CLUTTON-BROCK, T. H. 1974. Activity patterns of red colobus (*Colobus badius tephrosceles*). Folia Primatol. 21:161–187.

CURIO, E. 1976. The ethology of predation. Springer-Verlag, New York, New York.

EGLER, S. G. 1986. Estudos bionômicos de *Saguinus bicolor* (Spix, 1823) (CALLITRICHIDAE: PRIMATES), em mata tropical alterada, Manaus (AM). M.Sc. thesis, Universidade Estadual de Campinas, Campinas, Brasil.

FONTAINE, R. 1980. Observations on the foraging association of double-toothed kites and white-faced capuchin monkeys. Auk 97:94–98.

KLEIN, L. L. AND D. J. KLEIN. 1973. Observations on two types of neotropical primate intertaxa associations. Am. J. Phys. Anthropol. 38:649–654.

MOYNIHAN, M. 1970. Some behavior patterns of Platyrrhine monkeys. II. *Saguinus geoffroyi* and some other tamarins. Smith. Contr. Zool. 28:1–77.

RIDGELY, R. S. 1976. A guide to the birds of Panamá. Princeton Univ. Press, Princeton, New Jersey.

SCHUBART, O., A. C. AGUIRRE, AND H. SICK. 1965. Contribuição para o conhecimento da alimentação das aves brasileiras. Arqu. Zool. São Paulo 12:95–249.

SICK, H. 1985. Ornitologia Brasileira. Editora Universidade de Brasília, Brasília.

TERBORGH, J. 1983. Five new world primates: a study in comparative ecology. Princeton Univ. Press, Princeton.

WETMORE, A. 1981. The birds of the Republic of Panamá. Part 1—Tinamidae (Tinamous) to Rynchopidae (Skimmers). Smithsonian Institute Press, Washington, D.C.

SILVIA G. EGLER, *Dept. de Ecologia, Instituto Nacional de Pesquisas da Amazônia, Caixa Postal 478, 69083 Manaus AM, Brasil.* *Received 27 Nov. 1990, accepted 26 Feb. 1991.*

Wilson Bull., 103(3), 1991, pp. 512–514

Unprecedented stopover site fidelity in a Tennessee Warbler.—The postbreeding movements of long-distance migrant passerines are not well understood. Here we report the recurrence of an adult male Tennessee Warbler (*Vermivora peregrina*) during three successive autumns at a stopover site in the St. Croix River valley in east-central Minnesota (Washington Co., approximately 44°55′N, 92°48′W). This site is at least 240 km south of the nearest recorded or suspected breeding grounds (Janssen 1987; D. F. Parmelee, pers. comm.).

Migrant passerines showing stopover site fidelity are rare in the literature. Nisbet (1969) published a call to banders for records of transient migrants that returned to the site of banding in subsequent years. He arbitrarily designated "good" transients as those individuals occurring more than 100 mi. (161 km) from the species' regular breeding or wintering ranges. He received eight convincing records from his request. Since Nisbet's review, the number of "good" transients appearing in the literature has not increased dramatically; we counted records of approximately 21 individuals of 10 species (Nisbet 1969, Ryan 1970, Woodward 1972, Johnson and Ellis 1974, Leberman and Clench 1975, Foy 1975, Ely and Weber 1977, Goodpasture 1979).

During the spring (May) and autumn (mid-August through late-September) migration periods of 1984–1986, we captured migrants in five wooded habitat types using standard 30 mm and 36 mm mesh nylon mist nets (12 × 2.5 m). We accumulated over 70,000 net-h in three spring seasons, and over 65,000 net-h in the corresponding autumns. Nets were oriented E-W and spaced 30 m apart; net locations remained the same throughout the study (see Winker et al., in press for more detail).

Recaptures between years at our site were possible only for birds first captured in 1984 or 1985. Considering only these years, spring effort was 43,428 net-h (20 Tennessee Warbler captures), and autumn effort was 47,970 net-h (552 Tennessee Warbler captures). On 23 August 1984, we captured an individual (TEWA 1700-35375) with a fully ossified skull that was sexed as male, using the criteria of Raveling and Warner (1965). This same individual was subsequently recaptured seven times: three more times in 1984 (25 August, 5 and 9 September), and a total of four times in the next two autumns (19 and 23 August 1985, 25 August and 12 September 1986). All captures occurred at three adjacent net sites, and spanned a linear distance of only 60 m in an alder (*Alnus rugosa*) swamp bordering a small deciduous broadleaf woodland. In 1984, the recapture period spanned 17 days, and the bird experienced a net change in mass of −0.1 g. In 1985, the recapture period was only four days, with a net mass change of −0.2 g, and in 1986 mass change was 0.4 g in an 18-day period. In each season, the bird was molting, as were many autumn adults of this species at our site. Of 128 autumn adults for which molt was assessed, 72 (ca 56%) showed some molt, and 32 (25%) were molting extensively. The latter individuals were almost invariably molting in the alar and/or caudal tracts, and the recurring individual was a member of this category.

Following each capture, TEWA 1700-35375 was moved for measuring to a central location 130–190 m from the capture site. The release point was surrounded by woodlands in which the species regularly occurred, but this habitat was of a different type than the capture locale. The bird's subsequent return to the area and specific habitat of capture suggests that an attraction to this specific location existed within a season as well as between years.

This Tennessee Warbler is unique among the published list of "good" transient recurrences for several reasons. It is the only individual to return in three successive years; it is the only one recaptured more than once within a season; and it is apparently the only one which underwent prebasic molt at the site of capture. Nisbet (1969) hypothesized that the birds he reviewed had returned to presumably favorable sites to replenish fat reserves. The Tennessee Warbler returning to our site did not seem to be depositing fat.

We draw three conclusions from the evidence considered here: (1) site fixation (resulting in site fidelity) in transient passerines can occur at stopover sites but seems to be rare; (2) northerly stopover sites provide resources both for completion of the prebasic molt and for continued migration; and (3) the presence of adults in molt far from their regular breeding grounds and in samples collected in a TV tower kill (Raveling 1963:13) suggests that Tennessee Warblers can show an overlap of nocturnal migration and prebasic molt.

Acknowledgments.—We gratefully acknowledge the support of the James Ford Bell Foundation for our field work. We also thank the many field assistants whose efforts allowed us to keep the nets open. C. Blem, G. Hall, J. Klicka, and two anonymous reviewers provided useful comments on the manuscript.

LITERATURE CITED

ELY, C. A. AND R. WEBER. 1977. Orange-crowned Warbler: a near return. N. Amer. Bird Bander 2:103.

FOY, R. W. 1975. Returns of transient warblers to a coastal station. EBBA News 38:128–130.

GOODPASTURE, K. A. 1979. A transient Magnolia Warbler returns. Bird-Banding 50:265.

JANSSEN, R. B. 1987. Birds in Minnesota. Univ. Minnesota Press, Minneapolis, Minnesota.

JOHNSON, L. G. AND T. ELLIS. 1974. Retrap of migrant birds. IBB News 46:67.

LEBERMAN, R. C. AND M. H. CLENCH. 1975. Powdermill Nature Reserve Research Report No. 35:14, Carnegie Mus. Nat. Hist., Pittsburgh, Pennsylvania.

NISBET, I. C. T. 1969. Returns of transients: results of an inquiry. EBBA News 32:269–274.

RAVELING, D. G. 1963. Variation among samples of Tennessee Warblers (*Vermivora peregrina*) killed in nocturnal migration at a TV tower. M.S. thesis, Univ. of Minnesota, Minneapolis, Minnesota.

——— AND D. W. WARNER. 1965. Plumages, molt, and morphometry of Tennessee Warblers. Bird-Banding 36:169–179.

RYAN, L. S. 1970. More warbler returns. EBBA News 33:35–36.

WINKER, K., D. W. WARNER, AND A. R. WEISBROD. The Northern Waterthrush and Swainson's Thrush as transients at a temperate inland stopover site. *In* Ecology and conservation of neotropical migrant landbirds (J. M. Hagan and D. W. Johnston, eds.). Manomet Bird Observatory and Smithsonian Inst. (in press).

WOODWARD, P. W. 1972. Another return of a transient songbird. EBBA News 35:101–102.

KEVIN WINKER AND DWAIN W. WARNER, *Bell Museum of Natural History, Univ. of Minnesota, Minneapolis, Minnesota 55455;* AND A. R. WEISBROD, *Spring Creek Field Laboratory, National Park Service, Marine on St. Croix, Minnesota 55047.* *Received 15 Jan 1991, accepted 6 March 1991.*

Wilson Bull., 103(3), 1991, pp. 514–515

The response of adult Red-cockaded Woodpeckers to a fallen nestling.—On 31 May 1990, while watching a pair of Red-cockaded Woodpeckers (*Picoides borealis*) feeding two 20-day-old nestlings, we observed the following behavior. At 6:30 DST, the adult male flew to the entrance of the nest cavity with prey. He did not immediately offer the prey to the nestlings, but hesitated at the entrance for several seconds. One of the nestlings lunged forward, apparently to snatch the prey from the adult, only to lose its balance and fall from the 12-m-high cavity to the ground where it remained out of sight near the base of the cavity tree. Both adults continued to feed the nestling still in the cavity, but did not approach the one on the ground, even though it called periodically. After ca 1.5 h, the adult female flew to the base of a pine (1 m from the base of the nest tree), positioning herself 0.5 m above the ground. She called continuously to the fallen nestling, which replied. The adult then flew to the base of the nest tree, again staying 0.5 m above the ground. I could not see the nestling, but I could hear it calling constantly. The adult began to hitch up the bole of the nest tree while continuing to call. The nestling came into view clumsily hitching up the bole behind the adult. The adult frequently looked back at the young bird and stopped periodically. After climbing to ca 4 m above the ground, the nestling lost its foothold and fell again. The adult immediately flew down to the base of the tree and the process was repeated. After four such episodes, the adult flew off. We interpret this adult behavior as attempts to guide the nestling up the tree. While the adults were away, the nestling hitched about 1.5 m up the nest tree and stayed there for 1.5 h. It gave begging calls each time an adult flew to the nest cavity, but it was never fed. The adults fed only the nestling that remained in the cavity.

After completing 3 h of feeding observations, we obtained five cerambycid larvae (southern pine sawyer, *Monochamus titillator*) from some pine slash (tree tops and major branches lying on the ground) left over from a thinning operation and fed them to the fallen nestling. The adult male had been observed obtaining larvae by foraging on the logging slash.

We returned one hour later to find the nestling in the same spot. Soon an adult (sex