

**HERRING GULL, *Larus argentatus smithsonianus*.**—A young bird (37-658725) banded July 4, 1940, at Penikese Island, Massachusetts, by Laurence B. Fletcher was "caught" at La Libertad, El Salvador, on January 27, 1941. This is apparently the first record for the species in El Salvador.

**EASTERN WHITE-WINGED DOVE, *Melopelia asiatica asiatica*.**—During the summer of 1940, Dr. George B. Saunders banded nearly eight hundred nestling White-winged Doves in the Rio Grande valley in Texas. Dove 40-419215, banded near Mission, July 31, 1940, was killed near San Salvador, El Salvador, October 15, 1940. According to the account of this species given by Dickey and Van Rossem ('The Birds of El Salvador,' Field Museum of Natural History, 1938), this recovery constitutes the first definite proof that some of the White-winged Doves of El Salvador are migratory.—MAY THACHER COOKE, *U. S. Fish and Wildlife Service, Washington, D. C.*

**Ticks affecting birds' eyesight.**—One afternoon in November 1936, as I stood under an oak-tree in my garden, a Slate-colored Junco fluttered to my head, thence to my shoulder, and then made an uncertain way along my arm. This was not a tame bird, but a nearly blind bird that could not distinguish between person and tree. Its misfortune was plainly due to the huge tick that was fastened just below the right eye, and that flopped and swung with every turn of the head. In March 1940, I saw another Slate-colored Junco (*Junco hyemalis hyemalis*) nearly blinded by a large tick below the left eye. This bird hopped and fluttered through a long flower border, saw well enough to keep just beyond my reach, but was loath to fly. Both these birds were easy prey for predators, and if they escaped quick killing must eventually have lost all vision and died of starvation.

In my four years of banding (starting February, 1937) I have trapped an even score of birds carrying ticks, and in every case I removed the parasites. Only a few of these birds were re-captured, but from their records it seems safe to conclude that if a tick is removed before damage to the eye has progressed too far, the bird recovers sight; and it seems equally reasonable to suppose that if the bird were allowed to retain the tick it would finally reach the condition of the juncos cited above. The ticks taken from two Slate-colored Juncos caught on January 29, 1941, were identified by Dr. H. E. Ewing, U. S. National Museum, Washington, D. C., as *Ixodes* sp. The tick family, Ixodidae, of which the dog tick is a type, has been regarded as a mammalian parasite, bird-infesting ticks belonging to the family Argasidae.

In every case but one, the ticks were very near an eye. The exception was Eastern Mockingbird (*Mimus polyglottos polyglottos*) no. 39-209852, banded October 30, 1939, who had claimed for his winter territory the area north of our house. When re-trapped January 5, 1940, he had a slight puffiness above the right eye, but I could see no cause for trouble. Bitter weather set in, the Mockingbird was regularly fed, and it was February 22 before he was again caught. Then his right eye was sunken and shriveled, and the cheek inflamed. Above the eye and back near the crown of the head (like an unnatural horn) was a medium-sized tick—roughly, about the size of a navy bean. Lifting the feathers, I found another tick, smaller, on the opposite side of the head, but it did not appear to have affected the left eye. I smeared both ticks with olive oil, and using small tweezers pulled them off, including the heads; and putting more oil on the inflamed areas, released the bird. The next day he moped, for once allowed smaller birds to eat at his tray. On the second day he was restored in

spirit, and was seen to charge into a flock of Cedar Waxwings raiding his holly berries. On March 7, just two weeks later, he was again trapped, and to my astonishment the eye was full, bright and normal in appearance. Soon after this, transient Mockingbirds began to move through, our resident no longer defended his territory, and presently disappeared. In late October 1940, he returned for a second winter in the north territory, on December 16 was trapped and identified as 39-209852. There was no indication of injury by the ticks of the preceding winter.

Slate-colored Junco no. 38-66899, banded November 23, 1939, was re-trapped December 1, 1939, with a tick (larger than the Mockingbird's) attached to the upper lid of the right eye. As I pulled the tick away, thick blood oozed from under the lid, spread over the eye. But on December 14, when re-trapped, this bird showed no trace of injury. Junco no. 40-39519 was not so fortunate. It was banded December 14, 1939, and re-caught December 30 with a tick on the lower lid of the left eye. A slight pull on the tick made blood come up over the eye, and a stronger pull tore the bird's skin at the corner of the eye, so I was forced to cut away the tick's body and leave the head embedded. When re-taken January 23, 1940, the bird was blind in the left eye. In both these cases, the ticks developed to noticeable size in a short time, in one instance in seven days and in the other sixteen days; in the case of the Mockingbird a month and a half elapsed between the first sign of eye irritation and the discovery of the ticks on top of the head. It is also noteworthy that despite the condition of the eye and cheek, the Mockingbird was vigorous and in good spirits, had sung in the mild weather of February, and had guarded his food shelf.

Of the other birds found to have ticks, only one has a record of re-capture. Junco no. 40-39513, banded December 5, 1939, was a return November 20, 1940. Repeating January 29, 1941, it had a small tick just below the right eye. On the tick's removal there was left the characteristic area—a bare reddish place, pitted in the center where the head was fastened. When the bird was re-taken February 5, this spot had entirely disappeared.

In four years I have banded 1,253 birds (which includes some nestlings), representing 28 species, and have found ticks on ten Slate-colored Juncos, five White-throated Sparrows (*Zonotrichia albicollis*), two Mockingbirds, and three Cardinals (*Richmondia cardinalis cardinalis*). The juncos are our commonest winter residents, and easily trapped.—RUTH HARRIS THOMAS, Route 3, North Little Rock, Arkansas.