

The results of this work, as shown in the table, indicate a markedly lower temperature in the birds affected by botulism. The mean temperature for the pintails before treatment was 101.8 degrees Fahrenheit and after recovery it was 106.6. Observations indicated that as the severity of the infection

A Comparison of Body Temperatures of Botulistic Pintail Ducks before Treatment and after Recovery

Group	Number	Mortality	Before treatment Mean temp. (°F.)	After recovery Mean temp. (°F.)
Adult	46	8	102.3	106.9
Immature	72	16	101.6	106.4
	118	24		
Male	69	10	101.8	106.6
Female	49	14	102.0	106.5
	118	24		

increased, as determined by the external physical condition of the bird, there was an accompanying decrease in the body temperature. This relationship seemed to be substantiated when it was found that there were only three recoveries in the ten cases in which the body temperatures had fallen below 100 degrees plus the fact that the pintails most seriously affected had the lowest temperatures.—C. V. OGLESBY, *Nevada Game Commission, Reno, Nevada*, and FRED A. GLOVER, *United States Fish and Wildlife Service, Patuxent Research Refuge, Laurel, Maryland, November 15, 1953*.

**The Gray-cheeked Thrush at Point Barrow, Alaska.**—Bailey (Colorado Mus. Nat. Hist., Pop. Ser., 8, 1948:279-280) reported that the Gray-cheeked Thrush (*Hylocichla minima minima*) is very common throughout the Kotzebue Sound region of Alaska and inland among willows in the foothills bordering the arctic slope. Its normal breeding range extends along these foothills to the delta of the Mackenzie River, thence southeasterly to the Anderson River region and northern Newfoundland. However, he is able to list four vagrants to the northward as far as Point Barrow on June 8 and 10, August 29, and September 19. A fifth specimen can now be reported from Point Barrow. On September 19, 1952, I found a dead bird on the ground directly under the radar target located on the edge of the low bluff that constitutes the northernmost tip of Alaska. The bird apparently had flown into the heavy woven wire grid of the target's vanes. A ragged wound found along the throat and a hemorrhagic area over the top of the skull indicated the violence with which the bird struck the screen. The specimen was a male, weighed 25.23 grams, and the gonads were 1.5 and 2 mm. long.

Bent (Bull. U. S. Nat. Mus. Bull. No. 196, 1949:199) gives September 8 and 9 as late dates for departure of the Gray-cheeked Thrush from Nome and St. Paul Island, respectively. It is reasonably certain that my specimen from Point Barrow had lingered in the arctic considerably past the dates quoted by Bent, for although the bird was cold when picked up, there had been no appreciable desiccation of the tissues and it could scarcely have been dead more than twenty-four hours.

The recently collected specimen is now No. SU 12159 in the Zoological Collections of the Natural History Museum at Stanford University.—IRA L. WIGGINS, *Natural History Museum, Stanford University, California, March 23, 1953*.

**Scott Oriole Wintering at Palm Springs, California.**—On December 30, 1953, a male Scott Oriole (*Icterus parisorum*) was seen by me in Palm Canyon near Palm Springs, Riverside County, California. This bird, in fine male plumage, was observed through 8-power glasses, although at times he was so close that these were unnecessary. A search of the literature reveals very few instances of wintering birds of this species in California.—EARLE R. GREENE, *Los Angeles, California, January 1, 1954*.

**Leaf Bathing of the Mockingbird.**—While at breakfast on November 28, 1953, I was amused and very much surprised by the antics of a Mockingbird (*Mimus polyglottos*) in an avocado tree

outside my window. At first I could not decide what the bird was doing. After I had watched it for five minutes, however, I noticed that it was getting wet, its tail was already hanging heavy and its body feathers were soaked. It finally occurred to me that the bird was actually taking a bath. It was now 7 a.m. and the morning was cold; the sun was up just enough to shine on the top of the avocado. There had been a heavy dew in the night, and drops of water glistened on the leaves of the tree.

The bird would alight on the end of a branch where the new growth evidently held more moisture, then rub its head from side to side on the leaves, at the same time fluttering its wings in regular bird-bathing fashion. This would end with a great flapping of wings as the bird fell—indeed crashed—down through the leaves for several feet. When falling in this manner, the Mockingbird was showered with a mass of water droplets. It would check its fall about halfway down the tree and either fly back to a higher branch or sometimes to another tree fifty feet away and go through the same performance again. I watched the bird for twelve minutes as it repeated this over and over until it was well soaked. It then perched on a topmost branch and finished its bath with a series of fast shakes, flutters, and preening.

While I was watching this activity, my wife noticed in a tree in the backyard another Mockingbird which evidently had just finished its bath as it was very wet and was drying itself. Presumably its procedure had been similar to that of the first bird. So far as I know there was no water near by.

In my many years of bird study I have never seen or read of this peculiar yet natural way of bathing. Even so, I suspect that leaf bathing is of fairly frequent occurrence but has somehow escaped general notice.—WALDO G. ABBOTT, *Santa Barbara, California, January 1, 1954.*

**Association and Seasonal Succession in the Use of Nest Sites.**—In the vicinity of their nests passerine birds exhibit varying degrees of tolerance of the presence of other species. In general, however, two species do not place their nests close together, especially if they use the same type of nest site.

In several areas near Ann Arbor, Michigan, I have been impressed by the fact that three species of birds build their nests in the same type of vegetation, although at different times in the nesting season. These three species are: Traill or Alder Flycatcher (*Empidonax traillii*), Yellow Warbler (*Dendroica petechia*), and American Goldfinch (*Spinus tristis*). The data presented here were obtained during the breeding seasons from 1947 through 1953. Four of the five areas mainly concerned in this report are located in Ann Arbor Township, Washtenaw County: (1) University Botanical Gardens in Ann Arbor (Section 33); (2) Blanchard's Pond (Section 31); (3) Geddes Pond (Section 27); (4) Hogback Road area (Section 36; for a photograph of part of this habitat see Berger and Parmelee, *Wilson Bull.*, 64, 1952:35); (5) near Dixboro, Michigan (Section 20, Superior Township).

There is, of course, some overlap in the breeding seasons of these species, but the main nesting period for each is different from that of the other two species. Much of the overlap that does occur is probably due to re-nesting after failure of a first nest. So far as is known the Yellow Warbler and the Traill Flycatcher are single-brooded in southern Michigan. Some American Goldfinches have two broods.

Nest building by the Yellow Warbler begins in the first or second week of May (May 10, 1951, May 11, 1949, and a nest with one egg on May 11, 1952). I have never seen an active nest later than the first week of July.

The Traill Flycatcher starts to build in the first week of June (June 2, 1950, and 1953, June 4, 1951), and eggs have been found on June 7 (1951 and 1953) and June 9 (1952). The earliest dates I have known young to fledge were July 4 (1951), and July 6 (1952 and 1953). The latest dates for nestlings were August 16 (estimated date of fledging, August 19, 1948; see Berger and Hofslund, *Jack-Pine Warbler*, 28, 1950:10) and August 19 (1951). I have some evidence to indicate that this species does not attempt to re-nest if a nest is destroyed after the third week of July.

Although I found a goldfinch nest with one egg on June 12, 1947 (Berger, *Wilson Bull.*, 60, 1948: 52-53), in subsequent years this species has begun nest construction in the first or second week of July. Nestlings have been observed each year as late as the third or fourth week of September.

Depending on the area concerned, the following vegetation has most often been used as nest sites: ninebark (*Physocarpus opulifolius*), panicled dogwood (*Cornus racemosa*), hawthorn (*Crataegus* sp.), and privet (*Ligustrum vulgare*). It is interesting to note that in the Ann Arbor region red-osier dogwood (*Cornus stolonifera*) is rarely used for nest sites by any of these species. Nickell (*Auk*, 68, 1951: