

**Fulvous Tree Duck at Fort Bragg, Mendocino County, California.**—On the morning of December 8, 1962, a group of seven Fulvous Tree Ducks (*Dendrocygna bicolor*) was seen flying easterly along the north edge of Laguna Point at MacKerricher State Park near Fort Bragg, Mendocino County, California. The group circled once before flying inland a short distance to alight on Cleone Lake. A group of Fulvous Tree Ducks, probably the same individuals seen earlier, was observed for several days in the following week by Rangers D. G. Andrews and M. C. Wilson.

Although this tree duck has occurred occasionally north to Washington and Vancouver Island, British Columbia (A.O.U. Check-list, 1957:69), according to Grinnell and Miller (Pac. Coast Avif. No. 27, 1944:73) records are generally lacking for northwestern coastal California.—JOHN R. ARNOLD, *Division of Natural Science, Sonoma State College, Cotati, California, January 17, 1963.*

**Botulism and Myiasis as Mortality Factors in Falcons.**—Information in the literature pertaining to natural disease as a mortality factor in the Peregrine Falcon (*Falco peregrinus*) is virtually nonexistent. Cade (Univ. Calif. Publ. Zool., 36, 1961:188–189) lists trichomoniasis, aspergillosis, and coccidiosis as occurring in captive falcons; however, only trichomoniasis is known to occur naturally in wild Peregrines. Bond (Condor, 48, 1946:112) pointed out that botulism is a cause of death not mentioned by Hickey in his survey of the Peregrine population in eastern North America. Earlier, Bond (Condor, 41, 1939:55), while discussing the Tule Lake region of northern California, commented that during a botulism outbreak young Peregrines were affected with a disease much like botulism: “although *Clostridium botulinum*, type C, was not recovered from the carcasses, the symptoms were entirely typical.” E. R. Kalmbach (U. S. Dept. Agr. Tech. Bull., No. 411, 1934), in his analysis of western duck sickness, lists birds known to have been affected by botulism and includes both the Prairie Falcon (*Falco mexicanus*), which showed *C. botulinum*, type C, in a liver culture, and the Peregrine. The latter species was mentioned in reference to a bird from Utah that “was in a helpless condition and exhibited all the characteristic symptoms of duck sickness.”

Botulism is common in certain years on the marshes surrounding Great Salt Lake in north-central Utah, and in the course of several years additional observations have been made on Peregrine Falcons found suffering from botulism on these marshes. The majority of the birds were found by Calvin Wilson of the Tracy Aviary, Salt Lake City, but other aviculturists around Salt Lake City also picked up several of the birds mentioned. The Peregrines listed here were found from late July to early October. Most of the falcons were treated by either “flushing out” the bird with clear uncontaminated water or with a commercial product called B. K. Disinfectant, a solute with a calcium hypochlorite base, mixed one tablespoon per quart of water.

In 1943, when botulism was prevalent in specific areas, three adult female Peregrines were picked up in a weakened condition, cured, and released. Two adult females were found dead. Two additional adults, judged to be females because of their size, appeared to have early symptoms of botulism, but they could not be captured inasmuch as they were not sufficiently weakened. Between 1945 and 1951, one adult female was found and cured. Between 1951 and 1954, four adult females and one juvenal female were picked up. One of the adults died, the rest were cured. In 1956 a botulistic bird of unknown age and sex was picked up by students from the Utah State University. During 1957 an extremely dark juvenal female was found and cured. In late August of 1958 a very dark juvenile, judged to be a female because of its size, demonstrated the early symptoms of botulism; it could not be captured.

The only falcon definitely known to be a male was an adult found by Charles Springer of Salt Lake City in August, 1936. The bird was cured, banded, and released. M. R. Cheesman of Salt Lake City, recalling from memory, reports that he picked up several falcons between 1930 and 1950. Several of his friends interested in this problem have agreed that he found no less than ten falcons.

If we include the unverified ten Peregrines found by Cheesman, there is a total of 27 sick birds, a large number in view of the paucity of previously published reports of this species suffering from botulism. The large number of adult birds found sick in contrast to the number of sick juveniles does not corroborate Bond's (Condor, 48, 1946:112) findings that led him to state that “adults present in the same area and skillful enough to take healthy prey apparently did not suffer [from botulism].” Bond (Condor, 41, 1939:55) earlier reported Marsh Hawks (*Circus cyaneus*) feeding on diseased carcasses without apparent effect. In 1961 and 1962, three Marsh Hawks were brought to