Jan., 1939

Examination of the frequency distribution of bill depth measurements shows that the differences in average of that dimension probably represent a true difference in average genetic constitution of *dawsoni* and *L. t. tephrocotis*. Depths in male *dawsoni* range from 6.4 to 7.5 mm. (chiefly 6.7 to 7.2), in *wallowa* from 7.1 to 7.6, and in *L. t. tephrocotis* from 7.2 to 7.8.

Grinnell (*loc. cit.*) showed that in *dawsoni* there were more individuals with a rounded type of wing than in *L. t. tephrocotis.* He classified wings according to the relative lengths of the three outer primaries, designating each type by a formula that consisted of the primary numbers in order of decreasing length. The four formulae in order of decreasing sharpness of the wing tip are: (1) 9-8-7, (2) 8-9-7, (3) 8-7-9, and (4) 7-8-9. Occurrence of these types in the material that I have examined is as follows:

	I	2	3	4
L.t.tephrocotis	9	5	2	0
L.t. wallowa	13	6	0	0
L. t. dawsoni	5	32	21	3

It may be seen that the occurrence of a larger proportion of round-winged types in dawsoni is substantiated, and that wallowa shows no intermediacy toward dawsoni.

The sooty coloration, which distinguishes wallowa from its conspecific relatives, may have something to do with L. atrata, even though the latter form does not breed in the Wallowa Mountains. It is likely that wallowa possesses just a few of those factors for dark pigmentation that produce the solid blackish body plumage of atrata. Wallowa is not the result of recent hybridization of L. tephrocotis and atrata, for if it were, coloration more or less typical of atrata should appear sporadically in it. The sooty coloration is relatively uniform in the race and in no instance has it been found completely lacking. Thus, although wallowa may have certain factors in common with atrata that were derived from some common ancestor or from some former hybridization, it is not actually an annectent population linking atrata and L. tephrocotis. The differences in coloration between wallowa and atrata are great and there is no evidence of any break-down at the present time of the isolation of the breeding populations of atrata. It is impossible to conclude from available evidence whether the isolation of atrata is physiologic as well as geographic.—ALDEN H. MILLER, Museum of Vertebrate Zoology, Berkeley, California, November 28, 1938.

Linnet Nests in Hole in Tree.—In the vicinity of Benicia I have found California Linnets (*Carpodacus mexicanus frontalis*) using a variety of nesting sites. These sites may be in bushes or vines next to a house, on projections or woodwork about a building, in trees, on a beam under a bridge, or in wild artichokes (*Cynara*). This season, for the first time, I have found a pair of these birds nesting in a hole in a tree.

The tree was a small willow on the bank of a stream two miles southwest of Cordelia, Solano County, California. When I walked by this tree on May 26, 1938, the female flew from the hole which was well filled with dry grasses and which held four eggs. The cavity was about six feet from the ground and was about the size which might have been dug by a California Woodpecker; however, this hole appeared to have been formed by the breaking off a dead limb at its base, which left an opening into the partly hollow interior of the trunk. On a later visit, June 5, there were young in the nest.—EMERSON A. STONER, Benicia, California, September 3, 1938.

Waterfowl at Deep Springs Valley, Inyo County, California.—During the spring of 1938, while living at Deep Springs Ranch, I enjoyed the opportunity of making bird observations both at the ranch and at Deep Springs Lake. Both are located, eight miles apart, on the floor of Deep Springs Valley, a typical desert valley, devoid of any large vegetation and completely surrounded by mountains some of which reach to over 11000 feet. The floor of the valley is comparatively flat and lies at an elevation of about 5000 feet in the Inyo Mountains of eastern California.

The water of Deep Springs Lake is highly charged with various salts and is barren of any important living organisms. Surrounding the saline lake on the north and east are numerous freshwater ponds, each separated by small hillocks and fed by artesian springs. The ponds abound with a tremendous fauna of shrimp, snails, relict fishes, and frogs. Deep Springs Lake and its surrounding ponds, and Deep Springs Ranch with its irrigation ditches, puddles, and reservoir provide ideal havens for a wealth of migratory waterfowl and shore birds, while Deep Springs Lake is an excellent breeding ground for several species.

My observations in the valley were greatly limited up until about the middle of March, when migration seemed well under way. Many ducks certainly wintered at Deep Springs Lake, though I was not able to discover their identities. In late February a fairly large flock of Redheads was present at the lake and a few individuals put in their appearance at the ranch. The height of migration seemed to come about the 27th of March, at which time, with the help of Mr. Harrison Brown, I took a census covering about one-fourth of the total population. No less than 391 individual birds were counted, representing eleven species of waterfowl. By the first of May the number of waterfowl dropped off considerably over the March numbers and most of the birds left seemed to be breeding. A list of the species and their more important occurrences follows.

Colymbus nigricollis californicus. Eared Grebe. An adult bird spent the afternoon of May 24 in a puddle at Deep Springs Ranch.

Podilymbus podiceps. Pied-billed Grebe. A single bird was seen at the lake on May 17. On May 9, 1937, a bird settled on one of the watering troughs at the ranch.

Pelecanus erythrorhynchos. White Pelican. On April 13 a flock of 22 flew over the ranch.

Egretta thula. Snowy Egret. One was seen on May 11 in a grassy field north of the lake. On June 3 a pair was seen near an artesian sulphur spring on the north edge of the lake.

Casmerodius albus egretta. American Egret. On April 24 three were seen wading in the lake. Two more were seen on May 17.

Nycticorax nycticorax hoactli. Black-crowned Night Heron. A flock of seven was noted near one of the ponds north of the lake on May 17.

Anas platyrhynchos. Mallard. On May 8 a pair was seen at the lake.

Mareca americana. Baldpate. Three birds of this species were counted in the March 27 census. Dafila acuta. Pintail. On March 27 there were probably more than 400 Pintails at the lake, 100 being actually counted. At this time this was the most abundant species at the lake. By May 8 only a few birds remained. A nest with nine eggs was discovered on the latter date in the tules bordering one of the ponds east of the lake. On May 12 this same nest was visited and a California gopher snake was discovered peacefully coiled in it and trying to devour the eggs. It is curious to note that the brooding female was on the nest and flushed but a brief moment before I discovered the snake; certainly an insufficient time had elapsed for the snake to enter and make itself so completely "at home." The only explanation, it seems, is that the mother bird was sitting on the snake! The reptile was taken away and later indications seemed to show that the brood was successfully reared.

Nettion carolinense. Green-winged Teal. Fifteen noted on the ponds to the east of the lake on March 27,

Querquedula cyanoptera. Cinnamon Teal. A common summer resident and migrant at Deep Springs Lake. On July 30, 1937, a dead Cinnamon Teal was found in an alfalfa field at Deep Springs Ranch. Eighteen birds were counted on March 27. By May 8 this was the most common species at the lake, and it remained abundant into the summer. On May 1 a pair was located on a swimming hole at the ranch. One bird was found on May 12, wading in an overflow ditch about one mile south of the ranch.

Spatula clypeata. Shoveller. Six counted at the lake on March 27 and one female and two males noted on May 12.

Nyroca americana. Red-head. On February 20 a flock of about fifty was on a pond to the east of the lake. On February 22 a few were seen on an irrigation ditch at the ranch. Twenty-one males were counted in the March 27 census. Still present, though uncommon, at the lake in June.

Nyroca afinis. Lesser Scaup Duck. Six birds, probably of this species, were counted on March 27. On June 3 a single bird was noted on a pond to the north of the lake.

Nyroca collaris. Ring-necked Duck. On March 27 there were six birds of this species identified on one of the ponds to the east of the lake. One bird was noted on April 24 at the lake.

Erismatura jamaicensis rubida. Ruddy Duck. Eight birds on March 27. This species became steadily more and more abundant and finally was the most common duck at the lake by the first of June.

Porzana carolina. Sora Rail. March 27, two birds, in tules around pond north of lake. One bird noted in same place on May 8.

Fulica americana. Coot. February 13, common at the lake. On March 27 about 200 birds of this species were counted, and from then on it remained abundant, breeding commonly during the summer.

Oxyechus vociferus. Killdeer. On March 23 a single Killdeer followed a plow at the ranch, eating the worms that were unearthed in the freshly turned ground. The same bird continued doing this for three or four days after. On May 12 a single bird was seen at the lake, and on May 24 another was seen at the ranch.

Capella delicata. Wilson Snipe. On February 20 several snipe were flushed from the grass east of the lake. On March 7 one bird was seen at the ranch. On April 14 one was flushed near the boarding house at the ranch where someone remarked that it looked like an overgrown hummingbird! Several other occurrences are on record for this species during the spring months.

Actitis macularia. Spotted Sandpiper. One seen along a road at the ranch on April 21. Eight birds found in an irrigation ditch at the ranch on April 29. On May 8 several seen at the lake. About the middle of May the species was common at both the lake and the ranch. The last one seen during the spring was at the ranch on May 24.

Tringa solitaria. Solitary Sandpiper. A single bird of this species was closely observed at the ranch during the morning of May 7.

Pisobia minutilla. Least Sandpiper. Ten birds were counted on April 24, feeding on a bank at the lake. Two were seen on May 12 at the lake.

Recurvirostra americana. Avocet. A flock of eight Avocets spent the morning of May 5 about the ranch. Several were noted at the lake on May 8. On May 12 the species was abundant at the lake and one nest was found containing three eggs. Remained common into the summer.

Steganopus tricolor. Wilson Phalarope. Noted as common on May 7 in the ponds surrounding the lake. On May 12 it was abundant in large flocks on both the lake and the surrounding ponds. Five days later not a single bird of this species could be found.

Lobipes lobatus. Northern Phalarope. On May 17 a flock of about 25 was noted on a pond north of the lake.—WILLIAM G. WEBB, Eagle Rock, California, September 10, 1938.

Great Blue Heron Swimming.—While it is probable that most birds can swim when occasion requires, it is a novelty to see any of the larger waders demonstrating this inherent ability of their own free will and choice.

In company with Dr. Irvin Rasmussen, Mr. Cecil Williams, and Mr. Lee Kay, the writer saw this feat accomplished by a Treganza Blue Heron (Ardea herodias treganzai) at Gunnison Island, Great Salt Lake, Utah, July 12, 1938. It is believed that the individual was a bird of the year and that it probably had been raised on this island, which is about one mile long and a half mile wide. As the island is 30 to 40 miles from a source of food, it is probable that the bird had never ventured far beyond the confines of its homeland. When our company approached, the bird took wing and flew in a semicircle over the mainland, alighting in the shallow brine some 30 yards from shore, whence it proceeded to walk into deeper water. On reaching water that was too deep for wading it began to swim with apparent ease and skill. It remained resting on the lake for about two hours, during which time it came much closer to shore, where we could easily observe it with binoculars. It was noted swimming in water that was probably not more than 6 or 8 inches deep. During this time its legs were held tightly against the body, but we could see that the feet were in motion. When, on one occasion, the writer approached the bird as it swam near shore, it promptly stood up and walked toward deeper water. More than half the length of the tarsus was then visible above the waterline. It is possible that the great buoyancy of this nearly saturated water was an inducement to swimming.-CLARENCE COTTAM, United States Biological Survey, Washington, D. C., October 5, 1938.

The Amur Barn Swallow, a New Bird for North America.—Mr. Paul Silook, an Eskimo collector at Gambell, St. Lawrence Island, has recently sent in to the United States National Museum an adult barn swallow which he obtained at his home. On examination this bird turns out to be a perfectly typical example of the Amur Barn Swallow, *Hirundo rustica gutturalis*. It has a broad blue-black pectoral band separating the deep reddish bay of the chin and throat from the very pale, whitish abdomen. Unfortunately, the specimen is somewhat mutilated, lacking the tail, and is accompanied by no data, other than the knowledge that it was taken at or near Gambell either in the spring or summer of 1938. The record recalls to mind the fact that O. J. Murie lists a specimen of barn swallow taken on St. Lawrence Island during the spring of 1934 (*in* Geist and Rainey, Archaeological Excavations at Kukulik, St. Lawrence Island, Alaska, 1936 (actually 1937), Appendix V, p. 374) under the name *Hirundo erythrogaster*. This is the only previous record of any barn swallow for the Island. In response to my request, Mr. Murie has kindly sent me his specimen for study, and I find that it also is *Hirundo rustica gutturalis*. It does not have the broad pectoral band of the Silook example but has some blue-black across the breast; it has the light underparts and dark throat, chin, and forehead characteristic of gutturalis.

It may be worthy of note that these two specimens are not of the northeast Siberian race, tytleri, as might be expected on geographic grounds, but of the more southern Amur-Ussuriland race. They, together with such other St. Lawrence records as Anthus gustavi and Cuculus canorus bakeri, suggest that when Asiatic birds stray over to St. Lawrence Island, they are not necessarily (or even usually) the forms of the adjacent mainland area. This causes one to wish for actual specimens of the Yellow Wagtail (Budytes flavus) from the Island. The species has been listed on the basis of Nelson's early observations, which have always been assumed to be referable to B. f. alascensis, but without proof (see Friedmann, Proc. U. S. Nat. Mus., vol. 80, 1932, p. 30).—HERBERT FRIEDMANN, United States National Museum, Washington, D. C., November 10, 1938.