

Winter Recovery, in Guatemala, of a Warbling Vireo Banded in Southern Manitoba, and an Examination of Other Recoveries from the Wintering Range

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The Warbling Vireo (*Vireo gilvus*) and seven other species of insectivorous birds and one granivorous species nest at high densities on the forested dune ridge (MacKenzie *et al.* 1982) that separates Lake Manitoba and the Delta Marsh, Manitoba. The population biology of the species in this community (study area described in Sealy 1980, MacKenzie 1982) has been studied since 1974, and 549 Warbling Vireos have been banded up to 1983, and in many cases individually color marked. A recovery in winter in Guatemala of one of these banded vireos is one of only six recoveries from within this species' wintering range. These recoveries are examined in the present paper.

An AHY (= after hatching year) female Warbling Vireo (880-27980), banded and color marked on the dune-ridge study area on 26 June 1977, was found dead by Ismael Ramirez A. near Jutiapa, in southern Guatemala, on 2 November 1978. This individual had not repeated in 1977 nor was it recaptured on the study area during the breeding season in 1978. Two other recoveries of the Warbling Vireo during winter are from Guatemala, two

are from El Salvador, and one is from an unknown locality in Mexico (Table 1). These recoveries probably were of individuals established on their wintering grounds. However, the Nebraska-banded bird recovered on 8 October in Guatemala may have been migrating or had recently arrived, because this species presence in Guatemala spans from 28 September to 2 April (Griscom 1932, Land 1970), although arrival in fall occurs principally in October (Griscom 1932).

It is not known whether the wet and dry seasons influence the areas this species chooses over the wintering period (e.g. Karr 1971, Morton 1980). The localities of four of the recovered individuals (Table 1) are within the Warbling Vireo's winter range which Barlow (1980) delineated, a range he pointed out is disproportionately small when compared to its breeding range. Barlow further noted (p. 89) that "This reflects the short migration distances of many of the southern breeding populations and suggests a substantial and concentrated wintering population." Interestingly, the California-banded vireo was recovered

Table 1. Recoveries of Warbling Vireos within the wintering range.

Band Number (age/sex) ¹	Banding Locations (coordinates)	Banding Date	Recovery Location (coordinates)	Recovery Date
1170-18775 (AHY-U) ²	California (37.5-122.4)	5 May 1969	Mexico (00.0-000.0) ³	17 Jan 1970
1270-05767 (AHY-U)	Kansas (37.1-097.0)	9 Sep 1976	Guatemala (14.4-089.2)	5 Feb 1978
880-27980 (AHY-F)	Manitoba (50.1-098.2)	26 Jun 1977	Guatemala (14.1-089.5)	2 Nov 1978
1520-71596 (AHY-U)	Nebraska (42.0-097.0)	20 May 1979	Guatemala (13.5-090.0)	8 Oct 1982
860-49417 (AHY-U)	South Dakota (43.1-096.3)	3 Aug 1981	El Salvador (13.4-089.1)	9 Feb 1982
930-11435 (AHY-U)	Kansas (37.1-097.0)	18 Aug 1982	El Salvador (13.5-089.2)	25 Feb 1983

¹AHY = after hatching year; F = female; U = unknown.

²Probably *V.g. swainsonii*.

³Coordinates unknown.

from the northern part of the wintering range, in Mexico, and judging from the January date of the recovery, that bird probably was established on its wintering ground. The other recoveries, of birds banded in central North America (Table 1), are from the most southerly portion of the species' wintering range, from Guatemala and El Salvador. This species has been recorded once in Honduras, where Monroe (1968:319) collected a pair, and stated that it "is probably regular, though rare, in winter on the Pacific slope of Honduras." The Honduran specimens were assigned to the eastern subspecies, *V. g. gilvus*. The Warbling Vireo has been recorded once in both Nicaragua (T. R. Howell in Monroe, 1968) and Costa Rica (Slud 1964). Land (1970) reported that both *V. g. gilvus* and *V. g. swainsonii*, the latter a western subspecies breeding in North America, occur in winter in Guatemala and El Salvador (see also Dickey and van Rossem 1938).

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(Western)

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The Hawk Mountain Sanctuary Association is accepting applications for its ninth annual award for raptor research. To apply for the \$750 award, students should submit a brief description of their research program (maximum of 5 pp), a curriculum vitae, and two letters of recommendation by **30 September 1985**, to Stanley E. Senner, Executive Director, Hawk Mountain Sanctuary Association, Rt. 2, Kempton, PA. 19529. The Association's board

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