Return of a Red-eyed Vireo: a Transient or Breeder?

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Red-eyed Vireos *(Vireo olivaceus)* stop over, during both spring and fall migrations, on the forested dune ridge that separates Lake Manitoba from the Delta Marsh, Manitoba. A 3-km segment of this dune-ridge forest (study area described by Sealy 1980a, MacKenzie 1982) has been the focus since 1974 of an ongoing investigation into the ecology of a community of densely nesting species of insectivorous birds. An important part of this work has involved almost daily mist netting and banding, during the breeding seasons, of the resident breeding birds and in some years individuals that stop over in this forest during their migrations (see Sealy 1980b; den Haan 1982; Sealy and Biermann 1983). We believe that a Red-eyed Vireo banded in the dune-ridge forest in 1976 and recaptured in 1978 near its original banding site represents the return of a breeding bird, rather than a transient, despite the fact that Red-eyed Vireos have been recorded nesting only once on the study area.

An AHY Red-eyed Vireo (flattened wing, 75 mm; weight, 17.7g), probably a female (see Godfrey 1966, Williamson 1971), was mist netted and banded (1370-35318) on 20 June 1976. This individual did not repeat in 1976, but was recaptured on 19 July 1978, 130 m west of its initial capture site. It was molting wing and body feathers when recaptured. This capture date suggests that this individual probably was not a migrant, although its status as a breeder on or off the study area was never established. Red-eyed Vireos migrate through the dune-ridge forest in spring, generally over a 2-week period in late May and early June (Table 1), a time that corresponds to their arrival in Manitoba generally (Lawrence 1958). Only a few individuals have been seen or captured in mid-summer, but a detectable movement of birds occurs again in late August and early September (Table 1). In spring, singing individuals are particularly conspicuous.

The Red-eyed Vireo nests in woodlands along the southern edge of the Delta Marsh (Hochbaum 1971) as well as in aspen woodlands in surrounding areas (Bird 1961, Godfrey 1966, Flack 1976), but apparently generally not in the forested dune ridge (Hochbaum 1971, pers. obs.). Although Warbling Vireos *(V. gilvus)* nest at high densities in the dune-ridge forest (MacKenzie *et al.* 1982), evidence of nesting by the Red-eyed Vireo on the study area was obtained only in 1981. A Red-eyed Vireo nest was observed under construction on 7 June 1981, about 1.5 m high in a red-osier dogwood *(Cornus stolonifera).* This nest contained 1 egg by 11 June and 3 eggs, the final clutch, by 13 June. The young began to hatch on 25 June, but all 3 young were gone by 1 July. The adult female was banded and color marked on 24 June, the male on 25 June. A third adult Red-eyed Vireo was netted about 210 m east of this nest, also on 25 June, but it was not seen or netted again, and no other nests were found that year, or before or after 1981.

Table 1. Total numbers of Red-eyed Vireos mist netted and banded at 5-day intervals in the springs of 1980, 1982, and 1983 and "falls" of 1982 and 1983 on the forested dune ridge, Delta Marsh, Manitoba[1].

Five-day periods[2]	Number captured
May 26-30[3]	29
Jun 31-4	13
5-9	16
10-14	1
Jul 15-19	1
20-24	1
Aug 4-8	1
19-23	1
24-28	4
29-2	2
Sep 3-7	8
13-17	1
18-22	1

[1]Mist netting began on the study area on 15 May 1980, 21 May 1982, and 18 May 1983; it ended on 24 October 1982 and 31 October 1983.
[2]The 5-day periods not shown indicate that no Red-eyed Vireos were netted.
[3]None of these individuals repeated (i.e., recaptured on the study area within 3 months of banding).

The individual banded on 20 June 1976, and recaptured on 19 July 1978, may have nested in one or all 3 years on or near the study area, or it may have been present as a nonbreeder. The latter possibility seems unlikely, particularly in 1978. The bird showed no signs of injury or other disability. The dates when this individual was captured in 1976 and 1978 fell in the period between spring and fall migration of this species, as indicated in Table 1.

Adult Red-eyed Vireos are known to return to their previous breeding sites in subsequent years (Lawrence 1953), as do Warbling Vireos on our study area (unpub. data), and hence it is possible that this individual did so. One other individual banded earlier in 1976, on 11 June, was neither captured nor seen again, and based on its date of capture probably was a migrant (Table 1), although the nest in 1981 contained its first egg on that date!

Nisbet (1969) compiled the records of returns of passerine species that were banded during migration in North America. He divided these returns into two categories (p. 269): (1) "good" transients, species that are not known to breed or winter regularly within 100 miles [160 km] or more, and (2) "doubtful" transients, where the banding station lies on the edge of, or within, the breeding or wintering range of the species. He listed returns of only 8 "good" transients, all of them wood warblers (Parulinae), and 9 "doubtful" transients. He suggested that individuals migrate near the same date in different years. This trend has continued (see Ryan 1969, 1970; Woodward 1972; Johnson and Ellis 1974; Foy 1975; Ely and Weber 1977; Goodpasture 1979). Most of these bandings and recaptures occurred in the fall migration period. The Red-eyed Vireo that returned to the dune-ridge forest was a "doubtful" transient based on Nisbet's criteria, and was more likely a nesting bird.

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(Inland)