement study site. This sighting was the first and only for this species within the study area until early

August, despite 7 site surveys conducted in the interim. On 3 August a female Summer Tanager was observed in the initial stages of nest building. The female was repeatedly observed carrying nesting material to a distal branch of an American basswood (Tilia americana) approximately 9 meters above ground. A male was present and remained nearby in the upland forest area, often singing but providing no assistance to the female. On 5 August the site was again visited, but flood waters from the Missouri River had inundated the area beneath the nest tree preventing close inspection of the nest site. However, the nest tree was observed for approximately two hours without seeing any tanager activity. Flood waters did not recede until 11 August, at which time the male and female were again sighted but remained separated. At one point the male was observed feeding a nearly full-grown fledgling while the female was away. The male was quite vocal with the tanagers' characteristic call note, as was the female, who would respond from across a small backwater slough. When the female returned, the male, female and fledgling all flew into the upland forest where I lost sight of them. This observation seemed to be in clear conflict with my prior assumptions about the status of the nesting attempt. I had anticipated finding a fully constructed nest with the female somewhere in the egg-laying or incubation phase. On this date I could not see a constructed nest where I had observed the nest-building activity on 3 August.

Trying to resolve exactly what had transpired, I again returned to the site on 13 August. Approaching the tree from the opposite direction, I immediately spotted the female sitting on the nest. The female flushed from the nest and stayed away approximately 10 minutes. When she returned she was obviously agitated by my presence and scolded me for some time before moving away from the nest site. On her second return the male was with the female and would frequently vocalize with characteristic call notes. With the male following, the female slowly made her way back to the nest tree. The male repeatedly vocalized until the female was once again on the nest at which time he ceased calling and flew back into the upland forest. This behavior is consistent with the male deliberately driving the female back to the nest if she is incubating, as described by Potter (1985). I monitored the nest site again on 20 August and observed the female sitting on the nest and the male calling occasionally from the upland forest. On 25 August the female was again sitting on the nest but briefly left between 0812 - 0817 hours. I remained on site for approximately 2.5 hours surveying for other bird species but did not see the female again exit or enter the nest site. The male was observed momentarily chasing two other unidentified birds as well as aggressively preening on a dead branch near the nest tree for approximately 10 minutes. On 26 August the female was observed feeding young for the first time. She made several visits back and forth to the nest at 1025, 1039, 1044, 1110, and 1135 hours and would always vocalize prior to flying to the nest. The male was not observed assisting the female and was absent from the area, although he had been present the day before. On 27 August the female was observed feeding the young, making several visits at 0739, 0749 and 0759 hours. The female continued to periodically feed the young during the three hours the site was surveyed. The only time the female did not vocalize was when she flew directly to the nest and brooded the young. The male was not observed. On 30 August the female fed the young, making several visits at 0705, 0708, 0714, 0729, 0732 and 0738 hours. At least two young were visible in the nest. The male was not observed. On 31 August the female was observed feeding the young

between 0700 and 0930 hours. The male was again not observed. By 1 September the nestlings had fledged. The female was observed feeding at least one fledgling approximately 50 meters uphill from the nest site in the forested bluff. When discovered, the fledgling was on the ground but was observed to flutter high enough to perch in a small understory sapling approximately 1.5 meters above ground. On 2 September the female was heard eliciting call notes approximately 300 meters south of the nest site and approximately 50 meters uphill from the base of the bluff, possibly communicating with the fledglings. The female was last heard on the study site on 10 September calling from the forest understory but I was unable to visually confirm activity.

There are inconsistencies regarding the period between hatching date and nest fledging reported in the literature. Terres (1991) states that age of nest departure "not reported", Bent (1958) reports a 12 day interval and Alsop III (2001) describes the period as 13 - 14 days. Direct nest surveillance by Potter (1985) provides a nest departure date of 9 days and Fitch and Fitch (1955) report fledging by young tanagers as early as 7 days. Presuming my notes on a possible hatch date of August 25 are correct, the tanagers may have left the nest at 7 days of age. It should be noted however, that without direct inspection of the nest contents, confirmation of the exact hatch date was not possible. Based on my observations it appears that 2 young were fledged from the nest.

The observations provide compelling evidence for a record of double-brooded behavior by a Summer Tanager pair. This is based on the following synopsis. No tanagers other than the single pair observed were found on the study site or in the general vicinity, thus all observations are believed to be linked to a single breeding pair. The seasonality of this late nesting effort also suggests a second brood attempt or at the very least a renesting effort following a failed nest. Observation of the male feeding a nearly full grown fledgling prior to the August nesting period provides evidence on its own merit. Coincidentally, Mengel (1965) reported a similar scenario resulting in his suggestion of a possible double-brood effort in Kentucky. Rosenberg et al. (1991) found double-brood behavior to be common in Summer Tanager populations along the Lower Colorado River Valley. Summer Tanagers are thought to be monogamous during the breeding season and the likelihood that the feeding of young was a result of a previous pairing with a different mate is limited.

Based on a review of available literature, this may be the latest seasonal nesting effort by Summer Tanagers documented for North America. Corman and Wise-Gervais (2005) cite an observation of a fledged young being fed on 11 September in Arizona but no indication of possible age. Fitch and Fitch (1955) stated Summer Tanagers may attend young in excess of 3 weeks following nest departure. Thus the potential nest fledging date for the Arizona observation could be as early as 20 August.

Finally, given the males attendance throughout the incubation period, his sudden disappearance prior to the nest hatching date is inexplicable. Whether this event was related to direct or indirect mortality, or issues regarding physiology or individual behavioral traits cannot be answered. Interestingly, a field report in the Arkansas Audubon Society database by Janine Perlman, describes a nest fledging

without the assistance of the male for the previous 2 weeks. Feeding of the female by male Summer Tanagers during incubation has been reported by Potter (1985) however, this behavior was not seen by the pair under observation.

ACKNOWLEDGEMENTS

I thank Joel Jorgensen and Wayne Mollhoff for kindly reviewing the manuscript and offering helpful suggestions. I thank the Nebraska Game and Parks Commission, Nebraska Natural Resources Conservation Service and Ducks Unlimited for their support.

LITERATURE CITED

- Alsop FJ III. 2001. Birds of North America eastern region. Smithsonian Handbooks. New York (NY): DK Publishing Inc.
- Arkansas Audubon Society. 2010. Arkansas bird records database. Version 10.2 URL: http://www.arbirds.org/aas_dbase.html.
- Bent AC. 1958. Life histories of North American blackbirds, orioles, tanagers, and allies. U.S. Natl. Mus. Bull. 211. Washington (DC): Smithsonian Institution, p. 406-507.
- Corman TE, Wise-Gervais C. 2005. Arizona breeding bird atlas. Albuquerque (NM): University of New Mexico Press.
- Ducey JE. 1988. Nebraska birds: breeding status and distribution. Omaha (NE): Simmons Boardman Books. 148 p.
- Fitch HS, Fitch VR. 1955. Observations on the summer tanager in northeastern Kansas. The Wilson Bulletin 67(1):45-54.
- Mengel RM. 1965. The birds of Kentucky. American Ornithologists' Union Ornithological Monographs No. 3, 459-461.
- Mollhoff WJ. 2001. The Nebraska breeding bird atlas 1984-1989. Nebraska Ornithologists' Union, Occasional Papers No. 7. Lincoln (NE).
- Mollhoff WJ. 2004. The 2002 Nebraska nest report. The Nebraska Bird Review. 72(4):153-158.
- Potter EF. 1985. Breeding habits, nestling development and vocalizations in the summer tanager. The Chat 49(3):57-65.
- Robinson WD. 1996. Summer tanager (*Piranga rubra*), The Birds of North America Online (A. Poole, Ed.). Ithaca (NY): Cornell Lab of Ornithology. Available from: http://bna.birds.cornell.edu/bna/species/248.
- Rosenberg KV, Ohmart RD, Hunter WC, Anderson BW. 1991. Birds of the lower Colorado River valley. Tucson (AZ): Univ. of Arizona Press.
- Sharpe RS, Silcock WR, Jorgensen JG. 2001. Birds of Nebraska: their distribution and temporal occurrence. Lincoln (NE): University of Nebraska Press.
- Terres JK. 1991. The Audubon Society encyclopedia of North American birds. New York (NY): Wings Books. 1109 p.