

TEN CONSECUTIVE NESTS OF A SONG SPARROW

BY ANDREW J. BERGER

THIS brief paper presents data on ten consecutive nests of a color-banded female Song Sparrow (*Melospiza melodia*): one in 1948, five in 1949, and four in 1950. Her mate for the 1948 nest and the first four nests of 1949 was the same color-banded male. One other nest, probably built by this female, is also mentioned.

On July 1, 1948, at Ann Arbor, Michigan, I found a Song Sparrow nest which contained one addled (no embryo) Song Sparrow egg, two Cowbird (*Molothrus ater*) nestlings about 24 hours old, and one Song Sparrow nestling which left the nest as I exposed it. The sparrow was fully feathered and would not remain in the nest when replaced. I trapped and color-banded both adult sparrows. One of the young Cowbirds disappeared from the nest on July 5, but the other fledged July 9. The sparrows fed this Cowbird until July 24. After leaving the nest, the Cowbird's period of dependence on the Song Sparrows was 15 days. On July 28, I saw the color-banded Cowbird with three English Sparrows (*Passer domesticus*) about one-fourth mile from the Song Sparrow nest, and again, on August 5, I saw the Cowbird with several English Sparrows, but I did not see the sparrows feed the Cowbird. This nest is of special interest because the Cowbird eggs must have been laid only two or three days before the Song Sparrow egg hatched.

In Table 1, data from nest No. 1 (three young fledged May 21) are not included in the totals because the adults were not banded at that time. Since nest No. 2 was built only 20 yards from nest No. 1, in an area where there were no other Song Sparrows, however, it seems quite possible that it belonged to the same pair. I knew that after leaving the nest the Cowbird from this nest was attended by the Song Sparrows for at least 13, and possibly 15, days.

In 1949 I saw the male for the first time on March 25, the female on April 14. They occupied the same home range as in 1948. The banded male I last saw on June 28, 1949. On July 2, I first noted the female with an unbanded male. On August 4, I trapped the female at her fifth nest for that year. Both the colored band and the number on the aluminum band were checked. Her unbanded mate would not enter the trap.

During the winter of 1949-50 the area which had been the home range of the female for the two preceding nesting seasons was destroyed by construction of the University Maternity Hospital. On April 20, 1950, I found the female with an unbanded male near the exit to the University Arboretum, approximately a quarter of a mile from the old nesting area. The two areas were separated by the Huron River and a belt of woods on either side of the river.

TABLE 1
CHRONOLOGY OF SONG SPARROW NESTS

Date Found	Contents when found	First host egg laid	Known host eggs	Cowbird eggs	No. host young fledged	No. Cowbirds fledged	Remarks
1948 Apr. 23*	Under construction	Apr. 25	4	1	2	1	Banded Cowbird still being fed June 3
July 1	1 host egg; 1 host and 2 Cowbird nestlings	June 6†	2	2	1	1	Song Sparrow fledged July 1; Cowbird fledged July 9
1949 Apr. 24	Under construction	Apr. 26	2	0	0	0	Nest destroyed Apr. 27 after 2nd egg was laid
May 3	Under construction	May 4	4	2	0	0	3 host eggs disappeared May 9; nest deserted
May 15	3 Cowbird eggs	May 16	2	3	0	0	3 Cowbirds hatched but disappeared between May 28 and June 2
June 18	4 host eggs	June 4†	4	0	4	0	2 eggs hatched June 19; 3 fledged prematurely June 27 due to banding
July 31	1 host nestling	July 14†	1	0	1	0	Nestling still in nest on August 4
1950 May 1	1 host egg	May 1	3	1	0	0	Eggs disappeared May 7
May 11	Empty	May 12	2	5	0	0	Eggs disappeared May 23
June 2	5 host eggs	May 28†	5	0	0	0	5 eggs June 11; nest empty June 12
June 18	1 Cowbird and 2 host eggs	June 17†	2	5	0	0	5 eggs June 29; nest empty July 1
Totals.....			27	18	6	1	

* Data from this nest not included in totals; see text.

† Estimated

On May 11, 1950, I found nest No. 9 by watching two female Cowbirds. One Cowbird flew from a telephone wire to a raspberry thicket and then to the ground. The male Song Sparrow flew to the thicket and gave alarm notes. The Cowbird flew away. I found the complete but empty nest at once by going

to the place from which the Cowbird had flown. After this Cowbird left the area, the Song Sparrow flew to a tree 25 yards from the nest, continued giving alarm notes, and the second Cowbird flew from the tree. The first Song Sparrow egg was laid in this nest the following day and the first Cowbird egg two days after that. Two additional Cowbird eggs were laid on May 15. On May 22, the nest contained five Cowbird but no sparrow eggs. It seemed probable that in this case the Cowbirds found the nest by watching the nest building process.

At two other nests, on the other hand, I believe that female Cowbirds I was watching were searching for a nest. On April 29, 1950, while I was trying to find nest No. 8, I watched a female Cowbird for a half hour as she walked about through the grass, peered under clumps and hopped to the top of tussocks. Her movements were deliberate and at no time did I see her pick up food. I feel confident that she did not find the Song Sparrow nest at that time, because after the Cowbird flew off I searched the same area she had covered. Upon finding the nest on May 1, I learned that it was about twenty-five feet beyond the area we had searched. The one Cowbird egg was laid in this nest on May 4. Again on May 30, 1950, while looking for nest No. 10, I watched a female Cowbird in the same type of searching activity. I did not find this nest until June 2, but the Cowbird did not find it at all. Unlike the other nests of the Song Sparrow this nest was built in a field 85 yards from a thicket and the edge of a large grove of trees.

The total number of Song Sparrow eggs laid undoubtedly was greater than that indicated in Table 1. Whenever possible I visited nests daily during the laying period, but the time of visit varied. On some days it seemed certain that a Song Sparrow egg had been removed by a Cowbird before my visit to the nest. The following data from nest No. 9 justify this assumption: May 12, female on nest with one host egg, 11:20 a.m.; May 13, female not on one host egg, 2:30 p.m.; May 14, female on one host and one Cowbird egg, 10:30 a.m.; May 15, female on two host and three Cowbird eggs, 8:30 a.m. I have never known a Song Sparrow to skip a day in the laying of a clutch.

Nest No. 11 was the only nest *not* built on the ground. This nest was 20 inches from the ground in a blackberry thicket. The shortest distance between consecutive nests was 20 yards, the greatest, 175 yards, and the average, 96 yards. For six nests, the interval between the destruction of a nest and the laying of the first egg in the next varied from five to seven days. Only three out of ten nests were successful.

I am indebted to Dr. George M. Sutton for determining the fate of nest No. 11 during my absence from Ann Arbor (June 20 to August 4, 1950). I have been unable to find the banded Song Sparrow since my return to Ann Arbor.

DEPARTMENT OF ANATOMY, UNIVERSITY OF MICHIGAN MEDICAL SCHOOL, ANN ARBOR