

**Distributional data on uncommon birds in Utah and adjacent states.**—During the summer of 1961, and to a limited extent in 1962, as part of a study on the birds of Utah supported by the National Science Foundation, field parties covered much of the state. While the primary objective was the obtaining of series of geographically variable birds, incidentally several specimens of rare birds were taken and some extensions of range ascertained. The noteworthy data of this nature are presented herewith. In addition, several rarities from the Dugway Proving Grounds taken by John B. Bushman are reported, as well as information on uncommon birds taken in Utah, Wyoming, Colorado, and New Mexico by Clayton White while a member of the University of Utah ecological research team studying the flora and fauna of the Flaming Gorge and Navajo reservoir sites of the Upper Colorado River Basin Project. Unless otherwise stated, all specimens are in the collection of the University of Utah Museum of Ornithology. Several of the specimens were taken by Gary Lloyd, Guy Musser, and Gary Worthen, the members, along with Clayton White, of the 1961 field parties.

Common Loon (*Gavia immer*).—An unusual record for a desert region far from water pertains to a female found alive in a parking lot at Dugway, 4,800 feet, Tooele County, on 18 May 1960. It was preserved as a study skin.

Horned Grebe (*Podiceps auritus cornutus*).—While there are several sight records of this species for Utah, the only specimen was secured in 1872 (1872. Allen, *Bull. Mus. Comp. Zool.*, 3:173) near Ogden. On 8 April 1962, two female specimens were obtained at the Farmington Bay Refuge, Davis County, by Gary Worthen and Hugh Hogle. This grebe is a rare migrant in the state in contrast to the abundant Eared Grebe (*P. nigricollis*).

Green Heron (*Butorides virescens anthonyi*).—Two additional examples of this heron, rare in Utah, have been obtained. Both are immature females. One was taken at Spring Run on the southern outskirts of Salt Lake City on 27 December 1960; the other, 4 miles west of the Salt Lake airport on 9 October 1961. The December example indicates that during mild winters, such as 1960 was, individuals either remain late in migration or winter over in the region.

Ross' Goose (*Chen rossii*).—A mounted specimen at the headquarters building of the State Department of Fish and Game was taken at Flowell, Millard County, on 3 April 1961, by Donald E. Neilson, Superintendent of the Clear Lake Waterfowl Refuge. It had been seen for two weeks associating with a flock of domestic ducks on a small irrigation pond and was so tame that it would flush only as a last resort to avoid capture. It would accompany the ducks on foot into the fields during feeding excursions. This is the second specimen taken in the state and preserved in a collection. There are about a dozen additional sight records.

Hybrid teal (*Anas discors* × *Anas cyanoptera*).—This hybrid specimen was obtained through Calvin Wilson, Superintendent of the Tracy Aviary in Salt Lake City, after it died on 14 February 1962. It had been picked up originally by Mr. Wilson at the Ogden Bay Refuge, Weber County, in September 1951, afflicted with botulism. The underparts are cinnamoneous, but lighter than in the Cinnamon Teal, and the black of the belly is lacking. The speckling of the Blue-winged Teal suffuses the underparts. There is a suggestion of lateral white patches at the base of the tail as in the Blue-winged Teal, but the patches are pinkish in the hybrid. Bill size is intermediate. The color of the scapular and interscapular regions is also intermediate. In general, the head markings are closest to the pattern of the Blue-winged Teal. The cheeks, however, are pinkish and although white is present at the base of the bill on the sides of the face, the crescent of the Blue-winged Teal is indistinct. Unlike either of the parental species, white

borders the black of the chin and continues in dilute fashion posteriorly the length of the midline of the throat.

Fulvous Tree Duck (*Dendrocygna bicolor helva*).—A female was taken by Donald E. Neilson at the Clear Lake Waterfowl Management Area, 20 miles south of Delta, Millard County, on 20 May 1959. The largest ovum measured 3 mm in diameter. Only one other specimen has been reported from Utah.

Wood Duck (*Aix sponsa*).—This species is sufficiently rare in Utah that additional records of occurrence are noteworthy. A male bird of the year was taken by Raymond Behle at Farmington Bay Waterfowl Management Area, Davis County, Utah, on 10 October 1962. Donald E. Neilson contributes the following on Wood Ducks for the Clear Lake Waterfowl Management Area in Millard County. On about 1 October 1957, he observed one female feeding with a captive flock of Canada Geese (*Branta canadensis*) penned on the lake shore near the residence. Between feedings it rested on an old fallen fence post in the water a few feet offshore in the lake. The duck was observed almost daily for a month or more. It was fairly tame and could be approached within 100 feet. An immature male was banded on 30 September 1959. It was retrapped two or three times within a two-week period following its banding. Through March 1961, the species had been seen three more times at the refuge, a total of five records in four seasons.

Bald Eagle (*Haliaeetus leucocephalus*).—An adult Bald Eagle was seen on 21 July 1961, near the mouth of Negro Andy Canyon, San Juan County, New Mexico. Its behavior, when flushed, seemed to indicate that it was a nesting bird. Unfortunately, it was not possible to make a thorough search of the area, but there were numerous Douglas firs and cliffs that would provide suitable nesting locations for the species. Bailey (1929. "Birds of New Mexico," p. 108) states that the Bald Eagle occasionally breeds in the state, but most of her records are for fall and winter.

Pigeon Hawk (*Falco columbarius columbarius*).—In the last checklist of the birds of Utah, Woodbury et al. (1949. *Bull. Univ. Utah Biol. Ser.*, 11(2):11) give this race the status of sparse migrant or winter resident, but without substantiating data. The only Utah representative of the race that we know of is a male specimen in the University of Utah collection taken in the Salt Lake City Cemetery on 9 March 1937, and identified by John W. Aldrich in 1941. Incidentally, the A.O.U. Check-list (1957) does not indicate that this race is accidental or casual in western North America.

Pigeon Hawk (*Falco columbarius suckleyi*).—A female of this race was shot at the Tracy Aviary in Salt Lake City on 1 February 1954. It was identified by John W. Aldrich in 1960. Two examples of this race from Ogden, Utah have been reported previously by Porter and Knight (1952. *Auk*, 69:84).

Sora (*Porzana carolina*).—A specimen was taken in the housing area of the Dugway Proving Ground far from water at the south end of the Cedar Mountains, 4,800 feet, Tooele County, on 26 August 1957.

Semipalmated Plover (*Charadrius semipalmatus*).—Two specimens were taken at the sewer pond marsh, 4,700 feet elevation, near the main gate of the Dugway Proving Grounds at the south end of Skull Valley, Tooele County, on 29 April 1961. This species is a casual migrant in Utah and not known heretofore from the Dugway desert area.

Long-billed Dowitcher (*Limnodromus scolopaceus*).—Eleven specimens were taken at a pond just north of the Utah-Wyoming border, 5 miles southeast of Mountain View, 6,000 feet elevation, Uinta County, southwestern Wyoming, on 11 August 1962. They are all in breeding plumage save one which is in a transitional stage toward the winter dress. Knight (1902. *Univ. Wyo. Exp. Sta. Bull.*, 55:46) indicates that the species is

rare in Wyoming, with all records confined to the southeastern portion. Twomey (1942. *Ann. Carnegie Mus.*, 28:393) reports three specimens taken in May 12 miles east of Vernal in northeastern Utah. His only fall records pertain to flocks seen 10 and 25 September.

Sanderling (*Crocethia alba*).—One was taken on 29 April 1961, at the sewer pond marsh near the main gate of the Dugway Proving Grounds at the south end of Skull Valley, Tooele County. This is an uncommon migrant not known previously from the west desert region of Utah.

Bonaparte's Gull (*Larus philadelphia*).—A specimen was secured 6 miles northwest of Camelback Mountain, 4,300 feet, Tooele County, on 25 April 1955. It was in a puddle in a roadside barrow pit. In addition to this being a new and unusual record for the desert, it is one of half-a-dozen records for the state.

White-winged Dove (*Zenaida asiatica mearnsi*).—Until 1961, the only published record of the species for the state was that by C. W. Lockerbie, reported in Woodbury et al. (op. cit.:16) in East Canyon, Morgan County, on 1 August 1939. According to Mr. Lockerbie, their observation was of a single bird among a flock of Mourning Doves (*Zenaidura macroura*) frequenting the sagebrush along the east side of the East Canyon reservoir. However, there is another hitherto unreported observation. Clifton Greenhalgh of the Utah State Fish and Game Department saw one in a flock of Mourning Doves at Park Valley, Box Elder County, during June 1949.

Indications are that the species may be extending its breeding range into Utah. In early June 1961, Clifton Greenhalgh reported a flock of about a dozen at the Terry Ranch, in the Beaver Dam Wash, Washington County, 2,500 feet elevation, 5 miles north of the Utah-Arizona border in extreme southwestern Utah. One of our field parties visited the site on 23 June 1961, seeking a specimen, and although unsuccessful in this regard, the species was nevertheless seen on 24 June at the Lytle Ranch to the north. Mr. Lytle stated that he had observed White-winged Doves for several years. Two specimens were taken by Darold Nish at Greenhalgh's request and later brought to the University by Mr. Greenhalgh. They were a male and female, obtained at the Terry Ranch on 24 June 1961. The testes of the male measured 16 mm long, and the largest ovum of the female was 6 mm in diameter.

On 25 May 1962, Dean Stock of the University of Utah obtained a female at the Terry Ranch. Its ova measured 5 mm. Several others were seen at the time. In early July 1962, Dennis L. Carter of the Naturalist staff of Zion National Park also found the species in the Beaver Dam Wash. It would thus seem that the species is now established in the Wash in small numbers and probably breeds there. Much field work by many ornithologists in southwestern Utah prior to 1961 had failed to reveal the presence of the species, thus leading to the inference that recently there has been an extension of breeding range. Furthermore, records are accumulating from elsewhere in the state.

Lynn Greenwalt, Refuge Manager at Fish Springs National Wildlife Refuge in Juab County, central western Utah, reports that a White-winged Dove was trapped and banded at the refuge on 24 May 1961. A second White-winged Dove was trapped at Fish Springs on 8 September 1962, but expired in the trap and was prepared as a specimen. Two were observed on 1 May 1962, in Liberty Park, Salt Lake City, by Dan Dickerson, a student at the University of Utah.

Spotted Owl (*Strix occidentalis lucida*).—A female Spotted Owl was collected on 15 July 1961, in Frances Canyon, Rio Arriba County, New Mexico. This bird, her mate, and three fledged young were roosting midway up an 18-foot mountain red cedar in an association with Douglas fir. Another nesting pair was observed the same day in LaJara

Canyon, the adjacent canyon north of Frances Canyon. Bailey (op. cit.:330) says that Woodhouse reported it as common in the state in 1851, but since then it has been seen only on rare occasions.

Lesser Nighthawk (*Chordeiles acutipennis texensis*).—Heretofore this nighthawk has been known in Utah only from the extreme southwestern corner (Virgin River Valley), where it is considered to be a sparse summer resident. In addition to specimens being taken at the Terry Ranch in the Beaver Dam Wash and at St. George in southwestern Utah, two male specimens were secured one mile north of Hanksville, 4,100 feet, Wayne County, 8 July 1961, in southeastern Utah. The testes in the two specimens measured 6 and 7 mm long.

Black Swift (*Cypseloides niger borealis*).—To add to the data presented by Knorr (1962. *Condor*, 64:79) pertaining to the Black Swift breeding in the Wasatch Mountains of northern Utah, there is a specimen in the University of Utah collection prepared from a bird found dead by Guy Musser on 2 August 1960. It was clinging to tules along the stream issuing from Weeping Rock, Zion Canyon, 4,500 feet, Zion National Park, Washington County, Utah. Other information bearing on the distribution of this species in Colorado and New Mexico is as follows. An adult female with enlarged ovary was taken near Allison, La Plata County, Colorado, at a location about 3 miles north of the New Mexico border, on 12 June 1960. It is in the University of New Mexico collection. The enlarged gonads would indicate a breeding bird and it may prove to be from a breeding colony in New Mexico since several Black Swifts were seen by Clayton White throughout the month of July along the San Juan River in New Mexico. One was in the company of several nesting White-throated Swifts (*Aëronautes saxatalis*) on 15 July 1960, at a location one mile above the prospective dam site, which is about 50 miles east of Farmington, New Mexico, and 30 miles south of the Colorado-New Mexico border. Bailey (op. cit.:349) states that in 1883 Mr. Anthony found them nesting in the highest mountains of southwestern Colorado, but the first verified breeding record for Colorado is as recent as 1950 (Knorr, 1950. *Auk*, 67:516) from a location only about 80 miles north of the Navajo reservoir area. More recently, Knorr (1961. *Wilson Bull.*, 73:155-170) reported sightings still closer to the reservoir site, from Archuleta County, Colorado. Bailey (loc. cit.) gives only fall records and states that there are no summer records for the state.

Rufous Hummingbird (*Selasphorus rufus*).—There has long been a question whether this species may breed in Utah in addition to being a transient. Bee and Hutchings (1942. *Great Basin Nat.*, 3(3-4):73) list three breeding records at Lehi, Utah County, on 20, 21 June and 30 July. In a footnote, C. Lynn Hayward comments, "The breeding records of the rufous hummingbird are of unusual interest. Bent (1940, U.S. Nat. Mus. Bull. 176, p. 396) states that the species breeds south as far as southwestern Montana and suggests that it may be found in the mountains further southward. A nesting specimen was collected and mounted by Mr. Hutchings and was later supposedly sent to Brigham Young University, but unfortunately it was lost. However, Mr. Hutchings carefully checked the specimen and there is no doubt as to its identity." Also suggesting breeding status is a specimen taken by Gary Worthen on 10 July 1961 on the Wasatch Plateau, 9,000 feet elevation, at the north end of Fairview Reservoir, Sanpete County. It was a male that weighed 0.8 gram, with testes 2 mm long. However, the specimen had a thin layer of fat, suggesting that it may have been a migrant. Bailey (1928. "Birds of New Mexico," p. 363) mentions migrant Rufous Hummingbirds in that state on 7 July. Clayton White observed an adult male defending two young that were

perched on a wire fence at the Tracy farm at Naf, Idaho, 1 August 1961. This is about one mile north of Nafton, Utah.

Black Phoebe (*Sayornis nigricans semiatra*).—Eight additional examples were taken of this species, known in Utah only from the southwestern corner of the state. One was secured at the City Springs, St. George, on 30 December 1960, and another example from the same locality was taken on 19 June 1961. One was taken at the junction of the Virgin and Santa Clara rivers on 30 December 1960, and another there on 22 June 1961. Four were taken at Three Lakes, 5 miles north of Kanab, 26–27 June 1961. Two were also seen in the town of Newcastle, Iron County, on 26 May 1962. The two December examples indicate that the species is a permanent resident and the new data suggest that this phoebe is more common in southwestern Utah than heretofore supposed.

Verdin (*Auriparus flaviceps acaciaram*).—Although this species was known to occur in extreme southwestern Utah as a resident, there was only one specimen in the University of Utah collection. Seven more now have been added. Two were taken at the Terry Ranch in Beaver Dam Wash on 30 December 1960, and one at St. George the following day. The other four, including a juvenile, were taken at the Terry Ranch in the Beaver Dam Wash on 23–24 June 1961.

Brown Thrasher (*Toxostoma rufum longicauda*).—A specimen obtained by John B. Bushman at Fish Springs, 4,350 feet elevation, Juab County, on 9 June 1961, is the third record of this species for Utah. It was a male with testes measuring 13 by 7 mm.

Crissal Thrasher (*Toxostoma dorsale coloradense*).—Although reported from southwestern Utah as early as 1891, few specimens have been obtained since and the species was not represented in the collection at the University of Utah. We now have seven specimens as follows, all from the City Springs area, 2,800 feet, St. George, Washington County. Two females were taken on 31 December 1960, an adult male and a juvenile female on 20 June 1961, and three juveniles (two males and a female) on 25–26 May 1962.

Hermit Thrush (*Hylocichla guttata oromela*).—An immature female obtained at the mouth of Emigration Canyon, 5,500 feet, Salt Lake City, on 7 October 1961, has been identified by John W. Aldrich as of the race *oromela*. This migrant kind has been reported only five times previously from Utah.

Cedar Waxwing (*Bombycilla cedrorum*).—Suggesting nesting status, a pair with young was seen in an orchard 21 miles south of Hanksville, Wayne County, on 13 June 1961. A pair of adults was also seen in the town of Garrison, Juab County, on 24 May 1962. Although fairly common some winters in company with Bohemian Waxwings (*B. garrulus*), there is only one certain breeding record for the state.

Red-eyed Vireo (*Vireo olivaceus*).—Two records may be added to the few already available of this uncommon migrant in Utah. A specimen was obtained in Salt Lake City on 1 June 1962, and one at Dugway, Tooele County, taken on 6 September 1962, one and a half miles southeast of the main gate.

Northern Waterthrush (*Seiurus noveboracensis notabilis*).—A migrating female taken at a desert waterhole in southeastern Utah represents this race. It was taken at Green Water Spring, 5,400 feet elevation, Castle Creek, 18 miles southwest of the Natural Bridges National Monument, San Juan County, 13 May 1960. It was in a clump of willows beside a pond. Another Great Basin specimen was taken at the Dugway Housing area, 4,800 feet, Tooele County, on 21 May 1961. Waterthrushes are rare migrants in Utah and only about a dozen record specimens have been taken.

American Redstart (*Setophaga ruticilla*).—An adult male was taken 3½ miles east of Camelback Mountain, 4,335 feet elevation, Tooele County, on 30 August 1961. Not

only is the species rare in northern Utah but its occurrence in a barren, desert region is unusual.

Hooded Oriole (*Icterus cucullatus nelsoni*).—A breeding male with testes measuring 9 mm long was taken on 25 June 1961, at the Lytle Ranch, 2,500 feet elevation, Beaver Dam Wash, Washington County. This is the third specimen, to our knowledge, from Utah.

Scott's Oriole (*Icterus parisorum*).—Five additional specimens of this rather rare oriole in Utah were taken at the Lytle Ranch, 2,500 feet elevation, Beaver Dam Wash, Washington County, on 25 June 1961.

Blue Grosbeak (*Guiraca caerulea interfusa*).—Heretofore the records of this species in Utah have been confined to the Colorado River drainage, but a female specimen was obtained 4 miles west of Lehi, 4,562 feet, Utah County, on 29 June 1961, in the Great Basin. In addition, on 22 August 1962, three were seen at the Farmington Bay Refuge by Roger Tory Peterson and several other ornithologists.

Indigo Bunting (*Passerina cyanea*).—A breeding male was taken at River Mile 372, Green River, 6,050 feet, Sweetwater County, Wyoming near the Utah border on 4 July 1959. Knight (loc. cit.) does not report the species for Wyoming and there are but two records for Utah.

On 16 July 1961, an adult male was seen by Clayton White on Los Pinos River, San Juan County, New Mexico. Bailey (op. cit.) does not record this species for the state.

Black Rosy Finch (*Leucosticte atrata*).—To add to the data presented by Miller (1955. *Condor*, 57:306) and French (1959. *Condor*, 61:18-29) on the distribution of the species, the Black Rosy Finch has been found breeding in two additional mountain ranges in Utah. Behle (1958. *Univ. Utah Biol. Ser.*, 11(6):33) reported a sight record of the species in the Raft River Mountains. On 27 July 1961, Clayton White, Gary Lloyd, and Guy Musser saw several, including family groups of adults and young, at some cliffs near the head of Clear Creek, 9,000 feet, in the Raft River Mountains, but specimens were not obtained. However, on 16 July 1962, White obtained one specimen, a breeding female, thus definitely establishing the occurrence of a colony in this mountain range of northwestern Utah.

French (op. cit.:27) commented that the LaSal Mountains of southeastern Utah were expected to harbor breeding rosy finches. However, neither he nor Behle (1960. *Univ. Utah Biol. Ser.*, 12 (1)) found them there. French further commented that although this range has peaks of 13,000 feet elevation, few have cliffs suitable for rosy finch nest sites, and he postulated that aridity may be influential in preventing a rosy finch population there. A continued quest met with partial success on 15 July 1961, when the female of a pair was taken at the head of Dark Canyon, 12,000 feet elevation, on the east crest of the LaSal Mountains. Since only a pair was seen after several days of field work, the inference is that the species is rare. The finding of the Black Rosy Finch in the LaSal Mountains would seem to rule out the possibility of the Brown-capped Rosy Finch (*Leucosticte australis*) breeding in Utah. Since the latter species apparently breeds in the San Juan Mountains in Colorado to the east (fide French, op. cit.:27), a narrow hiatus separates the breeding ranges of the two species. This gap is less than those separating many of the breeding sites of the Black Rosy Finch.

Lark Bunting (*Calamospiza melanocorys*).—Two more specimens to add to the records summarized by Porter and Egoscue (1954. *Wilson Bull.*, 66:221) were taken 3 miles east of the north end of Camelback Mountain, 4,350 feet, Tooele County, one on 23 May and the other on 6 June 1956.

Grasshopper Sparrow (*Ammodramus savannarum perpallidus*).—A specimen was

taken 3 miles east of Camelback Mountain, 4,350 feet, on 19 September 1961. It was presumably a fall migrant, being very fat. This species seems to have disappeared as a breeding bird in Utah along with the removal of grassland through overgrazing.

Lapland Longspur (*Calcarius lapponicus alasensis*).—Evidence is mounting that the longspur, heretofore considered hypothetical or accidental in the state, is actually a regular, although uncommon, winter visitant, at least in the northern part of Utah. Porter (1954. *Condor*, 56:364) reported a specimen from the Dugway Proving Grounds, Tooele County, taken on 13 April 1953, representing the race *C. l. lapponicus*. However, the race *C. l. alasensis* seems to be more common, for Porter (loc. cit.) reports a specimen of this race also from Dugway taken on 3 November 1953, and Killpack (1953. *Condor*, 55:152) and Killpack and Hayward (1958. *Great Basin Nat.*, p. 25) give several records from the Uinta Basin around Roosevelt and Myton. A hitherto unreported specimen of *C. l. alasensis* was taken by William H. Behle at the Farmington Bay Waterfowl Management Area on 5 November 1955. Another representative of *alasensis* from Dugway is a male found dead on 9 October 1957, beside a building 3 miles east of Camelback Mountain, Tooele County.—WILLIAM H. BEHLE, JOHN B. BUSHMAN, AND CLAYTON M. WHITE, *Department of Zoology, and Ecology and Epizootology Research, University of Utah, Salt Lake City and Dugway, Utah, 15 March 1963.*

**Production of sterile eggs in the Dickcissel.**—Because female Dickcissels (*Spiza americana*) are secretive, their nests are difficult to find, and little is known about incubation in this species. Gross (1921. *Auk*, 38:169) reported that of eleven nests that were studied in 1918 in the state of Illinois, sterile eggs were contained in six. Some "sterile" eggs were broken open by Gross and were found to show no embryonic development. Of five eggs contained in one nest, four were sterile.

In late May to early July 1963, nine nests containing eggs of the Dickcissel were found within 4 miles of Lawrence, Kansas. Observation of these nests until their eggs hatched or were destroyed by predators (four nests were robbed) revealed that of five nests, four contained sterile eggs. In one nest containing five eggs, two were sterile. Sterile eggs were found, one in each nest, in two nests containing three eggs and in one nest containing five. The one nest lacking a sterile egg contained only three eggs. Therefore, in northeastern Kansas as well as in Illinois the production of sterile eggs in the Dickcissel is seemingly not uncommon.

It is difficult to show adaptiveness in the production of sterile eggs because their production requires an expenditure of energy. Laying of sterile eggs entails making unnecessary trips to the nest, increasing the chance that predators find it.

Skutch (1957. *Ibis*, 99:69-93) suggested that incubation by both male and female is primitive behavior. In the Dickcissel all of the duties of nest building, incubation, and care of young are now performed by the female (Gross, op. cit.). The male is brightly colored, resembling in color and pattern the meadowlark; whereas the female is obscure in color and pattern. Selection may have been, therefore, in favor of a small brood so that the female, in assuming all responsibility for it, could find and bring sufficient food for the young. Obviously, a decrease in clutch size would decrease the brood size; but it is suggested that in the Dickcissel the brood size has been decreased by the production of sterile eggs. If so, the physiological mechanisms governing clutch size in this species seem to be relatively more immutable than those governing fertilization.

I thank J. Knops, of the University of Kansas, and my wife, C. F. Long, for helping with the field studies.—CHARLES A. LONG, *Department of Zoology, University of Illinois, Urbana, Illinois, 8 October 1963.*