

FROM FIELD AND STUDY

The Directive Sense in Migrant Birds.—On May 14, 1932, our party was proceeding south-eastward by motor boat from Santa Barbara, California, toward Anacapa Island. Heavy fog blanketed us almost to the sea surface. All at once a female Black-throated Gray Warbler (*Dendroica nigrescens*) was among us on the launch. It was quite unafraid as it hunted about the superstructure for insect food, allowing a hand to be cupped about it to move it out into the open for better photography. It soon became uneasy, however. The direction we were going was wrong. It launched out over the sea surface directly to the rear (west of north), then lost courage in the fog and returned to us. After a brief period it again felt the urge and flew astern, again lost courage and fluttered back to rest on the skiff which we were towing on a long painter. From there it once more returned to the larger "floating island" to repeat its search for food. Soon we came into the cove at the east end of Anacapa and the cliffs appeared through the fog only a few yards away. Seeing this land mass, the warbler flew up and disappeared among the stunted vegetation. The northward urge seemingly had been overcome by the desire for security and the island won the toss. The plumage of the bird was not in perfect condition, which circumstance suggested a bodily weakness that perhaps increased the timidity and at the same time diminished the migratory urge. The directive sense was, however, unimpaired. This species moves northward through the lowlands of southern California in great hordes, the females especially being as late as May 5 to 15. Our subnormal individual might easily have been even more retarded than the average female.

This case remained buried in my notebook as exceptional until this spring when two corroborative experiments were unwittingly performed on another transient species.

On May 12, 1941, two birds identified as Lincoln Sparrows (*Melospiza lincolni*) were live-trapped by Mr. Palmer Stoddard in Beverly Hills, California, and brought to me for examination. The birds had been transported several miles in cages covered by dark cloth. After examination they were liberated from an inset balcony that faces southeast. The hour was 7 p.m. and the sun had been down some minutes. The direct avenue of escape was to the southeast and the first bird liberated took that line in frantic haste. However, at about thirty yards distance it swung sharply through a complete reversal and rose over the house into the evening sky heading northwest. The second bird was then removed and examined. When liberated it burst forth on a line only very slightly to the south of the other bird's course. At almost exactly the same distance from the starting point it made the same turn to the northwest and climbed into the sky on its proper course. There was shrubbery on either side of the balcony and deep cover across the street, just such cover as Lincoln Sparrows frequent, but no attempt was made to hide therein.

This species migrates through the Los Angeles area as a vernal transient, hiding by day in weed patches or low shrubbery. I suspect that these two individuals would have normally taken off soon for a night flight to their next stopping place. The striking thing was to see the "automatic steering gear" apparently operate so quickly to bring a badly frightened bird back upon its charted course, the air way of its race followed by untold generations of its ancestors.

It is not necessary here to hypothesize a guiding agency that is supernatural but merely one that is superhuman. There are many ways in which the bird is superhuman (or perhaps better, in which we are subavian).—LOYE MILLER, *University of California, Los Angeles, May 16, 1941.*

White-headed Woodpecker at Pasadena, California.—On April 23, 1941, while looking for robin nests along the Arroyo Seco in Pasadena, California, near the South Pasadena line, a White-headed Woodpecker (*Dryobates albolarvatus*) attracted my attention by knocking off a chip which in falling narrowly missed my head. Although there were numerous conifers in the immediate vicinity, the bird was in one of a series of live oaks which bordered South Arroyo Boulevard. The bird, a fine male, soon flew to a dead live oak standing alone in a large lawn across the street, where I watched it for some twenty minutes. Pebbles and mud-balls thrown from distances varying between twenty and thirty feet failed to flush the bird. The bursting mud-balls merely caused the woodpecker to move around to the other side of whatever limb he was drilling on at the moment. Ultimately he flew back to a spot in the live oaks near the one in which I had originally discovered him. The bird was not seen again until May 1. It was seen for the last time on May 5. This record is of interest in that this species is rarely found outside its normal habitat in the mountains, and there seems to be no previous record for this low level in the Pasadena area.—WENDELL TABER, *Pasadena, California, May 5, 1941.*