

EDWARD ARNOLD, ENTHUSIASTIC OOLOGIST

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Edward Arnold was born 26 August 1864 in Kingston, Ontario, the son of George and Mary (White) Arnold. He was raised in Kingston and completed his education at Dominion Business College. In 1880, he began working for the Grand Trunk Railroad as a clerk and ticket agent.¹⁶ The Grand Trunk transferred him to Detroit in 1886, then to Chicago, and finally in 1892 to Battle Creek, Michigan as Travelling Claims Agent for the Port Huron-Chicago line. Along with the job came a free rail pass. Described by business colleagues as a strongly motivated worker, Arnold was equally keen about his hobby. Beginning in 1894 and for the next 23 years, he used his vacations to collect bird eggs and skins throughout the United States and Canada. He began with a series of 10 annual trips to the Canadian West between 1894 and 1904. Lured by the description of the egg collector's paradise in the territory of Assiniboia in Walter Raine's *Birds Nesting in North-West Canada* and by the fact that his brother, William Henry Arnold, had homesteaded there in 1885, Arnold planned these trips soon after arriving in Battle Creek.²¹ He soon amassed one of the largest collections of western North American bird eggs.

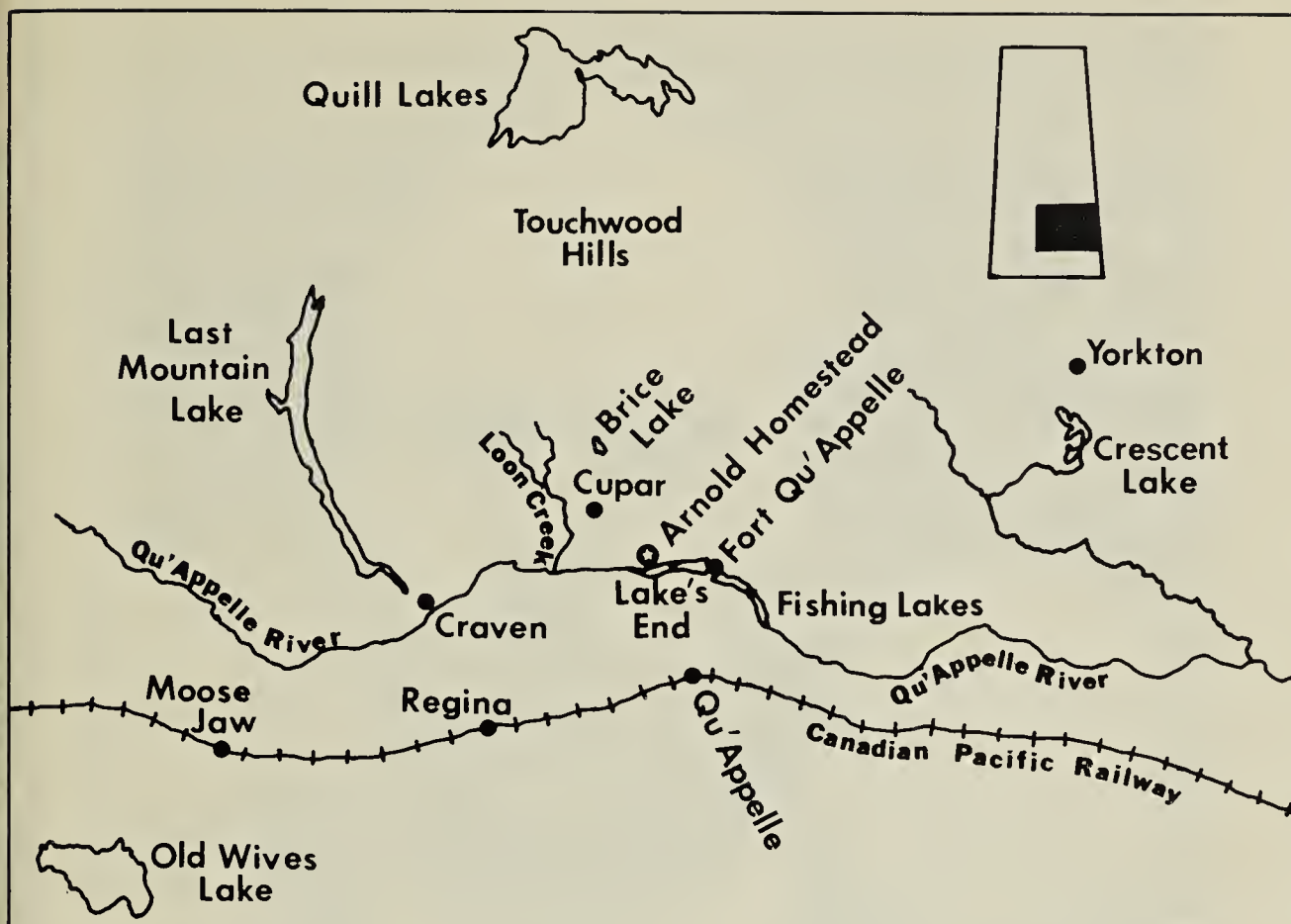
1894 Trip

Arnold's first trip to Assiniboia was planned for 1893, but heavy rail shipments because of the Chicago World's Fair forced him to postpone it until the following year. Serious about his new egg collecting hobby, he submitted an account of his observations to the *Nidologist*.² Unfortunately the articles

dealt only with his observation at a lake near Reaburn, Manitoba from 4 to June. Arnold claimed to have collected the second known set of Le Conte Sparrow eggs there; the first had been collected in the same area by G. F. Dippie and Walter Raine the previous year. Dippie questioned the set the next year in the *Nidologist*, pointing out the difficulty of correct identification without collection of the female.^{14 15} Although Arnold's last account ended "to be continued," descriptions of trips we know he made to Shoal Lake, northwest of Winnipeg (not to be confused with the town of Shoal Lake, west of Minnedosa) with Raine and to Fort Qu'Appelle were never published. The next year, in the introduction to his 1895 account Arnold wrote about his "rare good luck" in 1894 to have found 2 Goshawk nests, one of them along the trail between Qu'Appelle and Fort Qu'Appelle.³ Data in the Western Foundation of Vertebrate Zoology (WFVZ) show that Arnold stayed in Assiniboia well into June; he took a set of two fresh Ferruginous Hawk eggs from a nest 7 feet high in willow on 14 June 1894.

1895 Trip

Encouraged by his first year's success, Arnold's second trip west was quite a production. In addition to hiring a local guide, he brought two assistants to "help blow eggs, fill out data slips, and cook the necessary meals" as well as "tent, a complete camping outfit, good gun, and lots of good provisions." They caught the train at Battle Creek on the morning of 25 May and arrived at Qu'Appelle station at 6 a.m. on 28 May



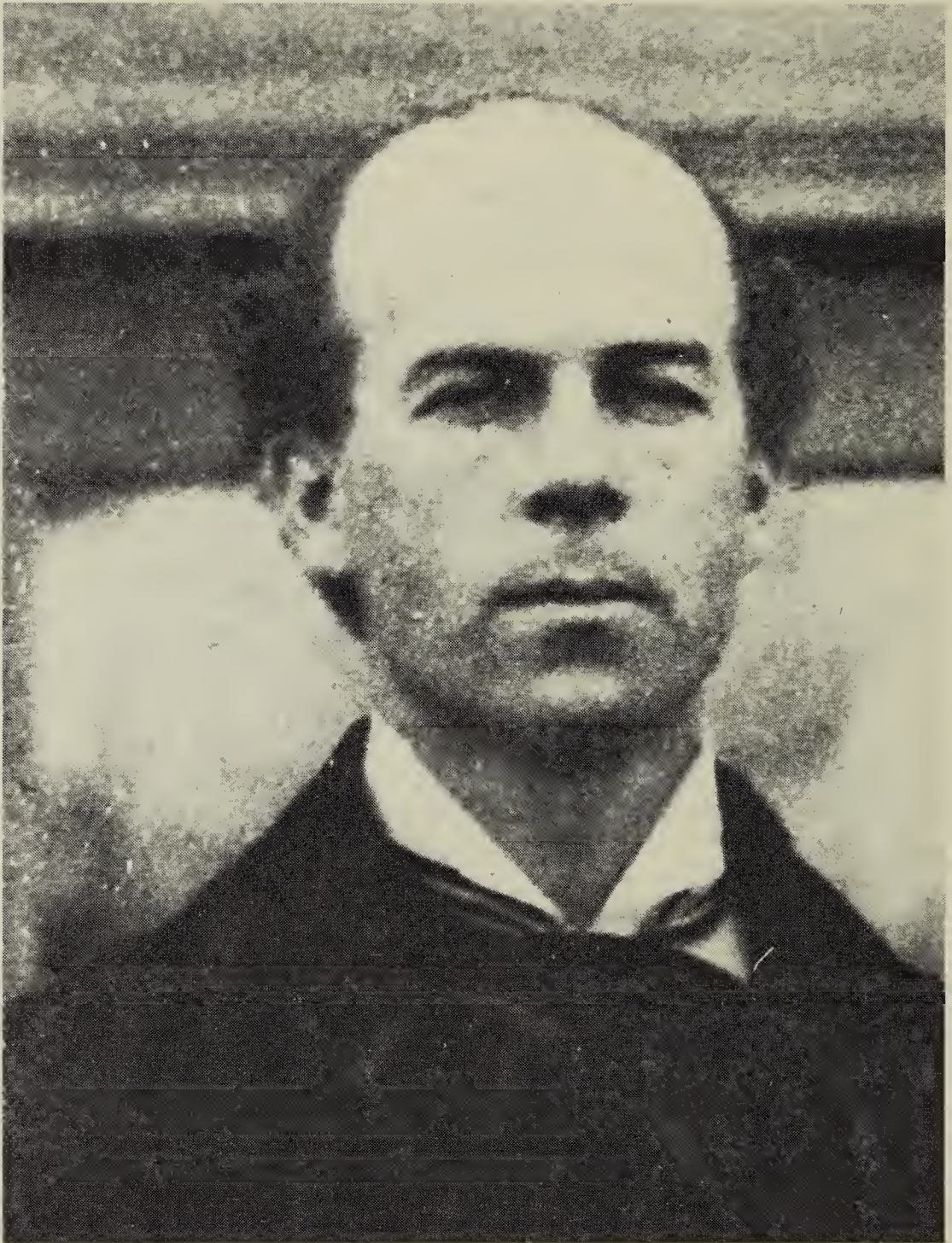
Arnold birded for 2 hours before boarding the stage coach at 8:30 a.m. on its 3-hour trip to Fort Qu'Appelle. Here Arnold hired a buckboard to take them on the 4-hour trip to his brother's homestead in the valley just west of Pasqua Lake.

William Henry Arnold farmed the 29.48 acres not covered by marsh on the north half of Section 18, Township 1, Range 15, west of the Second Meridian. The district was then known as "Lakes End, Assiniboia," the locality on a number of Arnold's egg labels. William, his wife, and four children lived in an 18 x 30 ft log house 600 yards north of Qu'Appelle River. The farm was a small ranching operation with 30 cattle and 8 horses kept within a 97-acre rail-fence enclosure. Only 3 acres were cultivated.

This time Arnold published notes on his trip in four installments in the *Biologist*.^{3,4} Included was an important

early note on Redhead parasitism in Canvasback nests, the first Saskatchewan nest of the Yellow Rail, and the second Saskatchewan nest of the Bufflehead. He also reported finding a Goshawk nest with two eggs, 8 feet from the ground in a willow, and two Long-eared Owl nests with three and five eggs each in coulees near his brother's house. Again, all four installments covered only the first few collecting days but mentioned 48 species, 21 of which were nesting records. All but two of these nests were probably valid; his nests of the Northern Shrike and Rough-legged Hawk were certainly errors of identification.

Arnold was visited by a schoolmate from Kingston who had hunted and trapped in Assiniboia for 15 years. His friend took him on a 2-day wagon trip to a lake at the base of Touchwood Hills, 30 mi to the northwest. On 5 June 1882, Kelly Wylie, Mary Houston, and the senior author attempted to trace Ar-



Edward Arnold, enlarged from a group photograph, A.O.U. meeting, Washington, D.C. November 1895

nold's trip. The homestead site was easy to find. It is now only 100 yards from the north shore of Pasqua Lake, which extends farther west and fills more of the valley since construction of a dam at the east end of Echo Lake in 1942. Following Arnold's approximate route, we travelled out of the valley, past the present site of Cupar, to three small lakes that form the headwaters of Three-lake Creek. Only the northernmost lake has a name, Brice Lake. The lakes are near the rural post office of Zala and are 25 mi north and 5 mi west of the Arnold homestead. Recent water levels are far

below the beachlines that existed at the time of Arnold's visit.

The day of our visit there were high winds, heavy clouds, and some rain but we did see 30 of the 48 species mentioned by Arnold. We were a week late for migrating Lesser Yellowlegs, Least Sandpipers and Northern Phalaropes and we would no doubt have found the Marbled Godwit and Long-eared Owl, if our survey had been more extensive. The Northern Harrier, Purple Martin and Loggerhead Shrike were seen on a brief repeat visit on 2 July.

With the breaking of the original grassland north of Cupar for grain farming, Upland Sandpipers, Baird's Sparrows, Chestnut-collared Longspurs, and McCown's Longspurs seen by Arnold are no longer common and we found none on our visit. Drainage of many sloughs and marshes in the farming area and the lower levels of the small lakes contributed to our lack of sightings of American Bittern, Canada Goose, Hooded Merganser, Yellow Rail and American Avocet. The Goshawk moved out of the area soon after settlement and the American Bittern and Loggerhead Shrike have decreased drastically in numbers in the last decade.

Although Arnold's last installment again read "to be continued," nothing further appeared. We now know, however, from museum records that he stayed at least 17 more days and made a trip about 21 mi straight north to the McDonald Hills district. There he collected two Golden Eagle eggs far advanced in incubation from a willow on 6 June and the next day collected four fresh Northern Harrier eggs on his return trip to Fort Qu'Appelle.

1896 Trip

Arnold's 1896 trip received only a half-sentence mention in the *Osprey*.⁵ In it, he reported taking his first set of Richardson's Merlin eggs but did not give the location. The nest may have been near Moose Jaw as this is the locality given for five fresh Merlin eggs collected on 27 May (data slip WFVZ, eggs no longer extant). WFVZ has data slips that show he also collected a Ferruginous Hawk egg advanced in incubation from Lakes End (Pasqua Lake) on 7 May, two Red-tailed Hawk sets, then a rare species on the open plains, in aspen and willow trees at the Fishing Lakes near Fort Qu'Appelle, and two sets of Goshawk eggs advanced in incubation near Quill Lakes on 8 June.

1897 Trip

On his fourth annual trip, Arnold "travelled several hundred miles with a guide and team, and collected in virgin soil." A brief note was published in the *Osprey* which mentioned his taking sets of Sandhill Crane, Marbled Godwit, Sprague's Pipit, Baird's Sparrow, American Hawk Owl, Swainson's Hawk, Ferruginous Hawk and American Rough-legged Hawk, the latter again no doubt a misidentification.⁵ Museum data show that 1897 was a very productive year for Arnold. He spent a good deal of time in the Moose Jaw area and there collected at least 10 raptor sets. Data slips record three Merlin sets with three, four and five eggs taken in the vicinity of Moose Jaw and north of Fort Qu'Appelle. The three egg set was taken from a nest near the latter location 15 ft in a maple on 17 June (WFVZ). Arnold did not then appreciate that Merlins do not build their own nests; he stated that the nests were "open ones, built by the birds with sticks and twigs, lined with hay and grass. They were built about the size of a Crow's nest and placed 15 to 25 feet from the ground in maple trees."⁵ No doubt the Merlins were using Crow nests from a previous year; Magpies were not common at that time.

That year, in the November *Osprey*, G. F. Dippie of Toronto questioned Arnold's identification of Merlin stating that he knew of only two authentic sets of "these extremely rare eggs," one of which he had personally taken from the top of a broken black poplar near Calgary on 22 July 1895.¹⁵ (The other set, presumably was taken by Roy Ivor south of Moose Jaw in 1883).¹⁷ Dippie implied criticism of Arnold for not giving "particulars as to locality and date, or whether the parents were secured," yet he ended with a caution to keep the locality a secret, otherwise, "collectors will rush there next season." Dippie further stated that maples do not occur west of Fort William.

The December issue of the *Osprey* published a letter from the agent of the Dominion Crown Lands Office, Regina, stating that the maple "does grow and flourish in Assiniboia," and that maple sugar had even been made. Arnold also responded by providing names and addresses of owners of three of his 1897 Merlin sets and offered to show the two sets he had at Battle Creek.⁶ He added that the parents indeed "were shot off the nest" and their identity confirmed.

The controversy continued in the January 1898 issue of the *Osprey* when editor Walter Adam Johnson stated in an editorial note: "The question as to whether or not the Richardson's Merlin breeds in Assiniboia in numbers recorded by Mr. E. Arnold, and incidentally the question of the maple's existence in Assiniboia, threatens to become a controversy of wholesale proportions."¹⁸ Johnson had received a letter from Professor John Macoun stating that the "emblem of Canada" [i.e., the sugar maple] does not grow further west than Fort William.

In retrospect, Arnold had indeed correctly identified both Richardson's Merlins and Manitoba Maples; the latter extends along the Saskatchewan River almost to the present Alberta-Saskatchewan boundary.

1898 and Subsequent Trips

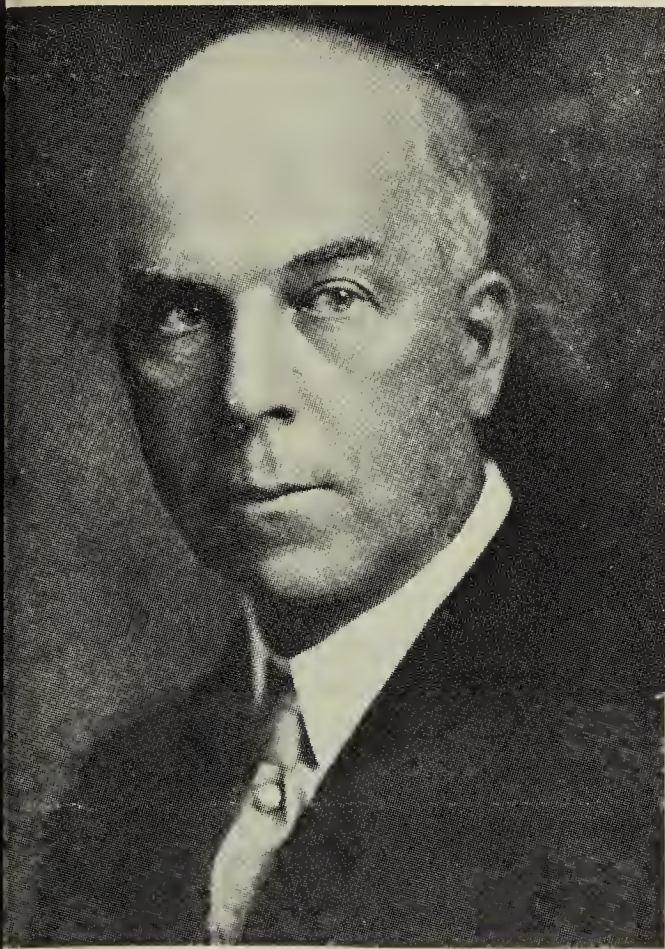
Although in 1912, Arnold wrote of having made yearly trips in 1894 and "for nine years following," records for trips he made subsequent to 1897 are very sketchy.⁸ We don't know whether the inappropriate criticism of the maples and Merlins inhibited him from writing further or whether he was simply too busy caring for his immense egg collection. Whatever the reason, Arnold stopped publishing notes concerning his western trips; information about those subsequent to 1897 can only be obtained from egg sets in museum collections.

Apparently 1898 was Arnold's most successful year for collecting raptor eggs. Concentrating his efforts around Moose Jaw and his brother's farm, he took Swainson's Hawk eggs at Lakes End (Pasqua Lake) on 4, 6 and 9 June; at Last Mountain Lake on 5 and 6 June; at Moose Jaw on 5 June, and at Looe Creek near present Cupar on 7 June. Ferruginous Hawk eggs were taken at Last Mountain Lake on 1 June and at Lakes End on 5 June. He also took American Kestrel sets at Moose Jaw 22, 30 and 31 May and 5 June, and a Craven on 7 June; five fresh Merlin eggs northwest of Fishing Lakes on 22 May and a set of Red-tailed Hawk eggs at Lakes End on 7 June.

After 1898, there are fewer Arnold data sets. In 1899, he collected near Moose Jaw the following: one set of five Ferruginous Hawk eggs on 15 May (Field Museum), two Merlin sets each with four eggs on 8 June (WFVZ and American Museum of Natural History) and a set of two Goshawk eggs on 4 June (WFVZ). There is no record for trips made in 1900 and 1902. In 1901 we know of only one set of four Ferruginous Hawk eggs taken on 23 May and a set of four fresh Merlin eggs taken on 5 June, both taken near his brother's ranch. There is no record for a 1903 trip west. A set of five Merlin eggs collected from a previous Magpie nest at Lethbridge, Alberta (his first recognition of this species' use of other bird's nests), a set of five Merlin eggs taken at Crescent Lake south of Yorkton on 17 May, and a set of five Merlin eggs taken at Lakes End on 30 May document his last trip to the North-West in 1904. In 1905, he visited Manitoba and Montana but we know of only one set of Sharp-shinned Hawk eggs taken near Lake Winnipegosis and one set of four Prairie Falcon eggs he collected on 28 April in the Bear Paw Mountains of Montana.

Other Collections

Arnold was also an active collector



Edward Arnold after his egg collecting days were over

near home. Between 1895 and 1908, he collected several sets of Red-shouldered Hawk eggs before departing for Assiniboia. These were collected primarily in the Battle Creek area in Kalamazoo, Calhoun, and Penfield counties but he also made collections in LaPorte County in nearby Indiana.

Arnold was long credited as the first person to collect a full set of four Kirtland's Warbler eggs on 15 June and again on 29 June 1904.⁷ Norman A. Wood had found the first nest of the species which nests only in northern Lower Michigan on 8 July 1903. It contained two large young and one egg. Only in 1926 could it be revealed, without danger of resulting arrest, that an oologist without a collecting permit, named J. A. Parmalee, had beaten Arnold by 9 days, taking a set on 6 June 1904. The full story was not told until publication of the definitive monograph, *The Kirtland's Warbler*.¹⁹

In 1908, Arnold was appointed Freight Claim Agent of the Grand Trunk Railway and he moved to Montreal. He continued to collect raptor eggs and, between 1912 and 1918, took several sets of Red-shouldered Hawk and Broad-winged Hawk eggs near Dorval and Montreal. There is no record that he made any more trips west. Indeed, his nephew John, in Regina, born in 1903, knows nothing of his uncle Edward. Arnold did, however, return to collect eggs in Michigan where he took Red-shouldered and Red-tailed Hawk sets in the vicinity of Battle Creek until 1914.

In 1911, he made a trip to Newfoundland with a Montreal friend who had once collected Merlin eggs at Lethbridge.¹¹ Elated, Arnold shared the eight weeks of observations in an 8-page article in the *Auk*.⁸ On his trip, he recorded 68 species, found the nests and eggs of 17, and the young of another four species. Strangely, his companion, W. J. Brown, had already published an almost identical list with four fewer species in the *Ottawa Naturalist* 4 months earlier.¹²

Arnold did not collect eggs after 1920. In 1923, at the age of 60, he was appointed General Claims Agent for the Canadian National Railways. He died on 2 January 1930 at his home in Montreal. At the time of his death, he "had seen nearly fifty years of railway service, filling positions until finally appointed Auditor of Freight Claims, with jurisdiction over the whole of the Canadian National System."²⁰ In the *Oologist* of April 1930, R. M. Barnes wrote: "He was one of the most active of America's oologists, and never lost interest even up to the last days of his life. During his life time he gathered together one of the most splendid and representative collections of eggs of North American birds in existence."¹⁰ Mousley described Arnold as "quiet, unassuming and retiring in his manner, strong in his convictions, loyal to his friends and dependable at all times." Mousley went on to

say: "He had been interested in birds all his life, and travelling about as he had to do in his various railway capacities gave him the opportunity of studying birds from the Atlantic to the Pacific. He was a fearless climber and his large collection of eggs representing over a thousand species and sub-species was well known among collectors."²⁰ Arnold was survived by his wife Altabella Simons Arnold and one daughter Carolyn.

Most of the eggs that Arnold collected personally remained in Battle Creek in "the wooden building of the old home" (letter of 10 March 1942 from Brigham to Arnold). This was for years in the care of a Mr. Thurston (letter from R. W. Tufts to Alta Arnold about August 1937). The eggs were all "securely locked in cabinets" (Alta Arnold to Brigham letter of 26 March 1936). From later letters it seems that this building eventually was demolished and the Salvation Army built on the site.

Mrs. Arnold had an agent who thought he could sell the egg collection in its entirety. A circular of the time claims the collection to be "one of the most complete, as to species represented, ever offered for sale. The only major specimens [sic] not represented are the Great Auk, Labrador Duck and Heath Hen . . . contains the Knot eggs. A set of four, the first known to science, originally belonging to the collection of the Hon. John Lewis Childs, for which he paid \$1,000. Two sets of the California Vulture, a bird verging on extinction . . . A set of the Ivory-billed Woodpecker . . . Some Museums that show the Great Auk cannot show this species . . . three sets of the Passenger Pidgeon [sic] . . . number of specimens 19,000." Among the birds of prey there were 11 sets of Broad-winged Hawk, 37 sets of Golden Eagle, 21 sets of Peregrine Falcon and 12 sets of Richardson's Merlin. There were a great many warbler sets, including 3 of Kirtland's Warbler and 22 of

Cape May Warbler, each set in its nest.

Only a few of the rarest eggs, including those of the Ivory-billed Woodpecker and Knot were kept in Montreal, (Alta Arnold to Brigham, letter of 12 April 1936), while other valuable eggs such as those of the California Condor remained in storage in Battle Creek.

Finally on 4 November 1936 an agreement was signed by Edward Brigham, Jr., of the Kingman Memorial Museum of Natural History in Battle Creek to care indefinitely for a "zoological collection of several thousand specimens owned by Mrs. Arnold . . . though the collection is received primarily for safe keeping, a portion of it at least may be exhibited . . ."

Altabella Arnold kept Edward's bird books until 1937, when she sold them to Dutton's in New York. R. M. Barnes expressed some interest in buying the egg collection "to add the extra choice specimens to the collection at the Field Museum in Chicago" as noted in a letter of 2 January 1937 from Altabella S. Arnold to E. N. Brigham. In the same letter Mrs. Arnold told Brigham of a repeated offer of \$5000 from Robie W. Tufts of Wolfville, Nova Scotia, for the hawk eggs alone, but she said "I could not divide the collection." She did sell him two California Condor eggs at \$400 each and eight sets of two eggs each of the White-tailed Kite. Even though the depression of the 1930s was virtually over, there were fewer and fewer zoologists interested in purchasing an egg collection, as Alta Arnold learned to her sorrow. Mrs. Arnold first offered the egg collection to Barnes for \$25,000 just over one-third of its calculated value of \$63,000 in the 1922 catalogue published by Barnes and compiled by the "committee of 25" which had included Arnold (letter Alta Arnold to Brigham 26 March 1936 or 1937). On receipt of a counter offer of \$5,000, Mrs. Arnold who had a "sentimental feeling" for

Michigan, then offered the collection to Dr. Josselyn Van Tyne at the University of Michigan Museums at the same price (letter of 5 August 1939), now claiming the catalogue value (in error) to be \$73,000. Even \$5,000 was a considerable sum then, and Van Tyne declined. Brigham in a letter of 14 November 1939 advised Mrs. Arnold: "you would only be able to sell to the University of Michigan by lowering your price more than I believe you would."

Besides eggs, Arnold's collection included nests and bird skins. In a letter of 6 November 1941, Brigham told Alta Arnold that "the nests are stored on a rack next to the ceiling in our carpenter shop, in the sub-basement of the museum building. Last week . . . the carpenter found . . . that the mice which we have fought for years in our storage rooms, had done their destructive work. It is too bad to have these birds' nests made into mice nests . . . to let the nests remain in their storage spaces is to invite their complete destruction." The eggs, well protected in sturdy cabinets, remained there "in a very dirty, drafty part of the basement" (letter of 23 October 1972 from Mrs. John Ringier (Cruttenden) (Fick to Raymond Quigley, WFVZ) until April 1952 when John Cruttenden, an avid oologist from Quincy, Illinois, bought the eggs and saved the collection (letter of 14 September 1953 from John Cruttenden to Ray Quigley). When Cruttenden died prematurely at age 41 years on 7 September 1956, the collection was purchased by Ed. N. Harrison, who packed the collection in a rented van and drove it to Los Angeles where it now forms part of the collection of the Western Foundation of Vertebrate Zoology. A small portion of the Arnold collection is still retained in the Kingman Museum in Battle Creek.

Acknowledgements

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¹ ANON. 1930. Auditor of Freight Claims Passes. Canadian National Railways Magazine 16:February, p. 36.

² ARNOLD, E. 1894. My '94 outing trip in North-West Canada. Nidologist 1:168, June-July; 2:11-13, Sept.; 3:23-25, Oct.

³ ARNOLD, E. 1895. An outing in Assiniboia, 1895. Oologist 12:150-151, 161-163, 168-170.

⁴ ARNOLD, E. 1896. My 1895 outing in Assiniboia. The Oologist 13:19-21.

⁵ ARNOLD, E. 1897a. A trip to Assiniboia. Osprey 2:13, Sept.

⁶ ARNOLD, E. 1897b. Correspondence. Osprey 2:52.

⁷ ARNOLD, E. 1904. Kirtland's Warbler. Oologist 21:171.

⁸ ARNOLD, E. 1912. A short summer outing in Newfoundland, 1911. Auk 29:72-79.

⁹ BARNES, R. M. 1922. A wandering oologist. The Oologist 39:48.

¹⁰ BARNES, R. M. 1930. The dissemination of our rank continues. Oologist 47:45.

¹¹ BROWN, W. J. 1906. Richardson's Merlin. Ottawa Naturalist 20:111-112.

¹² BROWN, W. J. 1911. Some Newfoundland bird notes — May, June, July, 1911, Ottawa Naturalist 25:89-94.

¹³ CALLIN, E. M. 1980. Birds of the Qu'Appelle, 1857-1979. Saskat-

chewan Natural History Society, Spec. Publ. 13, Regina. 168 pp.

¹⁴ DIPPPIE, G. F. 1895. Further notes on Leconte's Sparrow [sic]. Nidologist 2:95.

¹⁵ DIPPPIE, G. F. 1897. A criticism. Osprey 2:41.

¹⁶ HOOPER, J. J., BUNGER, W. O. and WINBURN, F. E. 1930. Edward Arnold: In Memoriam. Freight Claim Division, American Railways Assn., June p. 10896.

¹⁷ HOUSTON, C. S. and SCHMIDT, A. 1981.

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¹⁸ JOHNSON, W. A. 1898. Editorial notes Osprey 2:66-67.

¹⁹ MAYFIELD, H. F. 1960. The Kirtland's Warbler. Cranbrook Institute of Science Bloomfield Hills. 242 pp.

²⁰ MOUSLEY, H. 1930. Edward Arnold (Obituary). Auk 47:457-458 and Canadian Field-Naturalist 44:196.

²¹ RAINE, W. 1892. Bird nesting in North West Canada. Hunter Rose, Toronto 197 pp.



Winter

J. B. Gollop