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APPARENT SITE FIDELITY BY AN IMMATURE NORTHERN WATERTHRUSH SEIURUS NOVEBORACENSIS IN THE VIRGIN ISLANDS

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Snow & Snow (1960), Schwartz (1964), and Rappole & Warner (1980) have discussed winter home ranges of the Neotropical migrant, Northern Waterthrush (Seiurus noveboracensis) within the southern (Venezuela and Trinidad) and western Caribbean (Mexico and Panama). Loftin (1977) summarizes known captures and returns of this waterthrush in the American tropics and Rogers et al. (1982) discuss the repeat frequency of 16 species of neotropical migrants in Guatemala, including what they considered to be territorial Northern Waterthrushes. Kricher & Davis (1986) expand on the subject of winter site fidelity of this waterthrush and eight other neotropical migrants in Belize. McNeil (1982) reports intra- and interannual recaptures of adult Northern Waterthrushes in Venezuela. Rappole and Warner (1976) also report territoriality of Northern Waterthrush in southern Texas during spring.

Northern Waterthrush is an abundant winter visitor to the Caribbean (Pashley & Martin 1988) and very common in the Virgin Islands (Raffaele 1989, Askins et al. 1992) from early September to early May (Norton 1989), or about 240 days. The Northern Waterthrush ranks as one of the most common migrants encountered on Christmas Bird Counts (Pashley 1988; pers. observ.). Habitat preference on St. John is primarily mangrove, lowland mesic, and scrub forest (Robertson 1962, Askins et al. 1992). Elsewhere in the West Indies, Diamond & Smith (1973) reported a Northern Waterthrush returning to a winter site in Jamaica the following year. Yet no reports are available on intra-year site fidelity of banded hatch-year *Seiurus noveboracensis* on the wintering grounds in the Greater Antilles (Faaborg & Winter 1979, 1980; Faaborg & Arendt 1984). In this note I describe apparent territoriality of a single, banded hatch-year Northern Waterthrush on the Puerto Rico Platform shortly after the period of arrival.

During 15-21 September 1981, I attended three mist nets located in a small, gallery forest behind the beach berm of Trunk Bay, St. John, U.S. Virgin Islands (18°20'N, 64°45'W). The area is mostly shaded by the canopy, and the ambient conditions are cooler and damper than in scrub forest only meters away. On the morning of 15 September, two waterthrushes were captured in the lower trammel of one of the nets. I briefly examined each bird for subcutaneous fat and plumage characters to determine age-class (North American Bird Banding Tech., vol 1., revised 1980). Both were determined to be HY birds with little fat. I banded (Fish and Wildlife Service; Nos. 73-34001 and 73-34002) each bird and released them.

On 16 November 1981, while mist-netting at the same location behind Trunk Bay, I discovered a waterthrush in the lower trammel of the net lane. The bird was banded and bore the same number 73-34001 as that given to a Northern Waterthrush 62 days earlier. This interval, or 26% of the winter season, is comparable to that documented by Snow & Snow (1960) for intervals equivalent to 22% and 57% of the winter season in Trinidad (10°45'N, 61°35'W). Rogers et al. (1982) considered Northern Waterthrush in Guatemala to be territorial based on recapture 33 days after initial netting. In northern South America and Trinidad, Northern Waterthrushes have shown fidelity to territories throughout the winter season (Schwartz 1964, Snow & Snow 1960). Faaborg & Winters (1979: 216) suggest that netting success drops sharply after the first day and that it indicates well defined home ranges of resident and winter resident birds. Northern Waterthrushes are considered solitary in their wintering areas and both sexes defend separate territories (Rappole & Warner 1980).

Evidence presented here from using similar techniques which provided comparable results, albeit a single recapture, apparently represents territorial behavior by an immature migrant warbler from the eastern terminus of the Greater Antilles and serves to expand our understanding of territoriality throughout the region. It is hoped that a larger study could be undertaken to determine habitat use by both adult and immature waterthrushes in the insular Caribbean.

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LITERATURE CITED

- Askins, R.A., Ewert, D.N., & R.L. Norton. 1992. Abundance of wintering migrants in fragmented and continuous forests in the Virgin Islands. Pp. 197–206 in J. Hagan, III & D. Johnston (eds.). Ecology and conservation of Neotropical migrant landbirds. Washington, D.C.
- Diamond, J.R., & R.W. Smith. 1973. Returns and survival of banded warblers wintering in Jamaica. Bird-Banding 44: 221-224.
- Faaborg, J., & J.E. Winters. 1979. Winter resident returns and longevity and weights of Puerto Rican birds. Bird-Banding 50: 216–223.

- Faaborg, J., & J.E. Winters. 1980. More returns from the Guanica Forest, Puerto Rico. J. Field Ornithol. 51: 368.
- Faaborg, J., & W.J. Arendt. 1984. Population sizes and phylopatry of winter resident warblers in Puerto Rico. J. Field Ornithol. 55: 376–378.
- Kricher, J.C., & W.E. Davis, Jr. 1986. Returns and winter-site fidelity of North American migrants banded in Belize, Central America. J. Field Ornithol. 57: 48–52.
- Loftin, H. 1977. Returns and recoveries of banded North American birds in Panama and the tropics. Bird-Banding 48: 253-258.
- McNeil, R. 1982. Winter resident repeats and returns of Austral and Boreal migrant birds banded in Venezuela. J. Field Ornithol. 53: 125–132.
- Norton, R. L. 1989. Birds of St. John, USVI: A National Park checklist, 3rd ed. National Monuments Assoc., Washington, D.C.
- Pashley, D. N. 1988. Warblers in the West Indies I. The Virgin Islands. Caribb. J. Sci. 24: 11–22.
- Pashley, D. N., & R. P. Martin. 1988. The contribution of Christmas Bird Counts to knowledge of the winter distribution of migratory warblers in the neotropics. Amer. Birds 42: 1164–1176.
- Raffaele, H.A. 1989. A guide to the birds of Puerto Rico and the Virgin Islands. Princeton.
- Robertson, W.B. 1962. Observations on the birds of St. John, Virgin Islands. Auk 79: 44–76.
- Rogers, D. T., Jr., Hicks, D. L., Wischusen, E. W., & J. R. Parrish. 1982. Repeats, returns, and estimated flight ranges of some North American migrants in Guatemala. Bird-Banding 53: 133–138.
- Rappole, J.H., & D.W. Warner. 1976. Relationships between behavior, physiology and weather in avian transients at a migration stopover site. Oecologica 26: 193–212.
- Rappole, J.H., & D.W. Warner. 1980. Ecological aspects of migrant bird behavior in Veracruz, Mexico. Pp 353–393 in A. Keast & E.S. Morton (eds.). Migrant birds in the neotropics: Ecology, Behavior, Distribution and Conservation. Washington, D.C.
- Schwartz, P. 1964. The Northern Waterthrush in Venezuela. Living Bird 3: 169–184.
- Snow, D.W., & B.K. Snow. 1960. Northern Waterthrushes returning to the same winter quarters in successive winters. Auk 77: 351–352.

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