RETURN RECORDS OF LOUISIANA WATERTHRUSHES: AN EIGHT-YEAR-OLD BIRD REPORTED

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During 16 breeding seasons, 1961-1976, I have banded 278 Louisiana Waterthrushes (*Seiurus motacilla*) at Basin Spring and at Two Jays Sanctuary, sites about 10 miles apart 20 miles southwest of Nashville, Tennessee. Both locations are similar deciduous woodlands drained by spring-fed branches within the same drainage system. These waterthrushes normally winter in the West Indies, Central America, and northern South America (Check-list of N.A. Birds, Amer. Ornithol. Union, 1957). They arrive on my study area regularly in mid-March and are rarely recorded after 25 August. Fifty-seven Louisiana Waterthrushes (20.5%) were banded at the second station where mist netting for them was limited to 2 days in April for 13 seasons (20 birds banded) and to 2 or 3 days in early July for 9 seasons (37 birds banded). July banding at Two Jays was discontinued after 1969, and since 1973 no banding has been done there. This curtailment of effort accounts in part for a drop in the number of waterthrushes banded after 1969. Banding at Basin Spring is a year-round program. The higher number of birds banded there in 1976 probably reflects increased attention to the capture of waterthrushes during that summer. For purposes of this report, results of the two stations are combined.

Table 1.

Distribution of Louisiana Waterthrushes banded by years and the number returned from each year group.

Year	Number banded	Number returned	Year	Number banded	Number returned
1961	21	1	1969	21	1
1962	18	2	1970	8	0
1963	19	0	1971	9	1
1964	22	2	1972	10	3
1965	22	3	1973	8	3
1966	23	2	1974	16	1
1967	31	3	1975	10	1
1968	16	1	1976	24	—
			Total	278	24

Of the 278 waterthrushes banded (Table 1), 49 were nestlings representing 13 broods; 113 were judged hatching-year birds. Most birds were so judged by the presence of a rusty edge on the tertials; a few were "skulled." Juvenile feathers or active postjuvenal molts were recognized in others. Ninety were recognized as adults. Spring birds were all classified as adults. Later in the summer season a brood patch, worn feathers, wing or tail molt indicated some birds to be at least a year old, hence, adults when banded. The ages of 26 were indeterminable.

TABLE 2.

Number of Louisiana Waterthrushes that returned at yearly intervals.

Number returned	17	10	8	3	1	1
Time after banding (yr.)	1	2	3	4	5	8

Twenty-four (9.4%) of 254 banded birds (24 birds banded in 1976 excluded) have been caught in years subsequent to their banding dates. No return-bird had been banded as a nestling. Four returns had been called birds of their hatching year (HY) at the time of banding. Three of these were banded 5 July, 6 July, and 9 July when HY Louisiana Waterthrushes might be in juvenile dispersal. The fourth HY bird, banded 22 June, exhibited an active postjuvenal molt and probably hatched locally. I know of no way to distinguish local from transient populations after postjuvenal molt is complete. There is no obvious influx of postbreeding adult birds in late July or early August.

Twenty-four birds returned one or more times after winter absence to yield 40 return-records (Table 2). One Louisiana Waterthrush was caught 5 years after it had been banded. Judged to be at least a year old when banded on 28 May 1967, it was at least 6 years old when handled as a return on 9 April 1972. It had also returned 3 August 1969, 9 August 1970, and 8 July 1971.

Another Louisiana Waterthrush, recaught 4 years after banding, was destined to set still another record. First captured as an HY bird 22 June 1968, it returned 29 April 1972 and again 8 May 1976 when it was 8 years old. At the time of banding, this waterthrush showed active postjuvenal molt and is considered to have hatched locally. On its returns in both 1972 and 1976, it exhibited a large active brood patch. It is reasonable to suspect this 8-year-old female waterthrush was reproductively active.

The above series of records of Louisiana Waterthrushes lends itself to a statistical analysis of projection of a possible minimum annual survival rate for this species.

Any 8-year-old warbler is remarkable. Robert J. Pantle reported recovery of an 8-year-old Canada Warbler (*Wilsonia canadensis*) (*EBBA News*, **36**(3): 165, 1973). Homann reports a 7-year-old

Ovenbird (*Seiurus aurocapillus*) *N. A. Bird Bander*, **1**(2): 66, 1976). A compilation of age records by Farber (*EBBA News*, **36**(1): 26-29, 1973) reports three 6-year-old warblers: Magnolia (*Dendroica magnolia*), Myrtle (*D. coronata*), and Yellow-breasted Chat (*Icteria virens*); and four 7-year-old warblers: Golden-winged (*Vermivora chrysoptera*), Yellow (*Dendroica petechia*), Ovenbird (*Seiurus aurocapillus*), and Common Yellowthroat (*Geothlypis trichas*). Record of a 4-year-old Louisiana Waterthrush was submitted to that list by Mary H. Clench for the Powdermill, Pennsylvania, Banding Station.

In summary, these data show that Louisiana Waterthrushes express a strong attachment for and the ability to return after migration to a particular small area near where they have established a breeding territory; that at least some hatching-year birds may return as adults to their natal territory; and that they may live and remain reproductively active at least through their eighth year.

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