

OBITUARY

Frederick C. (Charles) Lincoln, a Fellow of the American Ornithologists' Union, spent his entire working life on his most absorbing interest—the study of birds. He had no hobbies, other than work in his chosen field, and as his strength failed he frequently expressed concern as to his future activity once he reached the compulsory retirement age of seventy. As it happened he was not to face that problem, as he died following a somewhat protracted period of failing health in his 68th year.

Lincoln was born in Denver, Colorado, on 5 May 1892, and following his death in Washington on 16 September 1960 was buried in Arlington National Cemetery.

Fred Lincoln was a rather quiet, studious person, who could, however, express his convictions with vigor when he felt the occasion demanded. He was courteous and patient in his dealings with his associates, especially the younger and less experienced men with whom he came in contact. His advice and counsel helped many of them in their beginning years.

During the serious drought of the mid-thirties and the critical drop in waterfowl populations that accompanied it, he worked hard and long to secure and analyze all possible information on which suitable regulations could be based. The bird-banding records that had been accumulated furnished the most available reliable information, with much dependence necessarily placed on more or less limited observation of state and federal wildlife officials, numerous citizen volunteers, and on the newly initiated winter inventory. Lincoln played a prominent part in organizing these efforts and also spent much of his time developing better methods of checking waterfowl populations and in analyzing the data secured. Many of the improved methods that were gradually developed came through his efforts. Among other methods, he developed the "Lincoln Index," a formula for extending the data from banding returns to forecast continental waterfowl populations.

He came to the Biological Survey in 1920 with an assignment to organize and expand the bird-banding operation of that bureau. This was his major interest, even though in later years he had other duties assigned to him.

While directing the bird-banding operations, he developed the flyway concept, which is now a basic concept in forming regulations for the hunting of migratory birds.

For many years he was in charge of all federal work in the migration and distribution of birds. From the files in this division came much of the distribution data used in Bent's *Life History of North American Birds* and in the last two editions of the A.O.U. *Check-list of North American Birds*.

Lincoln made a number of collecting trips in his early years but was little inclined to travel unless officially required to do so. However, the writer was privileged to be with him on two brief trips to Florida, one to Mexico, and on numerous one- or two-day field trips in the vicinity of Washington.

He was an excellent field companion, enjoying himself and making things pleasant for others in good or bad weather and often under somewhat trying conditions.

For many years we worked together in our spare time—usually nights or holidays on Alaskan birds. Differences of opinion over format and data to be included were frequent, but these arguments never interfered with a long and warm friendship. Even after it became difficult for him to write, he kept working on this book and other manuscripts.

In his early work, while he was curator of ornithology at the Colorado Museum of Natural History, he carried on considerable field work in Colorado, Arizona, South Carolina, and Louisiana.

Dr. Alexander Wetmore, while himself a student doing summer work at the Colorado



Frederick C. Lincoln

Museum in 1909, met Lincoln, then a teenaged youth becoming interested in birds and taught him to make bird skins. From this beginning Lincoln became more and more interested in serious bird work and eventually became curator of ornithology at the museum.

After he joined the Biological Survey, he and Wetmore made many field trips together in the vicinity of Washington. In 1931 they spent two months collecting birds in Haiti and for a short time in the Dominican Republic. Wetmore found him to be a fine field companion, good biologist, and careful worker.

Lincoln's first assignment, the bird-banding program, has now grown into a continent-wide project involving the cooperation of the Canadian Dominion and Provincial

wildlife organizations, and most state wildlife agencies as well as many private organizations and individuals. As a result of this, the migration patterns of North American birds are probably known in more detail than is true for any other continent.

In the early years of this work he devoted much of his energy to developing better methods of trapping and banding. He also in a large measure developed the methods used in recording data and reporting and analyzing returns. His several field trips during the 1920's and early 1930's were largely devoted to studies and experiments in this field.

After the end of World War II, his few field trips were short and limited largely to studying the patterns of dove migrations and local movements. In this endeavor he made two brief trips to Cuba and two or more to Florida. Local hunters in South Florida had a strong belief that their dove shooting was largely furnished by extensive flights of doves from Cuba. He and I spent some time in the field with some of the leaders of this group but did not succeed in collecting a single dove that could be identified as the West Indian race. On the contrary, an intensified banding program in recent years had shown somewhat complicated local movements of wintering populations of northern birds.

Fred Lincoln liked to write and also enjoyed helping others in their writing efforts. He wrote many articles on ornithological and conservation subjects, including several books of which he was either author or an active co-author. He unquestionably had a greater detailed knowledge of bird migration than any of his contemporaries and each year answered hundreds of letters of inquiry on this subject. In addition to his own writing he spent much time carefully reading manuscripts for co-workers, especially those dealing with bird migration and distribution.

So much of his work was carried on so quietly that few people knew the wide range of his interest and his helpful attitude toward other ornithologists, but this little known side of his efforts may have been his most important contribution to ornithology.

The most important of his published works were, *American Waterfowl*, written as co-author with John C. Phillips in 1930; a bulletin on migration of birds, later published as a book in 1939, and, *The Birds of Alaska*, published jointly with the writer of this memorial in 1959.

Lincoln joined the A.O.U. in 1910 and was elected a Fellow in 1934. He served as treasurer for several years and was for many years a member of the Committee on Nomenclature.

He was a member and at times an officer of numerous other scientific organizations. His long service in his chosen field was recognized by the University of Colorado, which in 1956 conferred on him an honorary Doctor of Science degree and by the Department of the Interior action in 1957 in giving him its Distinguished Service Award.

His library was, as he wished, given by his wife to the University of Colorado. This gift included his field notes, journals, and about 400 books as well as his well-selected collection of pamphlets and separates dealing with birds and mammals.

A partial bibliography is appended.

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