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The Birds of Southeastern Utah

BY

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THE BIRDS OF SOUTHEASTERN UTAH

By WILLIAM H. BEHLE

Southeastern Utah is a rugged and colorful portion of the state. As a part of the Colorado Plateau Physiographic Province it is characterized by an arid climate, multicolored but mostly red sandstones, shales and limestones, weathered sand, deep box canyons, and high, isolated, lacolithic mountain ranges. Despite the general aridity of the region there are several major rivers and streams. The Green and Colorado rivers converge southwest of Moab. Main tributaries below this point are the Fremont, Escalante, and San Juan rivers. The latter drains extreme southeastern Utah.

As to the mountains, just west of the Utah–Colorado line in Grand and San Juan counties, Utah, are the La Sal Mountains, the highest point being Mt. Peale at 13,089 feet. To the south lie the Abajo or Blue Mountains, the highest point being Abajo Peak; 11,357 feet. Closely associated to the west is a range known as Elk Ridge. The highest point on the southern end is the Bear's Ears; 9059 feet. To the west are the Henry Mountains, consisting of several somewhat detached portions, of which Mt. Ellen, Mt. Pennell, and Mt. Hillers are the principal peaks with elevations of 11,485, 11,320, and 10,650 feet, respectively. To the southwest, adjacent to the Utah–Arizona border, is the dome-like Navajo Mountain; 10,416 feet. Extending northwest but separated from Navajo Mountain by the Colorado River and Glen Canyon is the Kaiparowits Plateau. Like a great finger it extends to the high, flat-top mountains or plateaus to the west.

While other portions of the state had been subject to intensive avifaunistic study (see Twomey, 1942; Behle, 1943, 1955, 1958; Behle, Bushman and Greenhalgh, 1958), there had not been as much intensive effort devoted to collecting in southeastern Utah, although considerable exploratory work had been done. Stanford (1931) collected a few birds at the King ranch on the west slope of Mt. Ellen in the Henry Mountains in mid-September, 1929. Tanner and Hayward (1934) presented the results of a biological study of the La Sal Mountains based on field work in 1927 and 1934. Their report includes a section on birds. Benson (1935) in his reconnaissance of Navajo Mountain in 1933 took a few specimens of birds and listed the kinds observed at several localities.

Woodbury and Russell (1945:8) state that the University of Utah had three collecting expeditions to southeastern Utah which reached the San Juan River in 1931, 1933 and 1935. There was also a fourth trip to the general region in 1934. A resumé of these is as follows. A party of five, consisting of A. M. Woodbury, leader, and Wilton Ivie, Kenneth L. Ward, William Young, and Louis Parratt spent a week in southeastern Utah in 1931, securing about eighty specimens of birds. They collected along the Colorado River near Moab on October 25–26; at Bluff on October 27–28; 12 miles south of Moab on October 28; in the La Sal Mountains on October 29 at Wilson's Creek, Mud Lake Sawmill, and Clark Lake; at Castleton and Little Castle Valley on October 30–31; and at Green River on October 31. From May 6 to 14, 1933, a group of 14 members of the Biology Department, both staff and students, visited southeastern Utah, with A. M. Woodbury, Wilton Ivie, and O. S. Walsh, collecting about twenty birds. Their first collecting station was along the Green River near Gunnison



Butte, some 7 miles north of the town of Green River, on May 7. Then they took specimens at Moab, May 8-10; at Bluff May 10-12; and at Castle Valley, 15 miles northeast of Moab, on May 13.

The third trip by seven students with S. D. Durrant in charge extended from April 7 to 15, 1934. About sixty birds were taken by Jean Linford and O. S. Walsh, as follows: between Green River and Moab on April 7; 15 miles southeast of Moab on April 8-10; 1 mile west of Moab and 5-10 miles northeast of Moab on April 10-12; at Castle Valley on April 12-14; and at Green River on April 14. A fourth trip extended from April 27 to May 3, 1935, with a departmental group of ten. The ornithologists were O. S. Walsh and Cyril Fullmer, who collected about thirty birds at Bluff on April 28-30; 12 miles west of Mexican Hat on May 1; and at John's Canyon, 22 miles northwest of Mexican Hat, May 1-2. The data on some of the rarer birds taken on these several trips were placed on record by Woodbury (1939).

From April 1 to 10, 1938, Woodbury and Behle led another group of five students to the La Sal area, where we obtained 176 birds, which were reported on by Behle (1941). Camps were made at Block Canyon, some 19 miles south of Moab, from April 2 to 8. Collections were made in this vicinity and in surrounding regions, including at 8000 feet elevation in the La Sal Mountains, 5 miles north of La Sal Post Office, on April 7-8. On April 9 collections were made at Moab. Behle and three associates made a boat trip down Glen Canyon of the Colorado River April 13-17, 1947, and placed on record (1948) his observations on many species encountered en route. Woodbury and Russell (1945) in their comprehensive report on the birds of the Navajo country, which includes a narrow strip in southeastern Utah bordering on Arizona, presented data on specimens or observations made on birds along the San Juan River, from Bluff, the lower portion of Glen Canyon, Navajo Mountain, and the Kaiparowits Plateau.

As part of the author's plan of accumulating data on the birds of Utah, the following field work was undertaken in southeastern Utah with student associates. The interval from September 13 to 17, 1954, was spent at Geysers Pass, 10,500 feet, and Warner Ranger Station, 9000 feet, in the La Sal Mountains, in the company of Jon Ghiselin and C. Richard Wrathal. The following year camp was made on Beaver Creek, 2½ miles northeast of La Sal Peak, on the northeast slope of the mountains, from September 12 to 16. From here we worked upstream to Beaver Basin. Members of the party in addition to the writer were Jon Ghiselin, Howard Behle, and Michael Walz. We collected at elevations from 7500 to 10,000 feet. Another trip was made that year, primarily to study the winter population, when Behle and Clifton Greenhalgh spent three days from December 20 to 22 at Moab. The most intensive effort occurred in the summer of 1956. Behle and Ghiselin collected at Moab from June 5 to 8. Camp was again made on Beaver Creek from July 15 to 20, members of this party being Behle, Norman Chamberlain, M. Raymond Lee, and Keith Poehlman.

Attention next shifted to the Henry Mountains, where collecting was done from August 11 to 18, 1956. Camp was made at the base of the Horn, near Pennellen Pass, and side trips were made out in all directions. The party consisted of Ghiselin, Chamberlain, and the writer collecting birds and Poehlman, Lee, and S. D. Durrant collecting mammals. Enroute home some collecting

was done near Gunnison Butte, about 7.6 miles north of Green River, Emery County, on August 18. The Abajo Mountains and Elk Ridge areas were visited by Behle, Chamberlain, and Ghiselin in the late summer of 1956. Camp was made at Cooley Pass, 10,350 feet, in the Abajo Mountains, 7 miles west of Monticello, from August 23 to 26, when we made a side trip to Bluff and then drove to Kigalia Ranger Station, 8500 feet, on Elk Ridge, where we remained until August 29.

The author made a few casual observations at several points along the Colorado River while on a trip by jeep for limnological samples with Donald McDonald in the autumn of 1958. We were at the Crossing-of-the-Fathers on October 19, at Hole-in-the-Rock on October 20, and at Hite on October 21.

As contributions to this avifaunistic study, but incidental to other work, several students collected and observed birds as follows: John Downey, accompanying Keith Kelson who was studying mammals, collected 17 specimens of birds in the Abajo Mountains-Elk Ridge area during the summer of 1947. This same summer Harold Higgins collected 20 specimens in the same general area while making a study of nighthawks. John Bushman took 22 birds at the Ekker ranch in the Robbers Roost country, 25 miles east of Hanksville, from May 18 to 20, 1951. He and Richard D. Porter collected 26 specimens in Trachyte Canyon and at the Sanford ranch on the north slope of Mt. Hillers in the Henry Mountains, May 15-17, 1952. Twenty additional specimens were obtained by Bushman and Norman R. French, May 21-23, 1953, along the Colorado River at Dewey, about 12 miles south of Cisco, Grand County. A mockingbird was taken and observations made on several species in the Dewey area by Rudy Drobnick, May 13-15, 1954.

Spencer Whitney made a few observations on birds in August, 1957, while working on the University of Utah, Department of Anthropology, Archaeological Salvage Program in the region southeast of Escalante. Jon Ghiselin made a few observations in the Abajo Mountains during the summer of 1958. Harold Higgins and Gerald Smith collected five specimens and made numerous observations on birds in Glen Canyon from July 1 to August 9, 1958, incidental to their respective duties in vegetation mapping and limnological analysis on a University of Utah biological expedition in connection with the Glen Canyon salvage program. Since the greater part of the information was gathered by Higgins, he summarized the data and submitted the list of birds to A. M. Woodbury, supervisor of the survey.

Earlier, as part of this same project, Woodbury (1958) had prepared an annotated check-list of the birds of the Glen Canyon Reservoir area, compiled from various sources including published and manuscript records. The Glen Canyon region, he states, has not been definitely delimited by specified boundary lines, but is generally understood to include the immediate drainage into the canyon. The localities are given in his report in general terms for all of southern Utah, and many species are included in his Glen Canyon list on a hypothetical basis if records in adjacent or surrounding areas suggest the presence of the species in the Glen Canyon region. Thus a few species are included in Woodbury's list which do not appear in the present list. The data for the specimens listed in the present report had not been brought together in time for Woodbury's summary. Subsequently the present writer in associa-

tion with Harold Higgins undertook to summarize the data on the birds of Glen Canyon (Behle and Higgins, 1959) simultaneously with the preparation of this report.

In addition to the listing of specimens collected, this present report summarizes the available information on the birds of southeastern Utah east of the area included in the report by Behle, Bushman, and Greenhalgh (1958). It therefore includes that part of Utah from the eastern edges of the great plateaus of central southern and south central Utah east to the Utah–Colorado line and from the Book Cliffs on the north, south to the Utah–Arizona line. As such it includes extreme eastern Kane, Garfield, Wayne, and Emery counties, the southern portion of Grand County and all of San Juan County. It pertains particularly to the birds of the La Sal, Abajo, Elk Ridge, Henry, and Navajo mountains and adjacent lowlands.

ACKNOWLEDGMENTS

I am indebted to all those mentioned for their help in the field work. In addition Dan Winburn and Clifton Greenhalgh of the State Department of Fish and Game were of assistance in the Moab area. Dr. A. M. Woodbury has graciously allowed me to utilize the data gathered by Higgins and Smith on the summer 1958 Glen Canyon expedition, which was supported by the U. S. National Park Service and U. S. Bureau of Reclamation. He furthermore extracted data from the field notes of the Rainbow Bridge–Monument Valley expeditions that did not appear in the report by himself and H. N. Russell, Jr.

Until 1956 the author's field work was made possible by a grant from the University of Utah Research Fund, but the intensive effort of 1956 was supported by a grant from the National Science Foundation. Some of the latter funds have also been used to help defray the costs of publication of this report.

ECOLOGIC FORMATIONS

The broad aspects of the ecology of the La Sal mountain region have been presented by Tanner and Hayward (1934:211–215) through a discussion of the biotic communities found there. Woodbury and Russell (1945:12–19) have discussed for the general region to the south, including Navajo Mountain, what they term ecological habitats up to and including the spruce-fir forest. The alpine formation was lacking in their area. They give the principal avian inhabitants for each habitat. Yet another discussion pertaining to the area to the west is found in the paper by Behle, Bushman and Greenhalgh (*loc. cit.*). These writers employ the term ecologic formation, and likewise indicate the seasonal status and ecological distribution of the many species of birds found in that region. The ecological distribution of the birds in the area of the present report conforms to this area to the west.

Because of these prior discussions the information need not be repeated here, but it seems desirable to mention the ecologic formations represented. In a somewhat vertical sequence they are as follows: Aquatic; Marsh; Cliffs and Earth Banks; the Shrub Group, including Desert Shrub and Sagebrush; the Woodland Group, including Desert Riparian Woodland, Piñon-juniper Woodland, Submontane Shrub, Montane Riparian Woodland, Aspen Woodland; the Grassland Group, including Grassland and Mountain Meadow; the Coniferous

Forest group, including Ponderosa Pine Forest, Montane Spruce-fir Forest, Subalpine Coniferous Forest; and finally Alpine Tundra.

THE BIRDS OF GLEN CANYON

Because of the particular interest at the present time in Glen Canyon in connection with the construction of the dam 13 miles below the Utah-Arizona line and the ultimate formation of a reservoir extending upstream for 187 miles, it seems desirable to highlight the birds of Glen Canyon apart from the birds of the whole region including the mountains. Glen Canyon is 170 river miles long and has been described as a labyrinthine gorge (Woodbury, 1958:1). The walls are largely vertical and vary from 200 to 2000 feet in height above the river. The river is comparatively quiet in this stretch.

A number of circumstances make for a fairly rich avifauna. The canyon floor is in many places wide and varied. In addition to the river with its banks there are terraces, sometimes of large extent, numerous glens which gave the canyon its name, and many tributary canyons. Some of these side canyons are narrow, while others are wide. Some are dry and desert-like, while others have permanent streams. The vegetation varies widely from one environmental situation to another. Thus there are many habitats for permanently resident and summer resident species. Although the river fluctuates greatly throughout the year, usually numerous sand bars and river banks afford resting places for migratory shore and water birds. Another factor is the annual influx of winter visitants from the north, both water and land birds. Furthermore the river and its canyon meander at the base of the Henry Mountains, Navajo Mountain, and the Kaiparowits Plateau, thus affording opportunity for certain forms that breed at high elevations to drop down into the canyon in autumn and winter.

The changes in the bird life of the area when the water has backed up to form Lake Escalante will be interesting to watch, but they cannot be well prognosticated. The large body of water should attract water and shore birds in greater numbers. On the deltas at the mouths of incoming streams and on shores of embayments extensive stands of tamarix will probably develop that will be attractive to certain species such as the blue grosbeak. In contrast to these propitious features there will doubtless be some adverse ones. The fluctuating levels of the water will probably not be conducive to extensive growth of willows and cottonwoods, a habitat where many of the resident species now occur. Thus with this habitat destruction certain species may be reduced in numbers in the region. Whatever the changes, the present summary of the birds of Glen Canyon will constitute at least a partial historical record of pre-reservoir conditions and will serve as a basis for comparison of ensuing changes.

Despite the lack of intensive work on the birds of Glen Canyon itself, 97 kinds of birds are known from the canyon. Of these 24 are water or shore birds and 73 are land birds. On the basis of seasonal status a provisional judgment is that 20 are permanent residents, 34 are summer residents, 36 are transients or through migrants and 7 are winter visitants. Continuous observation throughout all seasons of the year would doubtless enlarge the list considerably. There are 100 additional forms, recorded from immediately adjacent areas, that should also occur in Glen Canyon. This makes a potential list of 197 species, not including accidentals. A check-list of both known and hypo-

thetical species follows. The seasonal status for each has been indicated, a judgment entered as to its relative abundance, and the habitat designated. The habitats are based largely on the vegetative features of the canyon, which have been discussed by Flowers (1959). Based on his descriptions and the writer's observations on his trip down the canyon there are six habitats for birds, as follows:

Open water. This is provided primarily by the river itself, but there are also some side streams of fairly large size like the Escalante River that also attract water and shore birds. Occasionally small ponds and pools occur even in the narrow canyons. For brevity in the table this habitat is sometimes referred to as "river."

Sand bars and river banks. The bars are vegetation-free and are most conspicuous at low water stages in most parts of the canyon. In places the river banks are also bare. In the table the two are referred to simply as "bars."

Marsh. Rarely occurring in side canyons are small marsh areas in the nature of patches of cattails (*Typha*), bullrushes (*Scirpus*), and reeds (*Phragmites communis*). Sometimes they line brooks or small side pools, but more often these vegetative types are arranged as dense stands growing in wet sand with little or no standing water.

River bank vegetation. More common than bare river banks are those covered with vegetation. The plant community takes the form ordinarily of a luxuriant growth of tall shrubs and small trees. The dominant shrub types are two species of willow, the sandbar willow (*Salix exigua*) and the Goodding willow (*Salix gooddingi*), tamarix or salt cedar (*Tamarix pentandra*), baccharis (*Baccharis emoryi*), and arrow weed (*Pluchea sericæ*). They range from 8 to 20 feet in height but may be partially submerged in flood-water stages. This river bank vegetation occurs in most places in the form of a narrow belt lining the river banks and extending back from 10 to 60 feet. In places, however, the stand is much wider, up to 200 yards, especially at the mouths of the side canyons whence it extends up the tributary canyons. Often a dense, almost impenetrable thicket is formed.

In places, depending on local conditions, other conspicuous plants are present, such as the tall reed (*Phragmites communis*), wild rose (*Rosa nutkana*), squawbush (*Rhus trilobata*), hackberry (*Celtis douglasii*), and even scrub oak (*Quercus gambelii*). In some small localized areas within this streamside thicket, cottonwoods (*Populus fremontii*) and old willows that have assumed tree size form limited groves. The cottonwoods occur within the streamside thicket mainly in side canyons, and there is widespread mergence of the two vegetative forms so it seems best to treat the whole complex as one avian habitat. This river bank vegetation association is the most conspicuous plant community in the canyon and attracts the greatest number of land birds.

Terraces. In many places terraces, representing the old flood plains of the river, exist above the present river bed. They vary in width from narrow strips 10 or 15 feet wide to broad areas 100 yards across. They often drop off steeply to the streamside vegetation along the river. These terraces afford a desert scrub type of vegetation, the shrubs varying from 1 to 4 feet high. The dominant types are arrow weed, saltbush (*Atriplex canescens*), inkweed (*Suaeda intermedia*), greasewood (*Sarcobatus vermiculatus*), rabbitbrush (*Chrysothamnus*), and squawbush. The areas between the bushes support various



FIG. 2. Bend of Colorado River in Glen Canyon below Hall Creek showing river bank vegetation, terraces, hillsides and cliffs. Photograph by H. S. Gentry and G. S. Gentry.



Showing several avian habitats: open water, sand bars and river
at Canyon Mouth, August, 1957. (Photo by W. H. Behle)

grasses and herbs but are often bare. In places small sand dunes have been formed. The surface of the soil is dry and xerophytic types of vegetation like yuccas and cacti (*Opuntia*) are fairly common. Occasionally small tree types like oak and hackberry occur.

Hillsides and Cliffs. The vertical canyon walls with their holes, crevices, ledges, and caves are very extensive. In some places the cliffs come down to the river, but when set back there are at their bases sand and talus deposits. In some places these depositions are steep and rugged; in others gradual slopes occur. On the more even stretches a low, desert shrub type of vegetation grows. Conspicuous plants are saltbushes (*Atriplex*), joint firs (*Ephedra*), and occasionally blackbrush (*Coleogyne*). In the table this habitat is referred to as simply "cliffs" or "hillsides."

Junipers. This extensive habitat of the Southwest is represented in Glen Canyon in only a few lengthy side canyons such as Aztec Canyon, which extends to the base of Navajo Mountain. The junipers are sparse and widely scattered, yet may attract certain obligate birds like titmice and piñon jays.

BIRDS OCCURRING IN GLEN CANYON

KIND	SEASONAL STATUS	RELATIVE ABUNDANCE	HABITAT
* Common Loon (<i>Gavia immer</i>)	Transient* and winter visitant	Uncommon	Open water
* Eared Grebe (<i>Podiceps caspicus</i>)	Transient*	Uncommon	Open water
Western Grebe (<i>Aechmophorus occidentalis</i>)	Transient	Rare	Open water
* Pied-billed Grebe (<i>Podilymbus podiceps</i>)	Transient*	Uncommon	Open water
White Pelican (<i>Pelecanus erythrorhynchos</i>)	Transient	Uncommon	Open water
Double-crested Cormorant (<i>Phalacrocorax auritus</i>)	Transient	Uncommon	Open water
^ Great Blue Heron (<i>Ardea herodias</i>)	Summer resident and transient	Common	River and bars; nests in cottonwoods
Snowy Egret (<i>Leucophoxa thula</i>)	Transient	Uncommon	Bars
Black-crowned Night Heron (<i>Nycticorax nycticorax</i>)	Transient	Uncommon	River and bars; roosting in cottonwoods
* American Bittern (<i>Botaurus lentiginosus</i>)	Transient*	Uncommon	River and bars
White-faced Ibis (<i>Plegadis chihi</i>)	Transient	Uncommon	River and bars
* Whistling Swan (<i>Olor columbianus</i>)	Transient*	Rare	Open water
^ Canada Goose (<i>Branta canadensis</i>)	Summer resident and transient	Common	Open water
* Snow Goose (<i>Chen hyperborea</i>)	Transient*	Uncommon	Open water
Mallard (<i>Anas platyrhynchos</i>)	Transient and winter visitant	Uncommon	Open water
* Gadwall (<i>Anas strepera</i>)	Transient and winter visitant*	Uncommon	Open water
Pintail (<i>Anas acuta</i>)	Transient and winter visitant	Uncommon	Open water
^ Green-winged Teal (<i>Anas carolinensis</i>)	Transient and winter visitant	Common	Open water
Blue-winged Teal (<i>Anas discors</i>)	Transient	Uncommon	Open water
Cinnamon Teal (<i>Anas cyanoptera</i>)	Transient	Uncommon	Open water
American Widgeon (<i>Mareca americana</i>)	Transient	Uncommon	Open water
Shoveler (<i>Spatula clypeata</i>)	Transient	Uncommon	Open water
* Redhead (<i>Aythya americana</i>)	Transient*	Uncommon	Open water
Canvasback (<i>Aythya valisineria</i>)	Transient	Uncommon	Open water

- Lesser Scaup (*Aythya affinis*)
- Common Goldeneye (*Bucephala clangula*)
- * Bufflehead (*Bucephala albeola*)
- * Ruddy Duck (*Oxyura jamaicensis*)
- * Common Merganser (*Mergus merganser*)

- * Red-breasted Merganser (*Mergus serrator*)
- ~ Turkey Vulture (*Cathartes aura*)

- * Goshawk (*Accipiter gentilis*)
- * Sharp-shinned Hawk (*Accipiter striatus*)
- Cooper's Hawk (*Accipiter cooperii*)
- ~ Red-tailed Hawk (*Buteo jamaicensis*)

- Swainson's Hawk (*Buteo swainsoni*)

- ~ * Ferruginous Hawk (*Buteo regalis*)
- ~ Golden Eagle (*Aquila chrysaetos*)

- Bald Eagle (*Haliaeetus leucocephalus*)

- * Marsh Hawk (*Circus cyaneus*)
- ~ Prairie Falcon (*Falco mexicanus*)
- Peregrine Falcon (*Falco peregrinus*)
- Pigeon Hawk (*Falco columbarius*)
- ~ Sparrow Hawk (*Falco sparverius*)

- * Gambel's Quail (*Lophortyx gambelii*)
- ~ * Chukar (*Alectoris graeca*)

- * Virginia Rail (*Rallus limicola*)
- * Sora (*Porzana carolina*)
- American Coot (*Fulica americana*)
- ~ Killdeer (*Charadrius vociferus*)

* Hypothetical

Transient	Uncommon	Open water
Transient	Uncommon	Open water
Transient*	Uncommon	Open water
Transient*	Uncommon	Open water
Transient* and winter visitant	Uncommon	Open water
Transient*	Uncommon	Open water
Permanent resident	Common	Soaring above canyon; nesting in cliffs and caves
Transient*	Rare	River bank vegetation
Permanent resident*	Uncommon	River bank vegetation
Permanent resident	Uncommon	River bank vegetation
Permanent resident	Abundant	Cliffs and river bank vegetation
Summer resident	Rare	Cliffs and river bank vegetation
Permanent resident*	Common	Cliffs and river bank vegetation
Permanent resident	Common	Soaring above canyons; nesting at cliffs and caves
Winter visitant	Uncommon	River and soaring above canyon
Permanent resident*	Uncommon	Terraces
Permanent resident	Common	Cliffs
Transient	Rare	In flight over river
Transient	Rare	River bank vegetation
Permanent resident	Common	River bank vegetation; terraces and cliffs
Permanent resident*	Uncommon	Terraces
Permanent resident*	Common	Terraces and rocky hillsides
Transient*	Uncommon	Marsh
Transient*	Uncommon	Marsh
Summer resident	Uncommon	River and marsh
Permanent resident	Common	River and bars

BIRDS OCCURRING IN GLEN CANYON (continued)

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KIND	SEASONAL STATUS	RELATIVE ABUNDANCE	HABITAT
* Common Snipe (<i>Capella gallinago</i>)	Transient*	Uncommon	Marsh
* Long-billed Curlew (<i>Numenius americanus</i>)	Transient*	Uncommon	River and bars
Spotted Sandpiper (<i>Actitis macularia</i>)	Summer resident and transient	Sparse breeder, common migrant	Bars
* Solitary Sandpiper (<i>Tringa solitaria</i>)	Transient*	Uncommon	Bars
* Willet (<i>Catoptrophorus semipalmatus</i>)	Transient*	Uncommon	Bars
* Greater Yellowlegs (<i>Totanus melanoleucus</i>)	Transient*	Uncommon	Bars
* Lesser Yellowlegs (<i>Totanus flavipes</i>)	Transient*	Uncommon	Bars
* Baird's Sandpiper (<i>Erolia bairdii</i>)	Transient*	Uncommon	Bars
- * Least Sandpiper (<i>Erolia minutilla</i>)	Transient*	Common	Bars
* Long-billed Dowitcher (<i>Limnodromus scolopaceus</i>)	Transient*	Uncommon	Bars
- * Western Sandpiper (<i>Ereunetes mauri</i>)	Transient*	Common	Bars
* American Avocet (<i>Recurvirostra americana</i>)	Transient*	Uncommon	Bars
* Wilson's Phalarope (<i>Steganopus tricolor</i>)	Transient*	Uncommon	Bars
California Gull (<i>Larus californicus</i>)	Transient	Uncommon	River and bars
Ring-billed Gull (<i>Larus delawarensis</i>)	Transient	Uncommon	River and bars
Franklin's Gull (<i>Larus pipixcan</i>)	Transient	Uncommon	River and bars
* Bonaparte's Gull (<i>Larus philadelphia</i>)	Transient*	Uncommon	River and bars
* Black Tern (<i>Chlidonias niger</i>)	Transient*	Uncommon	River and bars
- Mourning Dove (<i>Zenaidura macroura</i>)	Summer resident	Abundant	Terraces
* Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)	Summer resident*	Rare	River bank vegetation
* Roadrunner (<i>Geococcyx californianus</i>)	Permanent resident*	Uncommon	Terraces
* Barn Owl (<i>Tyto alba</i>)	Permanent resident*	Uncommon	River bank vegetation
* Screech Owl (<i>Otus asio</i>)	Permanent resident*	Uncommon	River bank vegetation
Great Horned Owl (<i>Bubo virginianus</i>)	Permanent resident	Uncommon	River bank vegetation and cliffs
* Burrowing Owl (<i>Speotyto cunicularia</i>)	Summer resident*	Rare	Terraces
Spotted Owl (<i>Strix occidentalis</i>)	Permanent resident	Uncommon	River bank vegetation
Long-eared Owl (<i>Asio otus</i>)	Permanent resident	Uncommon	River bank vegetation
* Saw-whet Owl (<i>Aegolius acadicus</i>)	Permanent resident*	Rare	River bank vegetation
- Poor-will (<i>Phalaenoptilus nuttallii</i>)	Summer resident	Common	Terraces

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- Common Nighthawk (*Chordeiles minor*)
- White-throated Swift (*Aeronautes saxatalis*)
- Black-chinned Hummingbird (*Archilochus alexandri*)
- * Costa's Hummingbird (*Calypte costae*)
- Broad-tailed Hummingbird (*Selasphorus platycercus*)
- * Rufous Hummingbird (*Selasphorus rufus*)
- Calliope Hummingbird (*Stellula calliope*)
- Belted Kingfisher (*Megaceryle alcyon*)
- Red-shafted Flicker (*Colaptes cafer*)
- Yellow-bellied Sapsucker (*Sphyrapicus varius*)
- * Williamson's Sapsucker (*Sphyrapicus thyroideus*)
- * Downy Woodpecker (*Dendrocopos pubescens*)
- Western Kingbird (*Tyrannus verticalis*)
- Cassin's Kingbird (*Tyrannus vociferans*)
- Ash-throated Flycatcher (*Myiarchus cinerascens*)
- * Black Phoebe (*Sayornis nigricans*)
- Say's Phoebe (*Sayornis saya*)
- Traill's Flycatcher (*Empidonax traillii*)
- * Dusky Flycatcher (*Empidonax oberholseri*)
- * Gray Flycatcher (*Empidonax wrightii*)
- Western Flycatcher (*Empidonax difficilis*)
- Western Wood Pewee (*Contopus sordidulus*)
- Olive-sided Flycatcher (*Nuttallornis borealis*)
- Horned Lark (*Eremophila alpestris*)
- Violet-green Swallow (*Tachycineta thalassina*)

* Hypothetical

Summer resident	Common	Terraces and in flight over canyons
Summer resident	Common	Cliffs
Summer resident	Common	Terraces and river bank vegetation
Summer resident*	Uncommon	Terraces and river bank vegetation
Summer resident	Common	Terraces and river bank vegetation
Transient*	Common	Terraces and river bank vegetation
Transient	Uncommon	Terraces and river bank vegetation
Transient	Uncommon	River bank vegetation and open water
Permanent resident	Common	River bank vegetation
Winter visitant	Uncommon	River bank vegetation
Transient*	Uncommon	River bank vegetation
Transient*	Uncommon	River bank vegetation
Summer resident	Uncommon	River bank vegetation
Summer resident	Common	River bank vegetation
Summer resident	Abundant	River bank vegetation and terraces
Summer resident*	Uncommon	River bank vegetation and terraces
Summer resident	Common	Terraces
Summer resident	Common	River bank vegetation
Transient*	Uncommon	River bank vegetation
Transient*	Uncommon	River bank vegetation
Transient	Uncommon	River bank vegetation
Transient, possibly summer resident	Uncommon	River bank vegetation
Transient	Uncommon	River bank vegetation
Permanent resident	Uncommon	Terraces
Summer resident	Common	River bank vegetation and over river and terraces

BIRDS OCCURRING IN GLEN CANYON (continued)

16

KIND	SEASONAL STATUS	RELATIVE ABUNDANCE	HABITAT
* Tree Swallow (<i>Iridoprocne bicolor</i>)	Transient*	Uncommon	River bank vegetation and over river
* Bank Swallow (<i>Riparia riparia</i>)	Transient*	Uncommon	River bank vegetation and over river
Rough-winged Swallow (<i>Stelgidopteryx ruficollis</i>)	Transient, possibly summer resident	Uncommon	River bank vegetation and over river
* Barn Swallow (<i>Hirundo rustica</i>)	Transient*	Uncommon	River bank vegetation and over river
~ Cliff Swallow (<i>Petrochelidon pyrrhonota</i>)	Summer resident	Common	Cliffs and over river
Scrub Jay (<i>Aphelocoma coerulescens</i>)	Permanent resident	Uncommon	River bank vegetation
- Common Raven (<i>Corvus corax</i>)	Permanent resident	Common	Cliffs and in flight over canyon
* Common Crow (<i>Corvus brachyrhynchos</i>)	Transient or winter visitant*	Uncommon	River bank vegetation
* Piñon Jay (<i>Gymnorhinus cyanocephala</i>)	Transient*	Uncommon	Junipers
* Black-capped Chickadee (<i>Parus atricapillus</i>)	Winter visitant*	Uncommon	River bank vegetation
Mountain Chickadee (<i>Parus gambeli</i>)	Winter visitant	Uncommon	River bank vegetation
Plain Titmouse (<i>Parus inornatus</i>)	Permanent resident	Uncommon	Junipers
* Common Bush-tit (<i>Psaltriparus minimus</i>)	Permanent resident*	Uncommon	River bank vegetation
* White-breasted Nuthatch (<i>Sitta carolinensis</i>)	Winter visitant*	Uncommon	River bank vegetation
* Red-breasted Nuthatch (<i>Sitta canadensis</i>)	Winter visitant*	Uncommon	River bank vegetation
Brown Creeper (<i>Certhia familiaris</i>)	Winter visitant	Uncommon	River bank vegetation
Dipper (<i>Cinclus mexicanus</i>)	Permanent resident	Uncommon	Clear stream
* House Wren (<i>Troglodytes aedon</i>)	Winter visitant	Uncommon	River bank vegetation
* Bewick's Wren (<i>Thryomanes bewickii</i>)	Permanent resident*	Uncommon	Terraces
* Long-billed Marsh Wren (<i>Telmatodytes palustris</i>)	Transient*	Uncommon	Marsh
~ Cañon Wren (<i>Catherpes mexicanus</i>)	Permanent resident	Common	Cliffs
~ Rock Wren (<i>Salpinctes obsoletus</i>)	Summer resident	Common	Cliffs and terraces
Mockingbird (<i>Mimus polyglottos</i>)	Permanent resident	Uncommon	Terraces
Catbird (<i>Dumetella carolinensis</i>)	Summer resident	Uncommon	River bank vegetation
* Bendire's Thrasher (<i>Toxostoma bendirei</i>)	Permanent resident*	Uncommon	Terraces
* Sage Thrasher (<i>Oreoscoptes montanus</i>)	Summer resident*	Uncommon	Terraces

- Robin (*Turdus migratorius*)
- * Hermit Thrush (*Hylocichla guttata*)
- * Swainson's Thrush (*Hylocichla ustulata*)
- * Western Bluebird (*Sialia mexicana*)
- Mountain Bluebird (*Sialia currucoides*)
- * Townsend's Solitaire (*Myadestes townsendi*)
- Blue-gray Gnatcatcher (*Poliophtila caerulea*)
- * Golden-crowned Kinglet (*Regulus satrapa*)
- * Ruby-crowned Kinglet (*Regulus calendula*)
- * Water Pipit (*Anthus spinoletta*)
- * Cedar Waxwing (*Bombycilla cedrorum*)
- * Phainopepla (*Phainopepla nitens*)
- * Northern Shrike (*Lanius excubitor*)
- * Loggerhead Shrike (*Lanius ludovicianus*)
- * Starling (*Sturnus vulgaris*)
- * Gray Vireo (*Vireo vicinior*)
- Solitary Vireo (*Vireo solitarius*)
- * Warbling Vireo (*Vireo gilvus*)
- Orange-crowned Warbler (*Vermivora celata*)
- * Nashville Warbler (*Vermivora ruficapilla*)
- * Virginia's Warbler (*Vermivora virginiae*)
- Lucy's Warbler (*Vermivora luciae*)
- Yellow Warbler (*Dendroica petechia*)
- * Audubon's Warbler (*Dendroica auduboni*)
- * Black-throated Gray Warbler (*Dendroica nigrescens*)
- * Townsend's Warbler (*Dendroica townsendi*)
- * Northern Waterthrush (*Seiurus noveboracensis*)
- * MacGillivray's Warbler (*Oporornis tolmiei*)
- Yellowthroat (*Geothlypis trichas*)
- Yellow-breasted Chat (*Icteria virens*)
- * Wilson's Warbler (*Wilsonia pusilla*)
- * House Sparrow (*Passer domesticus*)

* Hypothetical

Permanent resident	Common	River bank vegetation
Transient*	Uncommon	River bank vegetation
Transient*	Uncommon	River bank vegetation
Transient*	Uncommon	River bank vegetation
Transient	Uncommon	Terraces
Winter visitant*	Uncommon	River bank vegetation
Summer resident	Common	Terraces and river bank vegetation
Winter visitant*	Uncommon	River bank vegetation
Winter visitant*	Common	River bank vegetation
Transient*	Uncommon	Terraces
Transient*	Uncommon	River bank vegetation
Summer resident*	Uncommon	River bank vegetation
Winter visitant*	Uncommon	Terraces
Permanent resident*	Uncommon	Terraces
Permanent resident*	Common	River bank vegetation
Summer resident*	Uncommon	Terraces and junipers
Transient	Uncommon	River bank vegetation
Summer resident*	Common	River bank vegetation
Transient	Uncommon	River bank vegetation
Transient*	Uncommon	River bank vegetation
Transient*	Uncommon	River bank vegetation
Summer resident	Common	River bank vegetation
Summer resident	Common	River bank vegetation
Transient*	Uncommon	River bank vegetation
Summer resident*	Uncommon	Junipers
Transient*	Uncommon	River bank vegetation
Transient*	Uncommon	River bank vegetation
Transient*	Uncommon	River bank vegetation
Summer resident	Uncommon	River bank vegetation and marsh
Summer resident	Common	River bank vegetation
Transient*	Uncommon	River bank vegetation
Permanent resident*	Uncommon	River bank vegetation

BIRDS OCCURRING IN

KIND

- * Bobolink (*Dolichonyx oryzivorus*)
- * Western Meadowlark (*Sturnella neglecta*)
 - Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*)
 - Redwinged Blackbird (*Agelaius phoeniceus*)
- * Scott's Oriole (*Icterus parisorum*)
- Bullock's Oriole (*Icterus bullockii*)
 - Brewer's Blackbird (*Euphagus cyanocephalus*)
 - Brown-headed Cowbird (*Molothrus ater*)
 - Western Tanager (*Piranga ludoviciana*)
 - Black-headed Grosbeak (*Pheucticus melanocephalus*)
- Blue Grosbeak (*Guiraca caerulea*)
 - Lazuli Bunting (*Passerina amoena*)
- * Cassin's Finch (*Carpodacus cassinii*)
- House Finch (*Carpodacus mexicanus*)
- * Pine Siskin (*Spinus pinus*)
 - American Goldfinch (*Spinus tristis*)
- * Lesser Goldfinch (*Spinus psaltria*)
- * Green-tailed Towhee (*Chlorura chlorura*)
 - Rufous-sided Towhee (*Pipilo erythrophthalmus*)
- * Savannah Sparrow (*Paserculus sandwichensis*)
- * Vesper Sparrow (*Pooecetes gramineus*)
- Lark Sparrow (*Chondestes grammacus*)
- Black-throated Sparrow (*Amphispiza bilineata*)

N GLEN CANYON (continued)

18

SEASONAL STATUS	RELATIVE ABUNDANCE	HABITAT
Transient*	Rare	River bank vegetation
Transient*	Uncommon	Terraces
Transient	Uncommon	River bank vegetation
Transient, possibly summer resident	Uncommon	River bank vegetation
Summer resident*	Rare	River bank vegetation and junipers
Summer resident	Common	River bank vegetation
Transient	Uncommon	River bank vegetation and terraces
Transient	Uncommon	River bank vegetation
Transient, possibly summer resident	Uncommon	River bank vegetation
Summer resident	Common	River bank vegetation and terraces
Summer resident	Uncommon	River bank vegetation
Transient*	Uncommon	River bank vegetation
Summer resident	Common	River bank vegetation and terraces
Transient, possibly winter visitant*	Uncommon	River bank vegetation
Permanent resident	Uncommon	River bank vegetation and terraces
Permanent resident	Uncommon	River bank vegetation
Transient*	Uncommon	River bank vegetation
Permanent resident	Uncommon	River bank vegetation
Transient*	Uncommon	River bank vegetation
Transient*	Uncommon	River bank vegetation
Summer resident	Common	River bank vegetation and terraces
Summer resident	Common	Terraces

WILLIAM H. BEHLE

- Sage Sparrow (*Amphispiza belli*)
- * Slate-colored Junco (*Junco hyemalis*)
- Oregon Junco (*Junco oreganus*)
- * Gray-headed Junco (*Junco caniceps*)
- * Tree Sparrow (*Spizella arborea*)
- Chipping Sparrow (*Spizella passerina*)
- Brewer's Sparrow (*Spizella breweri*)
- * Harris' Sparrow (*Zonotrichia querula*)
- White-crowned Sparrow (*Zonotrichia leucophrys*)
- * Fox Sparrow (*Passerella iliaca*)
- * Lincoln's Sparrow (*Melospiza lincolnii*)
- Song Sparrow (*Melospiza melodia*)

Summer resident	Uncommon	Terraces
Winter visitant*	Rare	River bank vegetation
Winter visitant	Common	River bank vegetation
Transient*	Uncommon	River bank vegetation
Winter visitant*	Uncommon	River bank vegetation
Summer resident	Common	Terraces
Summer resident	Common	Terraces
Winter visitant*	Rare	River bank vegetation
Winter visitant	Common	River bank vegetation
Transient*	Uncommon	River bank vegetation
Transient*	Uncommon	River bank vegetation
Winter visitant	Common	River bank vegetation

AVIFAUNISTIC ANALYSIS

In this report 206 kinds of birds (species and subspecies) are listed from southeastern Utah. A breakdown as to seasonal status is difficult since our knowledge of some species is incomplete. An approximation is that 54 are permanent residents, 88 are summer residents, 54 are transients, and 10 are winter visitants. There are few distinctions of the avifauna in southeastern Utah as compared with other sections of the state with similar varied habitats. The several boreal islands in this region, although isolated, have in general the same vegetative belts and similar ecological distribution of the attendant bird life. Furthermore, this is similar to that portrayed for the high plateaus to the west (see Behle, Bushman, and Greenhalgh, 1958:13-27).

There are several instances where by chance species were not found on all the mountains of the region. For instance, pygmy nuthatches were not found in the La Sal Mountains but are known from the Uinta Mountains to the north. Swainson's thrushes and fox sparrows were found only in the La Sals. For the fox sparrow, this represents an extension of range of the race *swarthi*. Grace's warbler was found only in the Henry Mountains. The hermit warbler is known only from Navajo Mountain. The only specimen from Utah of the pileated woodpecker is the one from Bluff, but sight records indicate that it occurs elsewhere in the state. The only records of the spotted owl from Utah are from Navajo Mountain and Glen Canyon. Probably the only significant instance of occurrence is that pipits occur as breeding birds in the La Sals and not on the other mountains except as transients.

The Colorado and Green rivers and their tributaries attract many species of water and shore birds to the region. Although it is desert country, a few marshes such as the one near Moab afford the required habitat for a few species of marsh birds. In addition to many migrants from the north, a number of species that breed at high elevations during the winter drop down to the desert lowlands as transients or winter visitants. For instance Steller's jays were found at Moab in December, and the yellow-breasted sapsucker, ruby-crowned kinglet and creeper at Hite in November.

As pertains to the geographically variable resident species, most of those occurring in southeastern Utah are of the same subspecies as found in central and northern Utah. Only two races are seemingly confined to the southeastern portion of Utah: *Chordeiles minor henryi* and *Eremophila alpestris occidentalis*. A possible third is *Otus asio cineraceous*, which may also be found in southwestern Utah. In any event the race from southeastern Utah is different from that of northern Utah, which is *O. a. inyoensis*. Another important consideration is that several species from eastern Utah and also central Utah have different races from those occurring in the western Great Basin portion of the state (see Behle, 1955 and 1958). The races in the eastern portion of Utah are *Dendragapus obscurus obscurus*, *Bubo virginianus pallescens*, *Dendrocopos villosus leucothorectis*, *Petrochelidon pyrrhonota pyrrhonota*, *Parus atricapillus garrinus*, *Parus gambeli gambeli*, *Hylocichla guttata auduboni* and *Carpodacus mexicanus frontalis*.

ANNOTATED LIST OF BIRDS

Gavia immer (Brünnich): Common Loon. Two examples of this uncommon transient and possible winter visitant were seen in the Colorado River, 15 miles south of Moab, on December 22, 1955.

Aechmophorus occidentalis (Lawrence): Western Grebe. Two were seen swimming in the Colorado River in Glen Canyon near Red Canyon, river mile 163, on July 5, 1958. Transient.

Pelecanus erythrorhynchos Gmelin: White Pelican. Woodbury and Russell (1945:27) indicate that this species is an irregular or uncommon transient through the region and give a record of a bird being taken on the Colorado River at mile 52.6, which is 3 miles below Rock Creek, on July 28, 1937, but only the wings were saved.

Phalacrocorax auritus (Lesson): Double-crested Cormorant. A lone individual was seen on a sand bar of the Colorado River in Glen Canyon at mile 109 on July 16, 1958. Transient.

Ardea herodias Linnaeus: Great Blue Heron. This is the most abundant species of water bird occurring along the waterways of southeastern Utah, being a common transient and less common breeder. Herons were observed along the Colorado River at Dewey on May 21 and 23, 1953; at the junction of the Dolores and Colorado rivers on May 15, 1954; at 5 miles north of Moab on September 16, 1955; at Moab, June 5 and 6, 1956, at Hole-in-the-Rock on October 18, 1958; and at Hite on October 21, 1958. Higgins reports that they were observed nearly every day in Glen Canyon from Hite to Lee's Ferry, July 1 to August 9, 1958. Woodbury and Russell (1945:28) indicate that the species has been reported several times along the San Juan and Colorado rivers. The precise dates and localities are given in Behle and Higgins (1959). Behle (1948:304) saw the species frequently in Glen Canyon in April, 1947, and Woodbury (1958:182) mentions a breeding colony at river mile 117. Higgins also observed this colony on July 13, 1958.

A second place where the species is known to nest is at the river bottoms near Moab. On June 7, 1956, we located a heronry in some dead cottonwoods on the east side of the river about a quarter of a mile south of the bridge. The trees had been killed by beaver gnawing. Eight nests were arranged in two lots of four each. Young were observed in the nests. When discovered at about 8:00 A.M. only two adults were flying about, but at 8:30 seven others appeared. They circled over the nests and as they did so, emitted hoarse croaks. One adult alighted about 8 feet from a nest and then walked along the branch to the nest. The nest platforms were about 2.5 feet in diameter and located some 40 feet above ground. Later we learned from Dan Winburn that herons have nested in the vicinity for two or more decades, at least, but with the growth of the human population and industrialization in connection with the milling of uranium, the future of this particular colony is precarious.

Leucophoyx thula (Molina): Snowy Egret. San Juan River, 3375 ft., 17 miles above junction with Colorado River, August 1, 1935, and San Juan River, 3400 ft., 1 mile below Piute Rapids, August 1, 1938 (Woodbury and Russell, 1945:28). Total specimens, two. One was observed along the Colorado River at Dewey, May 21-23, 1953, three on September 16, 1955, 6 miles north of Moab, and one on the Green River, 6 miles north of the town of Green River on August 18, 1956. Higgins reports a flock of 17 feeding along the Colorado River near the mouth of Wahweap Creek, river mile 17, and one downstream at the dam site on August 7, 1958. Woodbury and Russell (*loc. cit.*) saw 11 on August 1, 1938, on the San Juan River, 15-25 miles above its junction with the Colorado River. Their additional sight records at mile 45 on the San Juan River, July 30, 1938, and at Forbidding canyon along the Colorado River, July 18, 1937, are recorded in Behle and Higgins (1959). Behle (1948:304) observed the species in Glen Canyon at river mile 60 on April 16, 1947, and at river mile 11 on April 17. Transient.

Nycticorax nycticorax (Linnaeus): Black-crowned Night Heron. Colorado River, 64 miles above Lee's Ferry, August 4, 1938 (Woodbury and Russell, 1945:29). One specimen. Behle (1948:305) saw two on April 16, 1947 near the mouth of Kane Creek, river mile 41.5, and two on April 17 near the mouth of Wahweap Creek, mile 17. Without giving particulars, Woodbury and Russell (*loc. cit.*) state that six were observed in 65 miles between August 4 and 11, 1938. The details are given in Behle and Higgins (1959). Transient.

Botaurus lentiginosus (Rackett): American Bittern. Woodbury and Russell (1945:29) report a specimen of this transient from the San Juan River at Bluff on May 5, 1892 (AMNH).

Plegadis chihi (Vieillot): White-faced Ibis. Three were reported by Behle (1948:305) along the Colorado River, 122 miles above Lee's Ferry on April 14, 1947. Transient.

Olor columbianus (Ord): Whistling Swan. Dan Winburn reports that in February, 1952, three alighted on the river near Moab, seemingly exhausted. They were fed by an interested boy and after a few days departed. Later, the carcass of one was found and the feet and head saved until the identity of the species was corroborated by Clifton Greenhalgh. Transient.

Branta canadensis (Linnaeus): Canada Goose. One was observed at Dewey on May 21, 1953, and three were seen at the slough east of the river near Moab on March 17, 1956. Higgins and Smith saw a pair of adults with six young at river mile 105 in Glen Canyon on July 16, 1958. The young were unable to fly and some were captured but later released. A total of ten geese were seen that day. A brood, possibly the same one, was seen the following day at river mile 101. Behle (1948:305) reported one at the mouth of Ticaboo Creek in Glen Canyon at river mile 148 on April 13, 1947, and one at mile 111 on April 14. Dan Winburn reports that small numbers migrate through the Moab region each year and recalls seeing a flock of 16 headed south in the autumn of 1955. He says there is some hunting of geese along the river by uranium miners and oil workers. He states that geese try to nest in the slough near Moab, but the nests are flooded when overflow water from the river pours into the slough in May and June. Woodbury and Russell (1945: 29) cite a record of skeletal parts occurring in Poncho House ruins, San Juan County, Utah, having presumably been buried between 700 and 1300 A.D.

Anas platyrhynchos Linnaeus: Mallard. Beaver Creek, 8500 ft., La Sal Mountains, September 14, 1955. One specimen. A small flock was observed in the slough southwest of Moab on December 21, 1955, and another on March 17, 1956. Five were seen there on June 8, 1956. Higgins observed a lone male flying near the mouth of Ticaboo Creek in Glen Canyon, river mile 148, on July 6, 1958. In addition to the female taken at some ponds on Beaver Creek in the La Sal Mountains, three others were seen there on September 12. The species is probably a regular migrant and winter visitant along the Colorado River and may be a sparse breeder in the Moab slough as well as at ponds in the mountains.

Anas strepera Linnaeus: Gadwall. A pair of these transients was seen at the Moab slough on March 17, 1956. Behle (1948:305) saw a pair in Glen Canyon near Hole-in-the-Rock at river mile 84, five at the mouth of the San Juan River, mile 78, on April 14, 1947, and two near the mouth of Wahweap Creek, mile 17, on April 17.

Anas acuta Linnaeus: Pintail. A small flock was seen at the Moab slough on December 21, 1955, and several were seen there also on March 17, 1956. Woodbury and Russell (1945:30) report scattered individuals along the San Juan River in July and early August. As reported in Behle and Higgins (1959) they saw a female on the San Juan River between miles 27 and 15 on August 1, 1938. Behle (1948:305) saw a pair in Glen Canyon on April 13, 1947, near the mouth of Ticaboo Canyon, 148.5 miles, two pairs on April 14 at river mile 122, and six individuals on April 14 near Hole-in-the-Rock at mile 84. The species is a transient and possibly a winter visitant.

Anas carolinensis Gmelin: Green-winged Teal. Colorado River (between Rock Creek at river mile 58, and Lees Ferry), Kane County, Utah, August 17, 1937 (Woodbury and Russell, 1945:31). One specimen. We saw several at the Moab slough on December 21, 1955, and a small flock there on March 17, 1956. Woodbury and Russell (*loc. cit.*) further indicate that the species was seen along the San Juan River. The details are given in Behle and Higgins (1959) and pertain to two birds seen August 1, 1938, between miles 27 and 15. Behle (1948:305) reported one in Glen Canyon at river mile 122 on April 14, 1947. Transient.

Anas discors Linnaeus: Blue-winged Teal. Bluff, May 10, 1933 (Woodbury and Russell, 1945:31). One specimen. One was seen at the Moab slough on June 8, 1956. Higgins saw a flock of six in Glen Canyon near the mouth of Rock Creek, river mile 58, on July 28, 1958. Behle (1948:305) saw a pair in Glen Canyon near Klondike Bar, river mile 65, on April 16, 1947. Transient.

Anas cyanoptera Vieillot: Cinnamon Teal. Woodbury and Russell (1945:31) report a male taken at Bluff on May 18, 1892 (AMNH), and Behle (1948:305) saw a pair in Glen Canyon near the mouth of Wahweap Creek, river mile 17, on April 17, 1947. As reported in Behle and Higgins (1959) Woodbury saw one on the Colorado River on August 5, 1938, between miles 63 and 50. Transient.

Mareca americana (Gmelin): American Widgeon. A few were seen at the Moab slough on March 17, 1956. Behle (1948:305) reported one in Glen Canyon at mile 122 on April 14, 1947. Transient.

Spatula clypeata (Linnaeus): Shoveler. Behle (1948:305) observed three pairs in Glen Canyon at Moki Bar, river mile 127, and two pairs at mile 122 on April 14, 1947. Transient.

Aythya valisineria (Wilson): Canvasback. Behle (1948:305) observed a pair in Glen Canyon near Moki Bar, river mile 127.5 on April 14, 1947, and another near the mouth of Last Chance Creek, mile 59.5, on April 16. Transient.

Aythya affinis (Eyton): Lesser Scaup. Glen Canyon at river mile 158, April 13, 1947 (Behle 1948:305). One specimen. Behle (*loc. cit.*) observed two others at the mouth of Ticaboo Canyon, river mile 148, on April 13. Transient.

Bucephala clangula (Linnaeus): Common Goldeneye. Behle (1948:305) saw the species in small flocks three times in Glen Canyon, all on April 16, 1947, as follows: 12 at the Crossing-of-the-Fathers near the mouth of Kane Creek, 40.5 miles; 12 again at mile 36; and 16 at mile 31. Transient.

Mergus merganser Linnaeus: Common Merganser. One was seen near the Moab bridge and two more 6 miles downstream on December 22, 1955. Transient.

Cathartes aura (Linnaeus): Turkey Vulture. Bluff, May 11, 1933 (Woodbury and Russell, 1945:34); Dewey Bridge, May 23, 1953. Total specimens, two. We saw the species at Dewey, May 14-15, 1954; junction U. S. Highway 50 and Utah State Highway 128, 2 miles west of Cisco on September 13, 1954; Fisher Point, September 16, 1955; Moab, June 7, 1956; Scorup Ranch, east side La Sal Mountains, July 18, 1956; North Creek, 7600 feet, Abajo Mountains, July 28, 1958. They occurred from the river bottoms up to the yellow pine forest in our experience, although Tanner and Hayward (1934:225) saw vultures frequently flying over the La Sal Mountains at Warner Ranger Station and Geyser Pass. Higgins saw one flying over Glen Canyon near Ticaboo Creek, river mile 148, on July 6, 1958, and several near mile 105 on July 16. Woodbury and Russell (*loc. cit.*) further indicate that an adult male was taken July 26, 1936, in the pygmy forest 2 miles north of Navajo Mountain Trading Post, San Juan County, Utah (GC), and another from Navajo Mountain on August 8, 1936 (GC). In addition they give several sight records for Navajo Mountain and indicate that the species was seen along the San Juan and Colorado rivers and the Kaiparowits Plateau. As reported in Behle and Higgins (1959) Woodbury saw one along the San Juan River between miles 35 and 27, July 31, 1938, and two along the Colorado River between miles 13 and 0, August 10, 1938. Permanent resident.

Accipiter gentilis atricapillus (Wilson): Goshawk. Kigalia Ranger Station, Elk Ridge, August 28, 1956. Total specimens, two. Both were immature females. In addition we saw one at the Horn, Henry Mountains, August 15, 1956. Woodbury and Russell (1945:35) give a sight record at War God Spring, Navajo Mountain, July 23, 1936. Uncommon summer resident.

Accipiter striatus velox (Wilson): Sharp-shinned Hawk. Kaiparowits Plateau, 7000 ft., July 30, August 5-6, 1937 (Woodbury and Russell, 1945:35); 5 miles north-east of La Sal Post Office, April 8, 1938 (Behle, 1941:181); Beaver Creek, La Sal Mountains, September 13, 1955; Wolverton Mill, 8500 ft., east side Mt. Pennell, Henry Mountains, August 12, 1956. Total specimens, six. We observed the species in the La Sal Mountains at Warner Ranger Station on September 16, at Mesa Guard Station on September 17, 1954, and at Beaver Creek, July 16-19, 1956. Ghiselin saw one at 9100 feet, July 26, 1958, along North Creek in the Abajo Mountains. In the lowlands we observed this hawk 8 miles northwest of Moab on September 12, 1955, and at Moab, December 21, 1955. Benson (1935:445) observed the species on Navajo Mountain in Mid-June, 1933. Woodbury and Russell (*loc. cit.*) indicate that a specimen was taken at Soldier Spring, 9000 feet, Navajo Mountain on July 13, 1933 (MVZ), and give additional sight records for there. They further give an early ob-

servation at Bluff on November 9, 1893, and state that on the Kaiparowits Plateau young birds out of the nest were observed being attended by the parents. Common permanent resident.

Accipiter cooperii (Bonaparte): Cooper's Hawk. Navajo Mountain Trading Post, July 25, 1936, and Kaiparowits Plateau, 7000 ft., August 5, 1937 (Woodbury and Russell, 1945:36); Dalton Springs, 8300 ft., Abajo Mountains, 5 miles west of Monticello, July 6, 1947; Blanding, August 7, 1947. Total specimens, six. One was observed in yellow pine at the Scorup Ranch on the east side of the La Sal Mountains on July 18, 1956. Whitney found the species at Coyote Gulch on the east side of the Kaiparowits Plateau, 40 miles south of Escalante and at Davis Gulch, Escalante River, 55 miles southeast of Escalante in August, 1957. Higgins reports one in willows along the Colorado River at mile 110 on July 16, 1958, and another flying low along the river at the mouth of Rock Creek, mile 58, on July 28, 1958. Ghiselin saw one in aspens at Buckboard Flat, Abajo Mountains, 5 miles west of Monticello on July 28, 1958, and another at the Baker Creek Ranger Station in Monticello this same day. The specimen listed above from Dalton Springs was the female of a pair nesting in aspens. Woodbury and Russell (*loc. cit.*) also report two specimens from Riverview, San Juan River, April 31 and May 1, 1892 (AMNH), and one from the southwest side of Navajo Mountain, August 9, 1935 (GC). They further indicate that the species has been seen in Sand Valley, San Juan County, Utah, and that a nest was found in an aspen grove on August 5, 1937, near the head of Pleasant Grove Canyon on the Kaiparowits Plateau, containing a juvenile bird and an unhatched egg. Tanner and Hayward (1934:225) saw Cooper's Hawks occasionally in the denser forests of the spruce-fir belt in the La Sal Mountains, and Benson (1935:443, 445) observed the species on the mesa at the base of Navajo Mountain in mid-June 1933, as well as on the mountain itself. This hawk is thus a common breeder and permanent resident and occurs from the river bottoms and mesas up into the aspen belt.

Buteo jamaicensis calurus (Cassin): Red-tailed Hawk. Beaver Creek, 9000 ft., La Sal Mountains, September 16, 1955. One specimen. We saw the species in the La Sal Mountains at Geyser Pass on September 14, 1954, and at the Scorup Ranch on the east side on July 18, 1956. One was seen at Moab on December 21, 1955. Higgins found this hawk to be abundant in Glen Canyon from July 1 to August 9, 1958, and detected a nest on a ledge in Long Canyon, river mile 95.5, on July 18, 1958. Woodbury and Russell (1945:37) report a specimen from Noland's Ranch, San Juan River, near Four-Corners, taken April 22, 1892 (AMNH), and two immature males from the mouth of Bridge Canyon, July 7, 1936 (GC). They further report sight records for Navajo Mountain and the Kaiparowits Plateau and indicate that an early observer found these hawks frequently from November 8-15, 1893, along the bluffs of the San Juan River. Their field records, as reported in Behle and Higgins (1959), indicate that the species was common along the Colorado River, July 4 to 23, 1936. One nest with young birds was noted. Tanner and Hayward (1934:226) report a specimen taken near La Sal and saw a pair on several occasions at the Warner Ranger Station. Common permanent resident.

Buteo swainsoni Bonaparte: Swainson's Hawk. Bluff, April 20, 1935 (Woodbury and Russell, 1945:37). One specimen, an immature male. Clayton White saw one on March 29, 1954, in Glen Canyon near Moki Bar at river mile 127. Summer resident.

Buteo regalis (Gray): Ferruginous Hawk. We have but one sight record at Warner Ranger Station, September 17, 1954. Permanent resident.

Aquila chrysaetos (Linnaeus): Golden Eagle. Single individuals were seen at Dewey on May 21-22, 1953, and in the La Sal Mountains at Geyser Pass, September 14, and Warner Ranger Station, September 17, 1954. Six were seen along Beaver Creek on September 13, 1955. Higgins observed two immatures in Glen Canyon near the Little Rincon, river mile 145, July 7, 1958, and an adult and an immature near the mouth of Aztec Creek, mile 68, on July 26. Woodbury and Russell (1945:39) state that Gale Monson has observed the species in Glen Canyon and give sight records for Monument Valley and Navajo Mountain. Tanner and Hayward (1934:226) saw several golden eagles at La Sal in 1927 which had been captured in the mountains. Permanent resident.

Haliaeetus leucocephalus (Linnaeus): Bald Eagle. As reported in Behle and Higgins (1959) Woodbury observed one from the top of Straight Cliffs on the east side of the Kaiparowits Plateau flying below the cliffs north of Glen Canyon on August 4, 1938.

Circus cyaneus (Linnaeus): Marsh Hawk. Kaiparowits Plateau, August 9, 1937 (Woodbury and Russell, 1945:39). One specimen. Our only observation was an unusual one, on August 24, 1956, of a marsh hawk flying over the crest of the Abajo Mountains near Cooley Pass at about 10,350 feet. Permanent resident.

Pandion haliaetus (Linnaeus): Osprey. One was seen on September 22, 1958, by Gerald Smith and Gary Rank at the Trachyte Ranch about 25 miles south of Hanksville at the east base of the Henry Mountains. Transient.

- *Falco mexicanus* Schlegel: Prairie Falcon. Higgins saw this hawk at several locations in Glen Canyon in 1958 as follows: Hite, July 1; Ticaboo Creek, July 6; Warm Springs Creek, July 9; Tapestry Wall, July 10; Aztec Creek, July 26; Wahweap Creek, August 6. Behle (1948:305) had earlier reported seeing the species in Glen Canyon at Moki Bar, mile 127, and near the mouth of the Escalante River, mile 88, on April 14, 1947, and near the junction of Bridge and Aztec canyons on April 15. Woodbury and Russell (1945:40) give a record for Bluff on November 15, 1893, and indicate that it has been seen on Navajo Mountain and along the San Juan River and the Colorado River in Glen Canyon. Details are given in Behle and Higgins (1959). One was observed to take a duck at mile 25 on the San Juan River, August 1, 1938. The species was also seen in Glen Canyon twice in 1936 and several times in 1938. Permanent resident.

- *Falco peregrinus* Tunstall: Peregrine Falcon. One was seen along the Colorado River at Dewey on May 21, 1953, and in Glen Canyon near Wahweap Creek, mile 17, on August 6, 1958. The species may breed in the region, for Woodbury and Russell (1945:41) report one bird repeatedly seen around Navajo Mountain, including observations on the northeast slope as low as the head of Beaver Creek, a tributary of San Juan River, on August 2, 11, 16, 1936. An unusual observation was reported by John W. Twente, who saw one flying over Burned Ridge at 10,500 feet on the north slope of Mt. Ellen in the Henry Mountains on September 8, 1957. Woodbury and Russell (1945:41) give several sight records for Navajo Mountains in July and August, 1936. Transient.

Falco columbarius Linnaeus: Pigeon Hawk. Behle (1948:306) saw a lone bird in flight up Glen Canyon near the mouth of Warm Spring Creek, mile 136, on April 13, 1947. Transient.

Falco sparverius sparverius Linnaeus: Sparrow Hawk. Navajo Mountain, 9500-10,000 ft., August 14, 1935, and July 4, 1936; and Side Canyon, Colorado River, San Juan County, July 13, 1936 (Woodbury and Russell, 1945:41); 19 miles. S. Moab, April 4 and 6, 1938 (Behle, 1941:181); Hatch Trading Post, 25 miles southwest of Blanding, June 29-30, 1947; Cooley Pass, Abajo Mountains, August 24, 1956. Total specimens, nine. In addition the species was found in the La Sal Mountains at Warner Ranger Station, September 16, 1954; and Beaver Creek, September 12, 1955; at the Horn in the Henry Mountains on August 11, 1956; in the Abajo Mountains at Cooley Pass on August 24, 1956; and at Gunnison Butte, 6 miles north of Green River on August 18, 1956. Higgins reports a pair of sparrow hawks feeding on insects in poison ivy plants at the mouth of Hole-in-the-Rock, river mile 84, on July 20, 1958. A male was also observed flying over a small terrace at river mile 75. Smith in addition found a family of five at the mouth of Smith Fork, river mile 131, on July 10, 1958. They were nesting in cottonwoods near a grassy area and the young were learning to fly. Stanford (1931:5) found the species to be common at the King Ranch in the Henry Mountains in September, 1929. Tanner and Hayward (1934:226) state that several specimens were taken at Warner Ranger Station, Geyser Pass, and La Sal. They noted them in great numbers near timber line and above at Geyser Pass. Benson (1935:443, 445) observed sparrow hawks on the mesa at the foot of Navajo Mountain as well as on the mountain in mid-June, 1933. Woodbury and Russell (*loc. cit.*) indicate that a specimen was taken on April 19, 1892, at Noland's Ranch, San Juan River, near Four-Corners (AMNH). They report a sight

record for Bluff on November 12, 1893, and further indicate that the species has been seen on the Kaiparowits Plateau and along the San Juan and Colorado rivers. Further details of several of their observations in Glen Canyon are given by Behle and Higgins (1959). Permanent residents.

Dendragapus obscurus obscurus (Say): Blue Grouse. La Sal Mountains; Geyser Pass, September 14-15, 1954; Warner Ranger Station, September 16, 1954; Beaver Basin, September 14, 1955, and July 16-17, 1956; head of North Creek, 10,700 ft., Abajo Mountains, August 25, 1956; Kigalia Ranger Station, Elk Ridge, July 24, 1954. Total specimens, 18 (four juveniles). In the Henry Mountains two were flushed on the south side of Bromide Basin on August 13, 1956. Two prospectors reported that dusky grouse were scarce in the mountains. Aaron Ross obtained two specimens on the western slope of Mt. Ellen, 8500 feet, in the autumn of 1959. Greenhalgh found the species mating in late May, 1951, in the La Sal Mountains. Tanner and Hayward (1934:226), in addition to reporting them as fairly common residents of the aspen-spruce belt occurring up to timber line, found family groups frequently feeding in open parks and clearings. They collected specimens at Geyser Pass and Warner Ranger Station. We took four juveniles in Beaver Basin on July 16-17 that were starting the molt into first winter plumage. Specimens taken that autumn were eating currants and snowberries. Permanent residents.

Centrocercus urophasianus (Bonaparte): Sage Grouse. Without giving any details Woodbury (1958:186) states that the species is known from the La Sal and Ute mountains. Permanent residents.

Lophortyx californicus (Shaw): California Quail. Castle Valley, April 13, 1934. One specimen. According to Dan Winburn a few were introduced in the Moab area as late as 1952, and the species is occasionally seen. Permanent residents.

Lophortyx gambelii Gambel: Gambel's Quail. Moab, October 26, 1931. Total specimens, five. In their check-list of the birds of Utah, Woodbury, Cottam, and Sugden (1949:11) assigned the birds of eastern Utah, including Moab, to the race *L. g. sana*. Ripley (1954:139) also referred to this race a breeding male from near the McElmo River south of Hovenweep National Monument in extreme southeastern Utah, commenting that his record marked an extension of range of this form into Utah. However, the A. O. U. committee in the fifth edition of their check-list (1957:143) limit the range of *sana* to western Colorado in the drainage area of the Uncompahgre, Gunnison, and upper Rio Grande rivers. According to Dan Winburn, Gambel's Quail were abundant in the Moab area until 1924, but after a severe winter their numbers were drastically reduced and they have never since been as abundant. He thinks there have been some introductions into the area. They are permanent residents.

Phasianus colchicus Linnaeus: Ring-necked Pheasant. One was seen at the city park at Moab on March 17, 1956, and one in the slough area southwest of town on December 21, 1958. This introduced form is an uncommon permanent resident.

Alectoris graeca (Meisner): Chukar. Gunnison Valley at Green River, 7.6 miles north of Green River City, August 18, 1956. One specimen. This species has been widely introduced throughout southeastern Utah in a state-wide planting program, and the populations seem to be on the increase. There were 30 in the flock from which the specimen listed above was taken. They frequented the sandy river bottoms but steep slopes were nearby. Several were flushed from oaks in Mill Creek Canyon, 5 miles northeast of Moab on December 21, 1955. Permanent residents.

Meleagris gallopavo merriami Nelson: Turkey. Although records seem to be lacking that would indicate the turkey occurred natively in southeastern Utah, it may have done so, for Woodbury and Russell (1945:44) state that partial skeletons of the species have been taken from Pueblo Indian ruins at Poncho House, San Juan County, Utah, as well as in several sites in northern Arizona where the species has not been known within recent historical times. In 1953 the Utah State Fish and Game Department introduced 16 wild turkeys trapped in nearby Colorado into the northwestern portion of the La Sal Mountains. Since that time they have spread throughout the range and have seemingly become well established. Estimates of their present numbers run into the hundreds. In January, 1957, 15 were introduced into the Abajo Mountains. On February 15, 1958, ten were released on Elk Ridge.

Tracks of four turkeys were seen on Mt. Ellen in the Henry Mountains by a Fish and Game Department warden in early November, 1958. Since no releases have been made in these mountains they may have moved in from Boulder Mountain to the west, where 15 were planted in January, 1958. Permanent residents.

Rallus limicola limicola Vieillot: Virginia Rail. Woodbury and Russell (1945:45) indicate that this is probably a migrant and state that a specimen was taken at Bluff, May 14, 1892 (AMNH). Woodbury (1958:187) states that it is known from the Moab vicinity.

Porzana carolina (Linnaeus): Sora. Bluff, May 11, 1933. Two specimens. Woodbury and Russell (1945:45). Transient but possibly a sparse summer resident.

Fulica americana americana Gmelin: American Coot. Several were seen in the marsh near Moab on March 17, 1956, and again on June 8, 1956, at which time they seemed to be breeding. Higgins reports that a single individual was flushed from willows lining the Colorado River in Glen Canyon at mile 47 on July 30, 1958. It swam about in the river until the boats passed and then returned to a small clump of Phragmites. Woodbury and Russell (1945:46) state that one was reported on the Colorado River below the mouth of Bridge Canyon on July 15, 1936. Transient and sparse summer resident.

Charadrius vociferus vociferus Linnaeus: Killdeer. Kaiparowits Plateau, August 11, 1937, and Monument Valley, July 8, 1937 (Woodbury and Russell, 1945:46); 19 miles south of Moab, April 5, 1938 (Behle, 1941:181). Total specimens, three. Smith observed the species in Glen Canyon at Trachyte Creek on July 2 and along the Escalante River on July 19, 1958. Tanner and Hayward (1934:226) noted the species near La Sal in 1927 and on a small stream near Moab in 1934. Woodbury and Russell (*loc. cit.*) also indicate that a specimen was taken at Riverview, San Juan River, May 16, 1892 (AMNH). As reported in Behle and Higgins (1959) Woodbury observed one along the San Juan River at mile 45 on July 30, 1938. Summer resident.

Actitis macularia (Linnaeus): Spotted Sandpiper. Colorado River at mouth of Rock Creek, July 20, 1937 (Woodbury and Russell, 1945:49); Warner Ranger Station, La Sal Mountains, September 16, 1954. Total specimens, two. One was observed at Dewey, May 21, 1953, four in the Moab sloughs, June 8, 1956 and one at Box Spring, Pennellen Pass, Henry Mountains, August 12, 1956. Higgins found this species common along the Colorado River throughout Glen Canyon and in the mouths of many side canyons during the summer of 1958 and concluded that they nested along many of the smaller streams. Stanford (1931:5) found this sandpiper at the King ranch in the Henry Mountains in mid-September, 1929. Tanner and Hayward (1934:226) saw several pairs about the lake at Warner Ranger Station. Many sight records by Woodbury for Glen Canyon in August, 1938, are given by Behle and Higgins (1959). As an indication of abundance they saw 17 in the lower 44 miles of Glen Canyon. Summer resident.

Tringa solitaria cinnamomea (Brewster): Solitary Sandpiper. Two miles southwest of Poncho House, San Juan County, July 9, 1937 (Woodbury and Russell, 1945:48). One specimen. Transient.

Totanus melanoleucus (Gmelin): Greater Yellowlegs. Without supplying details, Woodbury (1958:188) indicates that the species is known in migration from Elk Ridge.

Limnodromus scolopaceus (Say): Long-billed Dowitcher. Moab, about 1936. One specimen. This was originally recorded as a stilt sandpiper (Woodbury, Cottam and Sugden, 1949:14), but the identity was later corrected (Behle and Selander, 1952:27). Transient.

Steganopus tricolor Vieillot: Wilson's Phalarope. Kaiparowits Plateau, August 2-3, 1937 (Woodbury and Russell, 1945:52). Total specimens, two. They also report a specimen from Riverview, San Juan River, May 3, 1892 (AMNH). Transient.

Larus californicus Lawrence: California Gull. Higgins reports a lone transient on a sand bar in the middle of the Colorado River in Glen Canyon near the Stanton Gold Dredge at river mile 122.5 on July 12, 1958.

Larus delawarensis Ord: Ring-billed Gull. Behle (1948:306) observed three on April 16, 1947, along the Colorado River near the mouth of Last Chance Creek, river mile 49, and again near the mouth of Kane Creek, 40.5 miles. Transient.

Larus pipixcan Wagler: Franklin's Gull. Colorado River near mouth of Tica-boo Canyon, river mile 148, April 13, 1947 (Behle, 1948:306). One specimen. Transient.

Columba fasciata fasciata Say: Band-tailed Pigeon. Beaver Creek, 1 mile northeast of La Sal Peak, 9500 ft., La Sal Mountains, July 17, 1956. One specimen. Apparently the species occurs in all the mountains of southeastern Utah. In the northern portion of the La Sals we saw 12 in a steep canyon 1 mile east of Fisher Point on September 16, 1955. The vegetation here consisted largely of aspens with a dense understory of shrubs such as chokecherry and snowberry. The pigeons were perching in the open in dead aspens when first seen, but took refuge in the dense forest cover. We learned that a flock of thirty had been regularly seen throughout the late summer at the Hotz sawmill just to the east. On Beaver Creek we saw three pigeons regularly from July 16, to 19, 1956. They frequented a clump of spruces and aspens. We did not see them in the Abajo Mountains, but the local game warden said they were there and Cottam (1941:122) gives several observations for this range. As pertains to Elk Ridge, George Edmunds saved the head of a pigeon that had been killed by a hawk on North Creek some time between September 9 and 12, 1946. This is now in the University of Utah ornithological collection. Woodbury (1958:189) states that he has verbal reports of the presence of the species on Elk Ridge. Benson (1935:445) lists the species for Navajo Mountain with Woodbury and Russell (1945:54) supplying the details of his observation with the following statement: "June 19, 1933, Navajo Mountain, San Juan County, Utah. A pile of feathers from a freshly killed bird was found at War God Spring. Miss Kellogg heard the note of one the same day (Benson)."

With respect to its occurrence in the Henry Mountains, John Bushman in an interview with a rancher at the Sanford Ranch at the northeast base of Mt. Hillers on May 18, 1952, learned that a few days prior the rancher had observed a flock of about 15 in the pass between Mt. Hillers and Mt. Pennell. S. D. Durrant and M. Raymond Lee saw a few on Straight Creek near the Wolverton Mill on the east side of Mt. Pennell, July 16-18, 1955, and from 5 to 12 daily at Eagle on Crescent Creek on the east side of Mt. Ellen from July 31 to August 4, 1955. We saw two at the Wolverton Mill on August 12, 1956. Two prospectors encountered August 13, 1956, in Bromide Basin, Mt. Ellen, said the species regularly occurred in the basin. Summer resident.

— *Zenaidura macroura marginella* (Woodhouse): Mourning Dove. Colorado River near Rock Creek, July 24-26, 1937, Kaiparowits Plateau, August 3, 1937. Gouldings, Monument Valley, July 12, 1937, 4 miles north of Navajo Mountain Trading Post, July 27, 1936; War God Spring, Navajo Mountain, August 16, 1935; (all in Woodbury and Russell, 1945:54). Total specimens, 6. We found the species to be common at Dewey, May 21-23, 1953, and again on May 14, 1954. At Moab on June 5, 1956, we found them in the river bottomland occupying tamarix, willows and cottonwoods. Several were seen at the King Ranch at the west base of the Henry Mountains on August 11, 1956. Stanford (1931:6) found them abundant there in September, 1929. We found them to be common in the river bottoms north of Green River near Gunnison Butte on August 18, 1956. Whitney reported them abundant at Coyote Gulch, north side of the Kaiparowits Plateau, 40 miles south of Escalante, and in Davis Gulch along the Escalante River, 55 miles southeast of Escalante in August, 1957. Higgins found mourning doves to be abundant in Glen Canyon in the summer of 1958. They were observed every day of the trip from July 1 to August 9 and occurred on the terraces and in the side canyons.

Tanner and Hayward (1934:226) found these doves common on the deserts and foothills of the La Sal region. Benson (1935:442, 445) lists the species for Bridge Canyon, the mesa at the base of Navajo Mountain, and on the mountain in mid-June, 1931. Woodbury and Russell (*loc. cit.*) found the species to be a common breeder in the Navajo Country at all altitudes up to 9000 feet and in many types of cover. They indicate additional specimens have been taken at Riverview, San Juan River, April 30, 1892 (AMNH), and that a nest and two eggs were found along the

San Juan River 3 miles above Piute Rapids, August 1, 1938, while a nest and two half-grown young were also found on July 31, 1938. Their many observations for Glen Canyon in late July and August are given in Behle and Higgins (1959). Summer resident.

Coccyzus americanus occidentalis Ridgway: Yellow-billed Cuckoo. Tanner and Hayward (1934:226) indicate that a specimen was taken at Bluff in 1927. Woodbury (1939:157) and Woodbury and Russell (1945:55) cite the same specimen, giving the date of collection as July 2, 1927. Summer resident.

Otus asio cineraceus (Ridgway): Screech Owl. Sixteen and nineteen miles south of Moab, April 3, 5, 1938 (Behle, 1941:182). Total specimens, two. These were originally reported as of the race *mycophilus*. In their revision, Alden and Loye Miller (1951:169) considered this race synonymous with *cineraceus*, which name the writer used in his check-list of the birds of Utah (Behle, 1944:75). The specimens are discussed in the Miller's revision. Permanent resident.

Otus flammeolus flammeolus (Kaup): Flammulated Owl. War God Spring, Navajo Mountain, July 6, 1936 (Woodbury, 1939:158 and Woodbury and Russell, 1945:55); Kigalia Ranger Station, Elk Ridge, July 24, 1954. Total specimens, two. Woodbury (*loc. cit.*) and Woodbury and Russell (*loc. cit.*) indicate that the species was seen and heard calling at War God Springs on July 6, 12, 20, 21, while others were seen and heard on August 8 and 9, 1936, in the Beaver Creek area 8 miles north of Navajo Mountain. Summer resident.

Bubo virginianus pallescens Stone: Great Horned Owl. Nineteen miles south of Moab, April 6, 1938 (Behle, 1941:182); Beaver Creek, La Sal Mountains, September 13, 1955. Total specimens, two. We flushed one at Geyser Pass in the La Sal Mountains on September 15, 1954. Tanner and Hayward (1934:226) indicate that a specimen was secured at Geyser Pass and the species occasionally heard in the spruce-aspen forest in late evening. We also saw one at Dewey, May 21, 1953, and at Gunnison Butte 6 miles north of Green River on August 18, 1956. As reported in Behle and Higgins (1959) Woodbury saw one at mile 45 along the San Juan River, July 29, 1938. The Moab specimen was originally reported by Behle (*loc. cit.*) as intermediate between the races *occidentalis* and *pallescens*, but closest to the former. Subsequent study of the specimen at the U. S. National Museum by J. W. Aldrich led him to conclude that it represents the race *pallescens*. Permanent resident.

Strix occidentalis lucida (Nelson): Spotted Owl. Navajo Creek Canyon, north base of Navajo Mountain, August 3, 1936 (Woodbury, 1939:158 and Woodbury and Russell, 1945:58). One specimen. In reporting this the authors note another observation 1 mile northwest of Navajo Mountain Trading Post in Utah on July 28, 1936. Whitney saw a spotted owl in August, 1957, in Davis Gulch, a tributary of Escalante Canyon, 55 miles southeast of Escalante. Higgins reports that two were seen several times in a small side canyon of Glen Canyon near river mile 101 on July 17, 1958. Another was seen on July 19 near the mouth of the Escalante River. Permanent resident.

Asio otus tuftsi Godfrey: Long-eared Owl. Big Indian Wash, 10 miles north of Monticello, April 3, 1938 (Behle, 1941:182). One specimen. Permanent resident.

Aegolius acadicus acadicus (Gmelin): Saw-whet Owl. Woodbury (1939:158) reports a specimen in the collection of the high school at Moab, taken in willows along a canal bank near Moab on November 15, 1936. Permanent resident.

—*Phalaenoptilus nuttallii nuttallii* (Audubon): Poor-will. One mile east of State Highway 160, 6 miles south of Valley City, Grand County, Utah, June 24, 1947; Ecker's Ranch, 25 miles east of Hanksville, May 19, 1951, and September 8, 1951; Trachyte Creek, 30 miles south of Hanksville, May 17, 1952; 18.5 miles east of Monticello, July 1, 1947; Navajo Mountain Trading Post, July 22, 1936, and Kaiparowits Plateau, July 29, August 3 and 12, 1937 (Woodbury and Russell, 1945:60); Penellen Pass, Henry Mountains, August 13, 1956. Total specimens, 11 (three juveniles). Higgins heard several in the evening on rocky hillsides at Hite on July 3, 1958. Woodbury and Russell (*loc. cit.*) indicate that the species was also seen in Beaver Creek Canyon at the north base of Navajo Mountain. Two downy young

were found on the side of Navajo Mountain on July 23, 1936. Three poorly feathered juveniles were found on the Kaiparowits Plateau July 29, 1937, another family of three there on August 3 and a third on August 12. Summer resident.

~ *Chordeiles minor hesperis* Grinnell: Common Nighthawk. Elgin, August 25, 1940; Segó, August 5, 1947. Total specimens, two. According to Selander (1954: 73-74) these examples are referable to *hesperis*. Summer resident.

Chordeiles minor henryi Cassin: Common Nighthawk. Beaver Creek, La Sal Mountains, July 16, 1956; La Sal, August 9, 1947; 9 miles north of Monticello, July 16, 1947; 14 miles east of Monticello, August 8, 1947; Jackson Ridge, 21-25 miles north Blanding, Abajo Mountains, July 10-11, 1947; Blanding, August 7, 1947; Top Navajo Mountain, July 14, 1936 (Woodbury and Russell, 1945:59). Total specimens, 18. We found nighthawks to be common in the Henry Mountains from August 11 to 18, 1956. Higgins saw two flying upstream in Glen Canyon at Hite on July 3, 1958. Tanner and Hayward (1934:226) found the species common at Warner Ranger Station and at Geyser Pass in the La Sal Mountains, and found the species nesting at La Sal on June 16, 1927. Five specimens were taken which they listed under *C. m. howelli*. Benson (1935:443) lists the species as occurring on the mesa at the base of Navajo Mountain. As reported in Behle and Higgins (1959) one was seen by H. N. Russell, Jr., in Beaver Creek Canyon, a tributary of the San Juan River, on August 5, 1936. Summer resident.

Most of the above-listed specimens are also listed by Selander (1954: 73) under the race *henryi* although they are, with the exception of the one from Navajo Mountain, atypical, inclining toward *hesperis*.

~ *Aeronautes saxatalis saxatalis* (Woodhouse): White-throated Swift. Mt. Peal, La Sal Mountains, September 1, 1953; Cooley Pass, 10,600 feet, Abajo Mountains, August 24, 1956; Abajo Peak, August 25, 1956; Pennellen Pass, Henry Mountains, August 12, 1956; Straight Canyon, 8000 feet, east slope Mt. Pennell, Henry Mountains, August 12-17, 1956; Kaiparowits Plateau, July 27, 1937 (Woodbury and Russell, 1945: 61). Total specimens, 22. In addition we observed the species at cliffs bordering the Colorado River at Dewey, May 21, 1953, near the Moab bridge on June 5, 1956, and at Beaver Creek in the La Sal Mountains on September 13, 1954, and July 16-19, 1956. On this last date we observed one pursuing a red-tailed hawk. Tanner and Hayward (1934:227) reported them flying over the lake at Warner Ranger Station and found them elsewhere in the La Sal Mountains. Whitney reports the species along the cliffs of Coyote Gulch, east side of Kaiparowits Plateau, 40 miles southeast of Escalante, in August 1957. Higgins saw swifts foraging at Hite on July 3, 1958. Benson (1935:442, 445) found the species at Bridge Canyon, on Navajo Mountain, and on the surrounding mesa in mid-June, 1933. Woodbury and Russell (1945:61) likewise mention the species occurring on Navajo Mountain as well as Monument Valley and the San Juan and Colorado rivers in Utah. Their many observations for 1936-38 along the lower San Juan River and lower Glen Canyon are given in Behle and Higgins (1959). Summer resident.

~ *Archilochus alexandri* (Bourcier and Mulsant): Black-chinned Hummingbird. Moab, June 8, 1956; War God Spring, Navajo Mountain, July 9, 1936 (Woodbury and Russell, 1945:62). Total specimens, three. Whitney observed this species several times in August, 1957, at Coyote Gulch on the east side of the Kaiparowits Plateau, 40 miles south of Escalante. Benson (1935:442) saw it near Bridge Canyon, June 21-24, 1933, and took a specimen at Navajo Mountain on June 6, 1933 (see under *S.p. platycercus*). Woodbury and Russell (*loc. cit.*) state that this form is reported in expedition records from Monument Valley, Kaiparowits Plateau, the San Juan and Colorado rivers and from the canyons around Navajo Mountain, in Utah. Three of their records for the lower San Juan River and Glen Canyon below the junction, obtained in late July and early August, 1938, are given in Behle and Higgins (1959). Summer resident.

~ *Selasphorus platycercus platycercus* (Swainson): Broad-tailed Hummingbird. Beaver Creek, La Sal Mountains, July 17, 1956; Pennellen Pass, Henry Mountains, August 12, 1956; Navajo Mountain, August 9, 1935 and July 12, 17, 1936, and Kaiparowits Plateau, August 1, 1937 (Woodbury and Russell, 1945:63). Total specimens, five. We saw the species near Dewey, May 21, 1933, and Higgins reports a male from the mouth of Aztec Canyon, river mile 68.5 on July 26, 1958. Behle

(1948:306) saw one there on April 15, 1947. Tanner and Hayward (1934:227) took a specimen in the La Sal Mountains. Benson (1935:443, 445) indicates that specimens were taken both on Navajo Mountain and on the mesa at the base. However, a letter to A.M. Woodbury from Alden H. Miller, under date of August 10, 1946, indicates a misidentification of one specimen, a female, No. 63213 MVZ from Navajo Mountain, June 6, 1933, which was called *Selasphorus platycercus* but is instead an example of *Archilochus alexandri*. It was the basis for Benson's listing *Selasphorus platycercus* from the mesa. Benson did, however, take *Selasphorus platycercus* from the mountain top. Summer resident.

~*Selasphorus rufus* (Gmelin): Rufous Hummingbird. Pennellen Pass, Henry Mountains, August 12, 1956; Navajo Mountain, August 9, 1935, and July 11, 1936, and Kaiparowits Plateau, August 7-9, 1937 (Woodbury and Russell, 1945:63). Total specimens, six. Tanner and Hayward (1934:227) took four at Geyser Pass, La Sal Mountains. Woodbury and Russell (*loc. cit.*) list another specimen taken on Navajo Mountain on July 17, 1936. Transient.

Stellula calliope (Gould): Calliope Hummingbird. Higgins saw three at the mouth of Warm Springs Creek, Glen Canyon, at river mile 137 on July 9, 1958, and another hummingbird believed to be of this species 1 mile up Aztec Creek from river mile 68.5 on July 26. Probably transient.

Megaceryle alcyon cawrina (Grinnell): Belted Kingfisher. Colorado River above Moab, May 13, 1933. One specimen. One was seen in Glen Canyon at the Crossing of the Fathers, river mile 41, by Clayton White on April 2, 1954. One was seen in Sawmill Basin, Henry Mountains, September 15, 1954 by M. Raymond Lee. Transient.

~*Colaptes cafer collaris* Vigors: Red-shafted Flicker. North of Green River, 7.6 miles, 4200 feet, August 18, 1956; Beaver Creek, 8500 feet and Beaver Basin, 9900 feet, La Sal Mountains, September 14-16, 1955; Geyser Pass, La Sal Mountains, 10,800 feet, September 14, 1954; Moab, December 21, 1955, and June 8, 1956; 19 miles south of Moab, April 4, 1938 (Behle, 1941:182); Cooley Pass, 10,200 feet, Abajo Mountains, August 25-26, 1956; Pennellen Pass, Henry Mountains, August 16, 1956; Navajo Mountain, 8500 feet, July 22, 1936 (Woodbury and Russell, 1945:65). Total specimens, 12. Sight records are Fisher Point, north end La Sal Mountains, September 12, 1952; Mill Creek, 5 miles northeast Moab, December 21, 1955; Moab, March 17, 1956. Tanner and Hayward (1934:227) found the species common in the aspen and spruce forests. Benson (1935:445) lists it for Navajo Mountain in mid-June, 1933. Woodbury and Russell (*loc. cit.*) list specimens from Noland's Ranch near Four-Corners, April 21, 1892; Riverdale, April 24, 1892, and Bluff, May 25, 1892 (all in AMNH); Navajo Mountain, August 5, 1934, and August 10, 1935 (MNA). They also give sight records near Bluff, November 8-15, 1893, and Noland's Ranch, November 19, 1893. Additional observations at Beaver Creek, tributary to the San Juan River, on August 2, 9 and 10, 1936, are given in Behle and Higgins (1959). Permanent resident.

Dryopicus pileatus picinus (Bangs): Pileated Woodpecker. Woodbury and Russell (1945:66) report a specimen in the American Museum of Natural History taken at Bluff on May 21, 1892. Permanent resident.

Asyndesmus lewis Gary: Lewis' Woodpecker. Tanner and Hayward (1934:227) report two specimens from La Sal taken in 1927 in yellow pine. Four pairs were seen which appeared to be nesting. Summer resident.

Sphyrapicus varius nuchalis Baird: Yellow-bellied Sapsucker. Beaver Creek, La Sal Mountains, July 16, 1956; Moab, October 25, 1930, and April 9, 1938; 5 miles northeast of La Sal, April 8, 1938; 19 miles southeast of Moab, April 4-5, 1938 (Behle, 1941:182); Kigalia Ranger Station, Elk Ridge, August 26-28, 1956; Pennellen Pass, Henry Mountains, August 12, 1956; War God Spring, Navajo Mountain, July 23, 1936 (Woodbury and Russell 1945:67). Total specimens, 13. One was observed by Behle at Hite on October 21, 1958. Woodbury and Russell (*loc. cit.*) list an additional specimen from Bluff, October 27, 1931, and give several sight records from Navajo Mountain. Tanner and Hayward (1934:227) report two specimens from the Warner Ranger Station in the La Sals. Summer resident in the mountains dropping down to the river bottoms in migration.

Sphyrapicus thyroideus nataliae (Malherbe): Williamson's Sapsucker. Kigalia Ranger Station, Elk Ridge, June 12, 1956 and August 28, 1956. Total specimens, four. Woodbury and Russell (1945:67) list a specimen from Riverview on the San Juan River, April 27, 1927 (AMNH). Summer resident.

Dendrocopus villosus leucothorectis (Oberholser): Hairy Woodpecker. Beaver Creek, La Sal Mountains, July 16-19, 1956; Geyser Pass, La Sal Mountains, September 15, 1954; 15 miles southeast of Moab, April 8, 1934; 10 miles north of Blanding, August 28, 1956; 18 miles west of Monticello, July 1, 1947; Cooley Pass, Abajo Mountains, August 25, 1956; Kigalia Ranger Station, Elk Ridge, August 27-28, 1956; Copper Basin, Mt. Ellen, Henry Mountains, August 13, 1956; Wolverton Mill, Straight Creek, Mt. Pennell, Henry Mountains, August 12, 1956; Navajo Mountain, August 18, 1935, July 6 and 16, 1936 (Woodbury and Russell 1945:68). Total specimens, 17. Tanner and Hayward (1934:227) report three specimens from the La Sal Mountains. Benson (1935:445) took three on Navajo Mountain, June 13-20, 1933. Permanent resident.

Dendrocopus pubescens leucurus (Hartlaub): Downy Woodpecker. North of Green River, 7.6 miles, August 18, 1956; Little Castle Valley, October 31, 1931; Castle Valley, 15 miles east of Moab, April 13, 1934; Beaver Creek, La Sal Mountains, September 13-15, 1955; Warner Ranger Station, La Sal Mountains, September 16, 1954; 9 miles south of Moab, December 22, 1955; 19 miles southeast of Moab, April 17, 1938 (Behle, 1941:182). Total specimens, 12. Tanner and Hayward (1934:227) report three specimens from the La Sal Mountains. Permanent resident showing some altitudinal migration down to the river bottoms in winter.

Picoides tridactylus dorsalis Baird: Northern Three-toed Woodpecker. Mud Lake Sawmill, La Sal Mountains, October 29, 1931; Geyser Pass, La Sal Mountains, September 15, 1954; Beaver Creek, La Sal Mountains, September 14, 1955; Cooley Pass, and Abajo Peak, Abajo Mountains, August 24, 25, 1956. Total specimens, six. Tanner and Hayward (1934:227) record a specimen from Geyser Pass and noted that the species was present in considerable numbers in the spruce belt. Permanent resident.

Tyrannus verticalis Say: Western Kingbird. Colorado River at mouth of Castle Valley, May 13, 1933; Dewey, May 23, 1953; Bluff, April 29, 1935; Monument Valley, August 17, 1936, and Kaiparowits Plateau, August 13, 1937 (Woodbury and Russell, 1945:69). Total specimens, five. They were common along the Colorado River at Dewey also on May 14, 1954. Tanner and Hayward (1934:227) observed the species at the base of the La Sal Mountains and considered it a fairly common resident; that is, summer resident. Woodbury and Russell (*loc. cit.*) list a specimen from Riverview on the San Juan River taken April 26, 1892 (AMNH), and another specimen from the Colorado River at Rock Creek, July 22, 1937, which has not been located in the University of Utah collection. Several of their observations along the San Juan River and lower Glen Canyon for early August, 1938, are given in Behle and Higgins (1959). Summer resident.

Tyrannus vociferans vociferans Swainson: Cassin's Kingbird. Oljato, and 3 miles south, July 12-13, 1937; Colorado River east of Rock Creek, July 26, 1937; Kaiparowits Plateau, August 13, 1937 (all reported in Woodbury and Russell, 1945:70). Total specimens, four. Higgins observed this species frequently in side canyons of Glen Canyon, July 1 to August 9, 1958, where they were usually associated with larger brush and trees. However, individuals were seen near the river at Ticaboo Creek, river mile 148 on July 6, and at Warm Spring Creek, river mile 137 on July 9. Tanner and Hayward (1934:227) report a specimen taken at Blanding in 1927. Summer resident.

Myiarchus cinerascens cinerascens (Lawrence): Ash-throated Flycatcher. North of Green River, 7.6 miles, August 18, 1956; Green River, May 7, 1933; Dewey, May 23, 1953; Moab, June 6-9, 1956; Natural Bridges National Monument, June 10-11, 1936; junction Escalante and Colorado rivers, river mile 88, July 19, 1958, and the following all reported also in Woodbury and Russell (1945:72): Monument Valley, July 7, 1937; Gouldings, July 12, 1937; 7 miles below Totempole, July 3, 1937; San Juan County, July 8-12, 1936; mouth of Rock Creek, Colorado River, July 22 and 26, 1937; 3 miles north of Navajo Trading Post, July 27, 1936. Total specimens,

22. Higgins reported that this flycatcher was very abundant along the length of Glen Canyon and in side canyons, being observed every day from July 1 to August 9, 1958. They were nesting in the riverside thicket. Tanner and Hayward (1934:227) collected three specimens at La Sal and Moab in 1927 and in 1934 observed the species at the La Sal Ranger Station. Benson (1935:442) found it in Bridge Canyon, June 21-24, 1933. Woodbury and Russell (*loc. cit.*) also list a specimen from Riverview (AMNH), April 24, 1892. Several records from the field notes of the Rainbow Bridge-Monument Valley expedition, 1936-38, for the San Juan River and lower Glen Canyon are listed in Behle and Higgins (1959). Summer resident.

↳ *Sayornis saya saya* (Bonaparte): Say's Phoebe. Muddy Creek Canyon, 3 miles northwest of Emery, May 11, 1937; Moab, April 30, 1937; 19 miles southeast of Moab, April 2, 1938; 2 miles south of Cane Spring, San Juan County, April 6, 1938; 5 miles north of Bluff, March 18, 1946; junction of Escalante and Colorado rivers, July 19, 1958; Trachyte Ranch, 5000 feet, east base Henry Mountains, May 16, 1952; King Ranch, west base Henry Mountains, September 10, 1929; Pennellen Pass, Henry Mountains, August 12, 16, 1956; and the following also reported in Woodbury and Russell (1945:73): Bluff, May 11, 1933, and April 28, 1935; near Gouldings, Monument Valley, July 11, 1936; Warm Creek, July 16, 1936; Rock Creek, near Colorado River, July 21, 1937; 5 miles north of Navajo Mountain Trading Post, July 27, 1936; Navajo Mountain, July 7, 1936; Kaiparowits Plateau, August 4, 1937. Total specimens, 20. In our field work we found them to be common at Dewey, May 21-23, 1953, and on May 14, 1954, a nest with two eggs was found there. An adult was seen at Moab on September 13, 1954. Higgins reports that Say's Phoebes were common all along Glen Canyon in the summer of 1958. They occurred in side canyons and on the terraces. He felt they must be nesting along the cliffs and in some of the larger trees. The writer saw one in Warm Creek Canyon on October 18, 1958. Woodbury and Russell (*loc. cit.*) also list specimens from Noland's Ranch, Riverview, and Bluff, April 19-May 23, 1892 (AMNH), and from War God Spring, Navajo Mountain, August 13, 1935 (GC). Many additional observations for the San Juan River and lower Glen Canyon are listed in Behle and Higgins (1959). Tanner and Hayward (1934:227) took a specimen in the La Sal Mountains and reported the species to be abundant in the desert region at the base of the mountain. Benson (1935:442) observed the species in Bridge Canyon, June 21-24, 1933. Behle (1948:306) observed one near Hite on April 13, 1947, and another the same day near the mouth of Tica-boo Canyon, river mile 148. Summer resident.

↳ *Empidonax traillii extimus* Phillips: Traill's Flycatcher. Junction of Colorado River and Kane Creek, August 2, 1958, and the following reported in Woodbury and Russell (1945:74-75): Monument Valley, August 18, 1936; Colorado River, 75 miles above Lee's Ferry, August 3, 1938; 44 miles up San Juan River at mouth of Nokai Canyon, July 29, 1938. Total specimens, five. Higgins found this species common along the Colorado River in Glen Canyon during the summer of 1958. They occurred in such streamside vegetation as willow, tamarix, Baccharis, and Pluchea. A nest with young was observed at Hite on July 3, 1958. Several observations of Woodbury for lower Glen Canyon in 1938 are given in Behle and Higgins (1959), including family groups on August 5. The specimen from the mouth of Kane Creek, taken August 2, is a juvenile. Summer resident.

Empidonax traillii adustus Oberholser: Traill's Flycatcher. North of Greenriver, 14 miles, May 24, 1947; 6.5 miles north of Green River, August 18, 1956; Moab, June 6-8, 1956; Navajo Mountain Trading Post, July 26, 1936, and Kaiparowits Plateau, August 3, 1937 (Woodbury and Russell, 1945: 74-75). Total specimens, nine. All of these were transients, except those from Moab. Summer resident.

Empidonax hammondi (Xantus): Hammond's Flycatcher. Geysers Pass, La Sal Mountains, September 14, 1954; Warner Ranger Station, La Sal Mountains, September 16, 1954; Beaver Creek, La Sal Mountains, September 13, 1955; Kigalia Ranger Station, August 27-28, 1956; Pennellen Pass, Henry Mountains, August 16, 1956. Total specimens, eight. Stanford (1931:6) reported the species in the yellow pine belt in the Henry Mountains in September, 1929. Summer resident.

Empidonax oberholseri Phillips: Dusky Flycatcher. Muddy Creek Canyon, 3 miles northwest of Emery, May 11, 1937; Green River, May 7, 1938; 7.6 miles north of Green River, August 18, 1956; Dewey, May 23, 1953; Beaver Creek, La Sal Moun-

tains, July 16-17, 1956; Cooley Pass, Abajo Mountains, August 24, 1956; Trachyte Ranch, 35 miles south of Hanksville, May 17, 1952; Pennellen Pass, Henry Mountains, August 12, 16, 1956; Kaiparowits Plateau, August 6, 1937 (Woodbury and Russell, 1945:75). Total specimens, 17. The species was common along Beaver Creek in the La Sal Mountains in mid-July frequenting aspens primarily. A migrant thought to be this species was seen at Hole-in-the-Rock on October 20, 1958. Summer resident.

Empidonax wrightii Baird: Gray Flycatcher. Green River, May 7, 1933; Natural Bridges National Monument, June 11, 1936; Bluff, August 26, 1956; Monument Valley, August 7, 1936 and north of Navajo Mountain Trading Post, July 26, 1936 (Woodbury and Russell 1945:76). Total specimens, six. Woodbury and Russell (*loc. cit.*) list a specimen from Riverview on the San Juan River taken April 28, 1892 (AMNH). Summer resident.

Empidonax difficilis hellmayri Brodkorb: Western Flycatcher. Beaver Creek, 8750 feet, La Sal Mountains, July 17, 1956; Colorado River at mouth of Kane Creek, river mile 41, August 2, 1958; Beaver Creek Canyon [east base of Navajo Mt.] 6000 feet, August 7, 1936 (Woodbury and Russell, 1945:78). Total specimens, three. Summer resident.

Contopus sordidulus veliei Coues: Western Wood Peewee. North of Green River, 7.6 miles, August 18, 1956; Moab, June 6, 1956; Beaver Creek, La Sal Mountains, July 16, 1956; Kigalia Ranger Station, Elk Ridge, August 27, 1956; Notum, September 8, 1929; Copper Basin, south slope of Mt. Ellen, Henry Mountains, August 13, 1956; Navajo Mountain, August 12, 1935, and August 13, 1936 (Woodbury and Russell, 1945:78). Total specimens, ten. We saw the species at Dewey, May 21-23, 1953, near Dry Lake on the north slope of Mt. Hillers in the Henry Mountains on August 14, 1956, and at Hole-in-the-Rock on October 20, 1958. Tanner and Hayward (1934:227) took three specimens at Clark Lake and near La Sal in the La Sal Mountains and reported that they were not uncommon. Summer resident.

Nuttallornis borealis (Swainson): Olive-sided Flycatcher. Beaver Creek, La Sal Mountains, July 16, 1956; Bromide Basin, and Copper Basin, Mt. Ellen, Henry Mountains, August 13, 1956; Trachyte Ranch, 30 miles south of Hanksville, May 27, 1952. Beaver Creek Canyon, north foot of Navajo Mountain, August 6, 1936, and Kaiparowits Plateau, August 10, 1937 (Woodbury and Russell, 1945:79). Total specimens, six. Tanner and Hayward (1934:228) observed the species at Geyser Pass in the La Sal Mountains and took one specimen at La Sal. The species was uncommon. Woodbury and Russell (*loc. cit.*) list two additional specimens in the Grand Canyon Museum from Navajo Mountain, one taken on the southwest side on August 9, 1935, and one near War God Spring on August 13, 1935. They further indicate that in three weeks of field work on Navajo Mountain in July, 1936, the species was not found. However, one was seen along the Colorado River at mile 3.5 and at one-half mile below Lee's Ferry on August 10, 1938, indicating occurrence in Glen Canyon during migration. Summer resident.

Eremophila alpestris utahensis (Behle): Horned Lark. San Rafael Swell, 6 miles north of San Rafael River, Emery County, February 7, 1953; Elmo, November 25, 1942. Total specimens, four. Transient.

Eremophila alpestris occidentalis (McCall): Horned Lark. Eight miles east of Wellington, October 24, 1931; between Wellington and Green River, October 24, 1931; between Moab and Green River, April 7, 1934; between Woodside and Green River, April 1, 1938, and 5 miles south of Crescent Junction, April 9, 1938 (Behle, 1941:182); Valley City, April 14, 1928; Moab, April 30-May 1, 1937; Dry Valley, 33 miles southeast of Moab, April 4, 1938 (Behle, *loc. cit.*); 5 miles north of Bluff, March 18, 1946; 12 miles northwest of Mexican Hat, May 1, 1935 (Woodbury and Russell, 1945:80); Ekker's Ranch, 25 miles east of Hanksville, May 18-19, 1951; Trachyte Ranch, 30-35 miles south of Hanksville, May 16-17, 1952; Sanford (Cat) Ranch, north slope of Mt. Hillers, Henry Mountains, August 14, 1956; between Wahweap and Warm creeks, 5 miles northwest of Page [Arizona], Kane County, Utah, March 25, 1958. Total specimens, 37. Horned larks were seen in the Dewey area, May 21-23, 1953 and again on May 15, 1954. A flock of about 20 was seen on September 13, 1954 at the junction of U. S. Highway 50 and State Highway 128.

They were the commonest bird seen along the road to Dead Horse Point on March 17, 1956. Higgins reports a flock flying over Glen Canyon near the mouth of Kane Creek, river mile 40, on August 2, 1958. The canyon is wide at this point. Flock after flock, some numbering over a hundred birds, were encountered from Escalante to Hole-in-the-Rock on October 19-20, 1958. Tanner and Hayward (1934:228) indicate that the species was frequently observed at the base of the La Sal Mountains and that three specimens were taken at various points in San Juan County. Woodbury and Russell (*loc. cit.*) list one of these from Bluff, July 2, 1927 (BYU). They also report that the species was seen at Noland's Ranch on the San Juan River near Four-Corners from November 17 to 27, 1893. Permanent resident.

As noted by Woodbury and Russell (*op. cit.*:81) the population from southeastern Utah is intermediate in its characters between the races *occidentalis* and *leucolaema*; closest, they indicated, to *leucolaema* (see also Behle, 1942:155). Because *leucolaema* is the race of the high plateaus (Behle, Bushman and Greenhalgh, 1958:59), and many of the specimens are like intergrading topotypes of *occidentalis*, it seems desirable to arbitrarily assign these lowland intermediates to *occidentalis*. The non-breeding representatives are exceedingly variable, inclining in various degrees to *leucolaema* and even *utahensis*, but I have listed them altogether except the four called *utahensis*.

— *Tachycineta thalassina lepida* Mearns: Violet-green Swallow. Four miles north of Green River, June 22, 1947; Dewey, May 23, 1953; Moab, May 9, 1933, and June 6, 1956; Kigalia Ranger Station, Elk Ridge, June 12, 1936; Trachyte Ranch, 35 miles south of Hanksville, May 17, 1952, and the following also listed in Woodbury and Russell (1945:81): Bluff, April 28, 1935; near Gouldings, Monument Valley, July 12, 1937; Colorado River, July 13, 1936; 4 miles north of Navajo Mountain Trading Post, July 27, 1936. Total specimens, 13. We found this species common at Dewey, May 21-23, 1953, and at all collecting stations in the La Sal, Abajo and Henry mountains. Higgins saw them frequently in Glen Canyon and found a nest in a hollow cottonwood tree on July 12, 1958 near the Stanton gold dredge at river mile 122.5. Behle (1948:306) had previously reported two near the mouth of Aztec Creek, river mile 68.5, on April 15, 1947. Tanner and Hayward (1934:228) found the species in all life zones in the La Sal Mountains and obtained a specimen at Geyser Pass. Benson (1935:441) found it in Bridge Canyon, June 21-24, 1933. Woodbury and Russell (1945:82) report it nesting on Navajo Mountain and in Glen Canyon. Their many observations for Glen Canyon have been listed in Behle and Higgins (1959). Summer resident.

Iridoprocne bicolor (Vieillot): Tree Swallow. One was seen at Dewey on May 21, 1953, which was probably a transient in the lowlands. Woodbury and Russell (1945:83) state that the species has been reported to be breeding in the La Sal Mountains.

Stelgidopteryx ruficollis serripennis (Audubon): Rough-winged Swallow. Moab, May 8, 1933; Colorado River, 63 miles above Lee's Ferry, August 4, 1938 (Woodbury and Russell, 1945:83). Total specimens, two. A few were observed along the river at Moab on June 5, 1956. Higgins reported that a lone individual flew over their boat several times in Glen Canyon near Castle Butte, river mile 152, on July 4, 1958. The observations of Woodbury in 1938 along the San Juan River and lower Glen Canyon are listed in Behle and Higgins (1959). Summer resident.

Hirundo rustica erythrogaster Boddaert: Barn Swallow. Bluff, May 11, 1933 (Woodbury and Russell, 1945:84). One specimen. They also list a specimen from Bluff taken May 17, 1892 (AMNH). We observed the species at Dewey on May 21, 1953. Summer resident.

— *Petrochelidon pyrrhonota pyrrhonota* (Vieillot): Cliff Swallow. Dewey, May 23, 1953; Moab, May 8, 1933 and June 6, 1956; 6 miles north of Monticello, June 27, 1947. Total specimens, four. The species was nesting near Dewey on May 14, 1954. Higgins found this swallow common along many sections of Glen Canyon in July, 1958. Their nests could be seen attached high on the canyon walls. One specific observation in his notes was of a swallow seen on Warm Springs Creek, a short distance up from its mouth at river mile 137, on July 8, 1957. Woodbury and Russell (1945:84) list two specimens from Riverview on the San Juan River taken on April 28 and May 1, 1892 (AMNH). Summer resident.

Perisoreus canadensis capitalis Ridgway: Gray Jay. Mud Lake, La Sal Mountains, October 29, 1931; Geyser Pass, La Sal Mountains, September 14-15, 1954; Beaver Basin, La Sal Mountains, September 14, 1955, and July 19, 1956; Cooley Pass, Abajo Mountains, August 24, 1956. Total specimens, 16. The species was common in the La Sal Mountains, less so in the Abajo Mountains, and we did not find it on Elk Ridge or the Henry Mountains. It is unreported for Navajo Mountain. Tanner and Hayward (1934:228) also found the species common in the La Sal Mountains in the spruce zone and took three specimens. Permanent resident.

Cyanocitta stelleri macrolopha Baird: Steller's Jay. Beaver Creek and Beaver Basin, 8500-9900 feet, La Sal Mountains, September 12-16, 1955, and July 18, 1956; 1½ miles southwest of Warner Ranger Station, La Sal Mountains, September 16, 1954; Pine Flat, 8 miles southeast of Geyser Pass; La Sal Mountains, July 18, 1956; 5 miles northeast of La Sal, April 8, 1938 (Behle, 1941:182); 2-6 miles west of Monticello, Abajo Mountains, August 24-26, 1956; Blanding, August 7, 1947; Kigalia Ranger Station, June 12, 1936, and August 26-27, 1956; Wolverton Mill, Straight Canyon, east side of Mt. Pennell, Henry Mountains, August 12, 1956; Pennellen Pass, Henry Mountains, August 16, 1956; and the following reported in Woodbury and Russell (1945:85): 1-2 miles from head of Navajo Canyon, north foot of Navajo Mountain, August 10, 1936; War God Spring, Navajo Mountain, August 12, 1935; Soldier Seep, Navajo Mountain, July 10, 1936. Total specimens, 26. We noted a family group of adults and juveniles at Beaver Creek, La Sal Mountains, July 18, 1956. As an indication of altitudinal migration, a flock of six was seen in the river bottoms near Moab on December 21, 1955. Tanner and Hayward (1934:228) found the species common in the La Sal Mountains and took three specimens. Benson (1935:445) found this jay on Navajo Mountain, June 13-20, 1933 and took four specimens. Woodbury and Russell (1945:86) report from 10 to 20 seen on Navajo Mountain every day from July 1 to 22, 1936, and they were just as numerous on August 13. Permanent resident.

Aphelocoma coerulescens woodhouseii (Baird): Scrub Jay. Colorado River, 20 miles above Moab, May 14, 1933; Beaver Creek, La Sal Mountains, September 13, 1955; Moab, October 25, 1931, and May 8, 1933; Mill Creek Canyon, 4 miles northeast of Moab, December 20, 1955; Colorado River, 9 miles south of Moab, December 22, 1955; La Sal Mountains, 15 miles southeast of Moab, April 8, 1934; 19 miles southeast of Moab, April 2-4, 1938 (Behle, 1941:182); 11 miles west of Blanding, June 10, 1936; Star Ranch, 6000 feet, south base of Mt. Hillers, 12 miles west of Hite, May 18, 1952; Sanford Ranch, 6000 feet, Trachyte Creek, 20 miles south of Hanksville, May 17, 1952 and August 14, 1956; Straight Canyon, 8300 feet, east side of Mt. Pennell, August 15, 1956; [King Ranch] Henry Mountains, September 12, 1929; and the following also reported in Woodbury and Russell (1945:86): Gouldings, Monument Valley, July 12, 1937; Navajo Mountain Trading Post, July 25, 1936; War God Spring, Navajo Mountain, July 2, 1936; Kaiparowits Plateau, July 29-31, 1937. Total specimens, 23. Two were seen at Dewey, May 14, 1954, one at Castleton on September 12, 1955, in the La Sal region, and one at the King Ranch on the west slope of the Henry Mountains on August 11, 1956. Higgins saw two in Glen Canyon near the mouth of Seven Mile Canyon, river mile 141, on July 8, 1958, and two others in a small side canyon at river mile 91 on July 18.

Tanner and Hayward (1934:228) report a specimen from near La Sal and one at Moab. They considered the species common. Benson (1935:443) lists the species from the mesa at the base of Navajo Mountain in mid-June, 1933, and obtained one specimen. Woodbury and Russell (1945:87) cite an early report that the species was common in the underbrush along the San Juan River near Bluff, November 8-12, 1893. They also list another specimen from Soldier Seep, Navajo Mountain, July 2, 1936. Behle (1948:306) reported one at Hite on April 13, 1947. Permanent resident.

Pica pica hudsonia (Sabine): Black-billed Magpie. Cooley Pass, 10,600 feet, Abajo Mountains, August 24, 1956; Bluff, October 27, 1931 (Woodbury and Russell, 1945:88). Two specimens. In our field work the species was seen in addition at Dewey, May 21-23, 1953, and May 14, 1954; one in the riverbottoms near Moab on December 21, 1955, and several on June 7, 1956, in which year a nest was also found

in a willow thicket at Gunnison Butte, August 18. The record from Cooley Pass in the Abajo Mountains on August 24, 1956, is unusual, doubtless representing an upward, post-breeding vagrant.

Tanner and Hayward (1934:228) found magpies to be common about the base of the La Sal Mountains and at the La Sal Ranger Station in the oak belt. Woodbury and Russell (*loc. cit.*) list another specimen from Bluff, July 2, 1927. They state that Loring saw several along the river bank near there November 8-15, 1893, and found them common at Noland's Ranch in the Four-Corners area, November 17-27, 1893. Permanent resident.

Corvus corax sinuatus Wagler: Common Raven. We observed the species at Dewey, May 21-23, 1953, and May 14, 1954; at Fisher Point near Castleton, September 12, 1954; at Dead Horse Point, March 17, 1956; along Beaver Creek in the La Sal Mountains, July 16-19, 1956; at the King Ranch, Henry Mountains, August 11, 1956, and at Bluff and vicinity, August 26, 1956. In August, 1957, Whitney noted the species several times, most often in pairs, at Coyote Gulch, east side Kaiparowits Plateau, 40 miles southeast of Escalante, and at Davis Gulch, Escalante River, 55 miles southeast of Escalante. Higgins noted ravens on several occasions in Glen Canyon, July 1-August 9, 1958. Two seemed to remain near a crevice high in the cliffs near Music Temple, river mile 76, on July 23, 1958, as though nesting.

Stanford (1931:7) found the species in the Henry Mountains on September 12, 1929. Benson (1935:443, 445) reported it at the mesa at the base of Navajo Mountain as well as on the mountain in June, 1933, and obtained one specimen. Woodbury and Russell (1945:88) note that Loring reported it common around Bluff and Noland's Ranch, November 8-27, 1893. They further state that ravens were observed at nearly all altitudes from 3200 feet on the Colorado River to 10,000 feet on Navajo Mountain. In addition Woodbury has several observations for the lower Glen Canyon area in August, 1938 (see Behle and Higgins, 1959). Behle (1948:306) saw one in Glen Canyon at mile 31 on April 16, 1947.

An interesting observation of vulturine behavior on the part of ravens was reported by John W. Twente, who on September 8, 1957, observed several soaring around and around over a particular area in the Mt. Ellen area of the Henry Mountains. Investigating the area, he found no carrion, but grasshoppers were numerous. Permanent resident.

Corvus brachyrhynchos hesperis Ridgway: Common Crow. Castle Valley, 15 miles northeast of Moab, April 13, 1934. Total specimens, two. One was seen near the Moab bridge on June 7, 1956. Winter visitant.

Gymnorhinus cyanocephala Wied: Piñon Jay. Dewey, May 21, 1953; 10 miles south of Dewey, May 22, 1953; 15 miles southeast of Moab, La Sal Mountains, April 8, 1934; 19 miles southeast of Moab, April 4, 1938 (Behle, 1941:183); Hatch Wash, between Moab and Monticello, May 1, 1937; between Blanding and Monticello, May 12, 1933; Ekker's Ranch, 25 miles east of Hanksville, May 18, 1951; Sanford Ranch, north slope of Mt. Hillers, Henry Mountains, August 14, 1956; Kaiparowits Plateau, August 2-3, 1937 (Woodbury and Russell, 1945:89). Total specimens, 13. A flock of 50 was observed at Mill Creek, 5 miles northeast of Moab, on December 21, 1955. They were altitudinal migrants. We also saw the species at the King Ranch, Henry Mountains, on August 11, 1956. Whitney found them flocking in August, 1957, at Coyote Gulch, north side of Kaiparowits Plateau, 40 miles southwest of Escalante. Tanner and Hayward (1934:228) saw one in the piñon-juniper belt in the La Sal Mountains, and Benson (1935:443) found it on the mesa at the foot of Navajo Mountain in June, 1933. Woodbury and Russell (*loc. cit.*) list a specimen from near Bluff, May 19, 1892 (AMNH), give an additional observation of a flock of 100 on the Kaiparowits Plateau on August 4, 1937, and report it present on Navajo Mountain. Permanent resident.

Nucifraga columbiana (Wilson): Clark's Nutcracker. Clark Lake and Wilson Creek, 10,000 feet, La Sal Mountains, October 29, 1931; 19 miles south east of Moab, April 4, 1938, and 5 miles northeast of La Sal Post Office, 8000 feet, April 7, 1938 (Behle, 1941:183); Jackson Ridge, 9500 feet, 25 miles north of Blanding, Abajo Mountains, July 12, 1947; Cooley Pass, Abajo Mountains, August 24, 1956; Copper Basin, 10,000 feet, southeast slope of Mt. Ellen, Henry Mountains, August 13, 1956;

and the following listed by Woodbury and Russell (1945:90): Bridge Canyon, 3 miles below Rainbow Bridge, July 10, 1936 (mummy); Side Canyon, below Bridge Canyon, July 13, 1936; Navajo Mountain, July 3 and 14, 1936. Total specimens, 15. The species was seen at Geyser Pass and Warner Ranger Station in the La Sal Mountains, September 13-16, 1954, at Castleton, September 12, 1955, and at Beaver Creek and Beaver Basin, September 14, 1955 and July 16-19, 1956.

Tanner and Hayward (1934:228) likewise found them common throughout the aspen and spruce belts of the La Sal Mountains, especially at Geyser Pass near timberline, and a specimen was taken at Warner Ranger Station. Stanford (1931:7) found large flocks in the Henry Mountains in mid-September, 1929. Benson (1935:445) reported the species from Navajo Mountain in mid-June, 1933, and obtained a specimen. Woodbury and Russell (*loc. cit.*) state that the species was common on Navajo Mountain in June and July in the ponderosa pine and spruce belts. They were most numerous near the summit of the mountain.

This species is a permanent resident but nests early and shows pronounced and early altitudinal migration, some moving to lower elevations by mid-summer.

Parus atricapillus garrinus Behle: Black-capped chickadee. Warner Ranger Station, September 16, 1954; Beaver Creek, September 13, 1955 and July 16, 1956; Moab, June 8, 1956. Total specimens, 17. They occurred in the Moab area in willows and cottonwoods and in the mountains in aspens. Tanner and Hayward (1934:228) took a specimen at Warner Ranger Station. Permanent resident.

Parus gambeli gambeli Ridgway: Mountain Chickadee. La Sal Mountains: Wilson Creek, October 29, 1931; Geyser Pass, September 14-15, 1954; Warner Ranger Station, September 17, 1954; Beaver Creek, September 14-15, 1955, and July 17, 1956; 15 miles southeast of Moab, April 8, 1934; 5 miles northeast of La Sal Post Office, April 7, 1938 (Behle, 1941:183); Abajo Mountains: Cooley Pass, August 24-25, 1956; Elk Ridge: Kigalia Ranger Station, August 28, 1956; Henry Mountains: Horn Spring near Pennellen Pass, August 16, 1956; Bromide Basin, Mt. Ellen, August 13, 1956; Head Copper Basin, Mt. Ellen, August 13, 1956; and the following listed in Woodbury and Russell (1945:92): Navajo Mountain, August 12, 1935, and July 10, 1936; Kaiparowits Plateau, August 4-6, 1937. Total specimens, 43. Tanner and Hayward (1937:228) found this species abundant in the spruce belt of the La Sal Mountains. Benson (1935:445) took two specimens on Navajo Mountain in mid-June, 1933. Woodbury and Russell (*loc. cit.*) found it to be common on Navajo Mountain in the juniper-piñon pine forest where they thought it probably nested. The species descends into the tributaries of the Colorado River, for Russell found the species fairly numerous in spots along Beaver Creek canyon, a tributary of the San Juan River, August 5-10, 1936, and Woodbury saw one along the Colorado River at mile 67 on August 12, 1938 (see Behle and Higgins, 1959). Permanent resident.

Parus inornatus ridgwayi Richmond: Titmouse. Mill Creek Canyon, 4 miles northeast of Moab, December 21, 1955; 15 miles southeast of Moab, April 9, 1934; 19-20 miles south of Moab, April 2-6, 1938; Brown's Hole, 25 miles southeast of Moab, April 3, 1938; and Big Indian Wash, 34 miles southeast of Moab, April 3, 1938 (all in Behle, 1941:183); between Moab and Monticello, April 30, 1937; Natural Bridges National Monument, June 11, 1936; Sanford Ranch, north slope of Mt. Hillers, Henry Mountains, 30 miles south of Hanksville, May 17, 1952, and August 14, 1956; Navajo Mountain Trading Post, July 26, 1936, and Kaiparowits Plateau, July 31, August 12, 1937 (Woodbury and Russell, 1945:93). Total specimens, 32. In addition the species was seen at Dewey, May 21-23, 1953. Tanner and Hayward (1934:229) collected three specimens near the Thurley Ranch and La Sal in the La Sal Mountain region, while Benson (1935:443) found the species on the mesa at the base of Navajo Mountain in mid-June, 1933. As reported in Behle and Higgins (1959) Russell observed several in Beaver Creek Canyon, August 1-9, 1936. Permanent resident.

Psaltriparus minimus plumbeus (Baird): Common Bushtit. Colorado River 9 miles south of Moab, December 22, 1935; 15 miles southeast of Moab, April 8, 1934; 19 miles south of Moab, April 2-4, 1938; Kane Spring, San Juan County, April 30, 1937, 2 miles south of Kane Spring, April 5, 1938, Brown's Hole, 25 miles southeast of Moab, April 3, 1938, Big Indian Creek, 34 miles south of Moab, April 3, 1938

(all in Behle, 1941:183); Pennellen Pass, Henry Mountains, August 16, 1956; and the following from Woodbury and Russell (1945:94): Navajo Mountain Trading Post, July 24, 1936; southwest side of Navajo Mountain, July 8, 1936; and August 14, 1935; Kaiparowits Plateau, August 1, 1937. Total specimens, 28. In addition, one was seen along Mill Creek, 5 miles northeast of Moab on December 21, 1955. Tanner and Hayward (1934:229) found this species in the piñon-juniper belt near La Sal. Woodbury and Russell (1945:94) list a specimen from near Bluff, July 2, 1927 (BYU). Permanent resident.

Behle (*loc. cit.*) and Woodbury and Russell (*op. cit.*) have commented briefly on the characters of the population from southeastern Utah.

Sitta carolinensis nelsoni Mearns: White-breasted Nuthatch. La Sal Mountains: Geyser Pass, September 15, 1954; Pine Flat, 8 miles southeast of Geyser Pass, July 18, 1956; Beaver Creek, September 13-14, 1955, and July 17, 1956; 5 miles northeast of La Sal Post Office, April 7, 1938 (Behle, 1941:183); Devil Canyon, 10 miles north of Blanding, August 28, 1956; 7 miles north of Blanding, August 7, 1947; Cooley Pass, Abajo Mountains, August 24-25, 1956; Kigalia Ranger Station, Elk Ridge, August 27-28, 1956; Pennellen Pass, Henry Mountains, August 12, 1956. Total specimens, 24.

Tanner and Hayward (1934:229) considered this a fairly common species in the La Sal Mountains, ranging from the pigmy forest to the spruce belt. They took one specimen and found a nest on July 30, 1934, in a cottonwood tree. Benson (1935:445) obtained three specimens at Navajo Mountain in mid-June, 1933. Woodbury and Russell (1955:95) list a specimen from War God Spring, Navajo Mountain, taken August 13, 1935 (GC). Permanent resident.

Sitta canadensis Linnaeus: Red-breasted Nuthatch. Cooley Pass, Abajo Mountains, August 24, 1956; Kigalia Ranger Station, Elk Ridge, August 28, 1956; Bromide Basin, Mt. Ellen, Henry Mountains, August 13, 1956; Navajo Mountain, July 14, 1936 (Woodbury and Russell, 1945:96). Total specimens, five. Although no specimens were taken in the La Sal Mountains they were common at Geyser Pass and Warner Ranger Station, September 15-16, 1954 and along Beaver Creek, September 12-16, 1955 and July 17-18, 1956. Benson (1935:45) took a specimen on Navajo Mountain in mid-June, 1933. Woodbury and Russell (*loc. cit.*: 96) indicate that the species was common there and list another specimen taken August 15, 1935 (GC). They furthermore list a specimen supposedly in the University of Utah collection but not located, from the Kaiparowits Plateau, August 11, 1937. Permanent resident.

Sitta pygmaea melanotis van Rossem: Pigmy Nuthatch. Five miles northeast of La Sal Post Office, April 7-8, 1938 (Behle, 1941:183); between Blanding and Verdure, May 12, 1933; Devil Canyon, 10 miles north of Blanding, August 28, 1956; Kigalia Ranger Station, Elk Ridge, August 27-28, 1956; Pennellen Pass, August 12, 1956; Henry Mountains, September 12, 1929 (Stanford, 1931:7); Navajo Mountain, July 10, 21, 1936 (Woodbury and Russell, 1945:97). Total specimens, 21. Benson (1935:445) took two specimens on Navajo Mountain in mid-June, 1933. Woodbury and Russell (*loc. cit.*) indicate that the species was common in the yellow pines but did not occur in the spruce-fir forest on Navajo Mountain. They list another specimen from there taken on August 11, 1935 (GC). Permanent resident.

Certhia familiaris montana Ridgway: Brown Creeper. Green River, May 7, 1933; Geyser Pass, La Sal Mountains, September 15, 1954; Cooley Pass, Abajo Mountains, August 24, 1956; Navajo Mountain, August 12, 1935 (Woodbury and Russell, 1945:98). Total specimens, seven. One was seen at Hite on October 21, 1958, a case, as of the Green River specimen, of altitudinal migration. Tanner and Hayward (1934:229) report the species as fairly common in the La Sal Mountains and took three specimens at Geyser Pass. Benson (1935:445) took one on Navajo Mountain on June 18, 1933. Woodbury and Russell (*loc. cit.*) list several additional observations from Navajo Mountain during the summer of 1936. Permanent resident.

Cinclus mexicanus unicolor Bonaparte: Dipper. La Sal Mountains: 2 miles southwest of Warner Ranger Station, September 16, 1954; 1 mile north of Beaver Basin, September 15, 1955. Total specimens, two. Tanner and Hayward (1934:229) reported the species from the La Sal Mountains near Clark's Lake and elsewhere.

Benson (1935:442) lists the species for Bridge Canyon near Rainbow Bridge, June 22-24, 1933. Woodbury and Russell (1945:98) give sight records for Bridge Canyon on July 6, 1933, and August 7, 1935. Permanent resident.

Troglodytes aedon parkmanii Audubon: House Wren. Muddy Creek Canyon, 3 miles northwest of Emery, May 11, 1937; Beaver Creek, La Sal Mountains, July 17, 1956; Warner Ranger Station, La Sal Mountains, September 15-17, 1954; Bluff, April 28, 1935 (Woodbury and Russell, 1945:98); Kigalia Ranger Station, Elk Ridge, June 12, 1936 and August 27, 1956; Trachyte Ranch, 35 miles south of Hanksville, May 17, 1952; Wolverton Mill, Straight Canyon, east side of Mt. Pennell, Henry Mountains, August 12, 1956; Navajo Mountain, July 9, 1936, and August 16, 1935 (Woodbury and Russell, *loc. cit.*). Total specimens, 12. In addition the species was seen at Cooley Pass, Abajo Mountains, August 25, 1956, and on the north slope of Mt. Pennell, Henry Mountains, August 16, 1956. Tanner and Hayward (1934:229) found this wren to be abundant in the aspen forest at Warner Ranger Station and two specimens were taken. A nest was found on June 17, 1927 with six eggs about ready to hatch. Benson (1935:445) observed several in Bridge Canyon, June 22-24, 1933, and obtained a specimen on Navajo Mountain on July 14, 1933. According to Woodbury and Russell (1945:98) he saw the species daily, June 12-20, near fallen trees in the ponderosa pine belt. They too found it common up to 9500 feet, July 1-23, 1936, as well as at Bridge Canyon. Behle (1948:306) reported one along the Colorado River at the mouth of Smith Fork, river mile 132, on April 14, 1947. Summer resident.

Thryomanes bewickii eremophilus Oberholser: Bewick's Wren. Moab, October 25, 1931; 19 miles southeast of Moab, April 3-5, 1938, and 5 miles northeast of La Sal Post Office, April 7, 1938 (Behle, 1941:183); Natural Bridges National Monument, June 10, 1936; 4 miles north of Navajo Trading Post, July 27, 1936 (Woodbury and Russell, 1945:99). Total specimens, six. Higgins saw a lone individual on July 8, 1958, in a rose-willow-squaw-bush thicket in Seven Mile Canyon, one-half mile up from its junction with Glen Canyon at river mile 141. Tanner and Hayward (1934:229) obtained a specimen from the La Sal Mountains, and Woodbury and Russell (*loc. cit.*) report it as occurring on the lower slopes of Navajo Mountain. Permanent resident.

Telmatodytes palustris plesius (Oberholser): Long-billed Marsh Wren. Moab, April 9, 1938 (Behle, 1941:183). One specimen. Two were seen in the marsh immediately southwest of Moab on March 17, 1956, but none were found there in June. Whitney saw one at a small marsh created by beaver dams in Davis Gulch, Escalante River, in August 1957. Possibly a summer resident; otherwise transient.

Catherpes mexicanus conspersus Ridgway: Cañon Wren. Dewey, May 21, 1953; Moab, October 25, 1931; Moab, April 9, 1938, and 19 miles southeast of Moab, April 4, 1938 (Behle, 1941:183); and the following from Woodbury and Russell (1945:101): Bluff, October 27, 1931; Colorado River at mouth of Rock Creek, July 21, 1937; rim of Beaver Creek Canyon, north foot of Navajo Mountain, August 2, 1936; 2 miles north of Navajo Mountain Trading Post, July 28, 1936. Total specimens, ten. The species was observed along the Colorado River 10 miles south of Moab on December 22, 1955, at Dead Horse Point, March 17, 1956 and in Glen Canyon at Warm Creek, October 18, 1958, and Hole-in-the-Rock, October 20, 1958. Higgins found it abundant along the entire length of Glen Canyon during the summer of 1958 and located the remains of a nest on a ledge near the mouth of Kane Creek, river mile 41. Behle (1948:306) gives sight records for Glen Canyon at Hidden Passage, river mile 76 on April 15, 1947, and the mouth of Aztec Canyon, river mile 68.5 on April 15 and 16. Benson (1935:442) listed the species for Bridge Canyon, June 21-24, 1933. Woodbury and Russell (*loc. cit.*) list additional specimens from Navajo Mountain, August 6, 1935 (GC), Bluff, October 26, 1929 (MVZ), and November 13, 1893 (USBS). They further indicate that the species occurs in Monument Valley and the Kaiparowits region. Additional observations are given in Behle and Higgins (1959). Permanent resident.

Salpinctes obsoletus obsoletus (Say): Rock Wren. Muddy Creek Canyon, 3 miles northwest of Emery, May 11, 1937; 6 miles south of Valley City, June 24, 1947; Dewey, May 22, 1953; Moab, April 30, 1937; 19 miles south of Moab, April 5, 1938 (Behle, 1941:183); Bluff, October 27, 1931 (Woodbury and Russell, 1945:102); Hatch

Trading Post, 25 miles southeast of Blanding, June 30, 1947; King Ranch, Henry Mountains, September 9, 1929; Navajo Mountain, July 13, 1936, and east rim Beaver Creek Canyon, north foot Navajo Mountain, August 8, 1936 (Woodbury and Russell, *loc. cit.*). Total specimens, 11. We observed the species at Dewey again on May 14, 1954, at Castle Valley, September 16, 1955, on the north side of Mt. Pennell, August 16, 1956, and at Bluff, August 26, 1956. Higgins found rock wrens to be abundant breeders on rocky terraces and hillsides in many areas of Glen Canyon during the summer of 1958. Tanner and Hayward (1934:229) observed the species in considerable numbers in the La Sal Mountains at rock slides above timberline as well as on the lower rocky slopes, and a specimen was taken at Geyser Pass. Benson (1935:441) lists the species for Bridge Canyon, June 21-24, 1933. Woodbury and Russell (*loc. cit.*) list additional specimens from Bluff, May 16, 1892 (AMNH), and at Navajo Mountain, August 11, 1935 (GC) and state that it has been observed in many places in Utah along the San Juan and Colorado river banks and the Kaiparowits Plateau and Monument Valley. Their several records for Glen Canyon are given in Behle and Higgins (1959). Summer resident.

Mimus polyglottos leucopterus (Vigors): Mockingbird. Dewey, May 22, 1953, and May 13, 1954; Moab, June 8, 1956; 3 miles northeast of Gouldings, Monument Valley, July 9, 1937; Henryville, April 26, 1930. Total specimens, five. The species was seen at Castleton on September 17, 1954, and July 19, 1956. Higgins observed a mockingbird in the top of a saltbush near the Bert Loper cabin in Red Canyon, a tributary to Glen Canyon, on July 8, 1958, and another feeding around shadscale in Escalante Canyon near its mouth on July 19, 1958. Tanner and Hayward (1934:229) report it from Moab. Benson (1935:443) found it on the mesa at the base of Navajo Mountain in mid-June, 1933. Woodbury and Russell (1945:103) report two specimens taken near Bluff, May 8 and 16, 1892 (AMNH). Summer resident.

Dumetella carolinensis (Linnaeus): Catbird: 14 miles north of Green River, May 24, 1947. One specimen. We saw the species at Dewey, May 21, 1953. Higgins heard and later saw a single catbird in the dense streamside thicket near the mouth of Ticaboo Creek in Glen Canyon, river mile 148, on July 6, 1958. Tanner and Hayward (1934:230) report a specimen from Moab taken in 1927 and state that several were noted at the time. Summer resident.

Toxostoma bendirei (Coues): Bendire's Thrasher. Woodbury (1939:159) states that Clarence Coltam took two specimens (BYU) and observed many more in Monument Valley near the Utah-Arizona line on July 4, 1927. The record is given again in Woodbury and Russell (1945:105). Higgins reports a sight record on July 14, 1958, near the top of Lake Canyon, a tributary of Glen Canyon, at river mile 113. It occurred in black brush (*Coleogyne*). Summer resident.

Oreoscoptes montanus (Townsend): Sage Thrasher. Near Emery, May 11, 1936; 23 miles southeast of Moab, April 5, 1938 (Behle, 1941:183); near La Sal junction, June 10, 1936; 7 miles north of Bluff, August 26, 1956; Monument Valley, August 18, 1936 (Woodbury and Russell, 1945:106); Kigalia Ranger Station, Elk Ridge, August 27, 1956. Total specimens, six. One was seen at Castleton September 17, 1954. Tanner and Hayward (1934:230) report two seen at Moab. Woodbury and Russell (*loc. cit.*) list a specimen from Riverview on the San Juan, May 2, 1892 (AMNH), and Monument Valley, July 5, 1927 (BYU). Summer resident.

Turdus migratorius propinquus Ridgway: Robin. Nineteen miles southeast of Moab, April 5, 1938, and 5 miles northeast of La Sal Post Office, April 8, 1938 (Behle, 1941:183); Navajo Mountain, July 21, 1936, and Kaiparowits Plateau, August 11, 1937 (Woodbury and Russell, 1945:106). Total specimens, six. The species was observed at Dewey, May 21-23, 1953; at Warner Ranger Station September 16, 1954; at Beaver Creek in the La Sal Mountains, September 12, 1955, and July 16-18, 1956; at Mill Creek, 5 miles northeast of Moab, December 21, 1955 and at Moab, March 17, 1956. Higgins reports that the robin was observed at many places in Glen Canyon, July 1 to August 9, but was most abundant in the larger vegetation near the mouths of side canyons. Tanner and Hayward (1934:230) report the species abundant in the La Sal Mountains. Benson (1935:445) saw it on Navajo Mountain in mid-June, 1933. Woodbury and Russell (*loc. cit.*) list a juvenile from Navajo Mountain taken on August 16, 1936 (GC). Essentially summer resident, but a few occurring in winter.

Hylocichla guttata auduboni Baird: Hermit Thrush. Fourteen miles north of Green River, May 24, 1947; La Sal Mountains; Beaver Creek, September 13, 1955, and July 16, 1956; Warner Ranger Station, September 17, 1954; Geyser Pass, September 15, 1954; Cooley Pass, Abajo Mountains, August 24-25, 1956; Slate Creek, south slope of Mt. Ellen, Henry Mountains, August 12, 1956; Navajo Mountain, July 14, 1936 (Woodbury and Russell, 1945:107). Total specimens, 22.

Tanner and Hayward (1934:230) found hermit thrushes to be fairly common in the La Sal Mountains and obtained four specimens. Benson (1935:445) took two specimens on Navajo Mountain in mid-June, 1933. Woodbury and Russell (1945:107) give the date of the Benson specimens as June 18, 1933, and further indicate that the species was common on Navajo Mountain. A nest was found there on July 16, 1936, containing one juvenile. By August 13 they were seemingly gone. Summer resident.

Hylocichla ustulata swainsoni (Tschudi): Swainson's Thrush. Fourteen miles north of Green River, May 24, 1947; Beaver Creek, La Sal Mountains, July 16-18, 1956. Total specimens, seven. They occurred in willow thickets. Summer resident.

Sialia mexicana bairdii Ridgway: Western Bluebird. Pine Flat, 8 miles southeast of Geyser Pass, La Sal Mountains, July 18, 1956; 5 miles northeast of La Sal, April 8, 1938 (Behle, 1941:183); 7 miles north of Blanding, August 7, 1947; Kigalia Ranger Station, Elk Ridge, August 27, 1956; Henry Mountains, September 12, 1929 (Stanford, 1931:8); Pennellen Pass, Henry Mountains, August 11-14, 1956; Navajo Mountain, July 4, 1936 (Woodbury and Russell, 1945:108). Total specimens, 16. The species was seen at Beaver Creek, La Sal Mountains, on September 16, 1955 and July 18, 1956. In every case they were in ponderosa pines. Benson (1935:445) took one on Navajo Mountain in mid-June, 1933. Woodbury and Russell (*loc. cit.*) mention an additional molting specimen from Navajo Mountain taken August 16, 1935 (GC) and give other sight records for July. Permanent resident.

Sialia mexicana occidentalis Townsend: Western Bluebird. Nineteen miles southeast of Moab, April 6, 1938 (Behle, 1941:183). One specimen. Transient.

Sialia currucoides (Bechstein): Mountain Bluebird. Castle Dale, March 27, 1937; 15 miles southeast of Moab, April 9, 1934; 19 miles southeast of Moab, April 6, 1938 (Behle, 1941:18); Elk Ridge, June 12, 1936; Sanford Ranch, 30 miles south of Hanksville, May 17, 1952; Straight Canyon, east side of Mt. Pennell, Henry Mountains, August 15, 1956; Total specimens, seven. We found them common along all the roads in the Moab area on March 17, 1956, indicating a wave of northward migration. Higgins saw a lone bird, a male, in the top of a juniper one and a half miles up Ticaboo Canyon from its junction with Glen Canyon at river mile 148, on July 6, 1958. Stanford (1931:8) found this species in the Henry Mountains in mid-September, 1929. Tanner and Hayward (1934:230) found them frequently in all zones in the La Sal Mountains including the alpine zone. Woodbury and Russell (1945:109) note a specimen taken at Noland's Ranch near Four-Corners on the San Juan River, April 20, 1892 (AMNH). Summer resident.

Myadestes townsendi townsendi (Audubon): Townsend's Solitaire. Castle Valley, May 13, 1933; Moab, May 9, 1933; 5 miles northeast of La Sal Post Office, April 7, 1938 (Behle, 1941:183); Cooley Pass, Abajo Mountains, August 25, 1956. Total specimens, four. One was observed along the Colorado River, 10 miles south of Moab, December 22, 1955. Tanner and Hayward (1934:230) report that several were seen and specimens taken at timberline near Geyser Pass as well as at 8200 feet in the La Sal Mountains. Summer resident.

➤ *Polioptila caerulea amoenissima* Grinnell: Blue-gray Gnatcatcher. Green River, May 7, 1933; 2 miles south of Dewey, May 23, 1933; Moab, April 30, 1937; Pennellen Pass, Henry Mountains, August 12, 1956; and the following also listed in Woodbury and Russell (1945:111): Colorado River above Rock Creek; July 26, 1937; Navajo Mountain Trading Post, July 25, 1936; Kaiparowits Plateau, July 30-31, August 10, 1937. Total specimens, 11. Additional sight records are: Castleton, September 17, 1954; Mill Creek, 5 miles northeast of Moab, December 21, 1955. Higgins saw three specimens at White Canyon Post Office in Glen Canyon near Hite on July 2, 1958, and one other in Seven Mile Canyon on July 8, 1958. Tanner and Hayward (1934:230) obtained a specimen along the Colorado River near Moab. Benson (1935:443)

lists the species for the mesa at the base of Navajo Mountain in mid-June, 1933. Woodbury and Russell (*loc. cit.*) give records for Monument Valley but none certainly in Utah. Summer resident.

Regulus satrapa amoemus van Rossem: Golden-crowned Kinglet. Mud Lake Sawmill, La Sal Mountains, October 29, 1931 (Woodbury, 1939:160); Geysers Pass, La Sal Mountains, September 14-15, 1954. Total specimens, three. Woodbury (*op. cit.*:159) reports that Osgood found the species in the Henry Mountains but no dates of observation are given. Permanent resident.

Regulus calendula cineraceus Grinnell: Ruby-crowned Kinglet. Ten miles northeast of Moab, April 10, 1934; near Moab, October 25, 1931; Beaver Creek, La Sal Mountains, September 15, 1955; Warner Ranger Station, La Sal Mountains, September 16, 1954; 15 miles southeast of Moab, April 8, 1934; Cooley Pass, Abajo Mountains, August 25, 1956; John's Canyon, 22 miles northwest of Mexican Hat, May 2, 1935; and listed also in Woodbury and Russell (1945:112); Bluff, April 29, 1935, and Navajo Mountain, August 14, 1935, and July 15, 1936. Total specimens, 13. One was seen at Moab on March 17, 1956, and another at Hite on October 21, 1958. Tanner and Hayward (1934:230) heard the species at Geysers Pass in the La Sal Mountains. Woodbury and Russell (*loc. cit.*) list a specimen from Noland's Ranch on the San Juan River, near Four-Corners, taken April 20, 1892. Permanent resident.

Anthus spinoletta (Linnaeus): Water Pipit. A flock of 15 was seen at 10,400 feet elevation on an open, rocky area at the north end of Mt. Ellen in the Henry Mountains on September 9, 1957, by Raymond Lee and John W. Twente. They may have been migrants, for we did not find any on the south slope of Mt. Ellen near the summit in mid-August, 1956. Tanner and Hayward (1934:230) found this species numerous about snow banks near the summit of Mt. Peale in the La Sal Mountains at 13,000 feet, in mid-June, 1927. They state that specimens were taken but do not indicate whether they were breeding. They probably do breed there, however. We did not see them in mid-September on the slopes of Haystack Peak above timber line, but they had probably moved to lower elevations by then. Probably a summer resident; certainly transient.

Lanius ludovicianus nevadensis Miller: Loggerhead Shrike. Pennellen Pass, Henry Mountains, August 13-16, 1956, and the following also listed in Woodbury and Russell (1945:114): Bluff, April 29, 1935; East Gypsum Drainage, Monument Valley, 3 miles above Totem Poles, August 15, 1936; road from Goulding to Oljato, July 12, 1937; San Juan River, 18 miles above junction with Colorado River, August 1, 1938; Rock Creek, July 28, 1937; Kaiparowits Plateau, August 12, 1937. Total specimens, nine. We saw two at Bluff, August 26, 1956. Stanford (1931:8) reported the species from the Henry Mountains in mid-September, 1929. Tanner and Hayward (1934:230) give a sight record for the La Sal Mountain region. Benson (1935:443) lists it for the mesa at the base of Navajo Mountain, mid-June, 1933. Summer resident.

Vireo solitarius plumbeus Coues: Solitary Vireo. Green River, May 7, 1933; Moab, May 9, 1933; Natural Bridges National Monument, June 11, 1936; Sanford Ranch, 30 miles south of Hanksville, May 17, 1952. Total specimens, five. One was seen in the lower Beaver Creek area, La Sal Mountains, on September 14, 1955. Tanner and Hayward (1934:230) report a specimen from the La Sal Mountains taken in the yellow pine-oak belt. Summer resident.

Vireo solitarius cassinii Xantus: Solitary Vireo. One mile north of Beaver Basin, 9600 feet, La Sal Mountains, September 14, 1955, and the following two also listed in Woodbury and Russell (1945:117): east rim Beaver Creek Canyon, north foot of Navajo Mountain, August 11, 1936; Soldier Seep, Navajo Mountain, August 17, 1935. Total specimens, four. Another of their records pertains to an observation at Beaver Creek Canyon, a tributary of the San Juan River on August 2, 1936 (Behle and Higgins, 1959). Transient.

**Vireo gilvus swainsonii* Baird: Warbling Vireo. North of Green River, 6.5 miles, August 18, 1956; Dewey, May 23, 1953; Beaver Creek, La Sal Mountains, July 16, 1956; Natural Bridges National Monument, June 11, 1936; the following from the Henry Mountains: Kings Ranch, September 10, 1929; Head Copper Basin, Mt.

Ellen, August 13, 1956; Pennellen Pass, August 12, 1956; Wolverton Mill, Straight Creek, east slope of Mt. Pennell, August 12, 15, 1956; and the following also listed in Woodbury and Russell (1945:117): Beaver Creek Canyon, north foot of Navajo Mountain, August 4, 6, 1936; west slope of Navajo Mountain, July 7, 1936; Navajo Mountain Trading Post, July 29, 1936; Kaiparowits Plateau, August 2, 1937. Total specimens, 16. Tanner and Hayward (1934:230) heard the species frequently in the aspen and spruce belts in the La Sal Mountains and took one skin in June. Benson (1935:443) listed it for the mesa at the base of Navajo Mountain, the observation being, according to Woodbury and Russell (1945:118), on June 25, 1933, near Navajo Trading Post. They also list an additional specimen from Navajo Mountain, August 17, 1935 (GC). Summer resident.

Vermivora celata orestera Oberholser: Orange-crowned Warbler. Beaver Creek, La Sal Mountains, September 13, 1955, and July 16-19, 1956. Total specimens, four. A migrant was seen along the Colorado River at Hole-in-the-Rock on October 20, 1958. Tanner and Hayward (1934:231) obtained two specimens in the La Sal Mountains at Warner Ranger Station and Geyser Pass. Summer resident.

Vermivora ruficapilla ridgwayi van Rossem: Nashville Warbler. East Gypsum Drainage, Monument Valley, August 17, 1936, and Navajo Mountain, August 11, 1935 (Woodbury and Russell, 1945:119). Total specimens, two. They also give a sight record for Navajo Mountain on August 13, 1936. Transient.

Vermivora virginiae (Baird): Virginia's Warbler. Green River, May 7, 1933; 6.5 miles north of Green River, August 18, 1956; Beaver Creek, La Sal Mountains, July 16, 1956; John's Canyon, 22 miles northwest of Mexican Hat, May 1, 1935; Robbers Roost Spring, 25 miles east of Hanksville, May 19, 1951; Trachyte Ranch, 35 miles south of Hanksville, May 16, 1952; Pennellen Pass, Henry Mountains, August 16, 1956; Wolverton Mill, Straight Creek, east side of Mt. Pennell, Henry Mountains, August 12, 1956, and the following also listed in Woodbury and Russell (1945:119): Bluff, May 11, 1933; Navajo Mountain, July 17, 1936; Kaiparowits Plateau, August 1, 9, 1937. Total specimens, 12. Summer resident.

~ *Vermivora luciae* (Cooper): Lucy's Warbler. Side canyon of Colorado River, July 13, 1936 and Colorado River, 41 miles above Lee's Ferry, August 8, 1938 (Woodbury, 1939:161 and Woodbury and Russell, 1945:120). Total specimens, two. Higgins found this warbler to be a common breeder along many stretches of Glen Canyon, July 1 to August 9, 1958, from Ticaboo Creek, river mile 148, to Lee's Ferry. Woodbury and Russell (*loc. cit.*) give as additional sight records an immature being fed by an adult along the Colorado River 2 miles below the mouth of the San Juan River on July 17, 1937, single birds on the San Juan River 30 miles above its mouth on July 31, and on the Colorado River at mile 41 on August 11, 1938. They also report a specimen from Riverview on the San Juan, taken April 27, 1892 (AMNH). Summer resident.

~ *Dendroica petechia aestiva* (Gmelin): Yellow Warbler. Woodbury and Russell (1945:121) list a specimen from Riverview on the San Juan River taken May 4, 1892. Transient.

Dendroica petechia morcomi Coale: Yellow Warbler. Muddy Creek Canyon, 3 miles northwest of Emery, May 11, 1937, 4 miles north of Green River, June 22, 1947; 6.5 miles north of Green River, August 18, 1956; Dewey, May 23, 1953; Moab, June 6-8, 1956; Robbers Roost Spring, 25 miles east of Hanksville, May 18, 1951; Trachyte Ranch, 35 miles south of Hanksville, May 16, 1952; and the following also listed in Woodbury and Russell (1945:121): San Juan River, 35 miles above mouth, July 30, 1938; Colorado River, July 11, 1936; Colorado River, 75 miles above Lee's Ferry, August 3, 1938; 63 miles above Lee's Ferry, August 5, 1938; 50 miles above Lee's Ferry, August 6, 1938; 3 miles below mouth of San Juan, August 3, 1938; near Rock Creek, July 20-23, 1937; Navajo Mountain, August 13, 1935; Kaiparowits Plateau, August 4, 1937. Total specimens, 38. Higgins found this species to be a common breeder in streamside vegetation along Glen Canyon, July 1 to August 9, 1958. Both adults and immatures were seen nearly every day of the trip. Tanner and Hayward (1934:231) reported the species as common in willow thickets along streams in the La Sal Mountain region and took one specimen from the oak belt near La Sal. Behle (1948:306) reported an early migrant on April 14, 1947, along

the Colorado River at the mouth of Smith Fork, river mile 132. Several records for the San Juan River and lower Glen Canyon by Russell and Woodbury are given in Behle and Higgins (1959). Summer resident.

Dendroica auduboni memorabilis Oberholser: Audubon's Warbler. Muddy Creek Canyon, 3 miles northwest of Emery, May 11, 1937; Green River, May 7, 1933; Beaver Creek, La Sal Mountains, July 17, 1956; John's Canyon, 22 miles northwest of Mexican Hat, May 1, 1935; Cooley Pass, Abajo Mountains, August 25, 1956; Kigalia Ranger Station, August 27, 1956; Sanfords Ranch, 30 miles south of Hanksville, May 17, 1952; Henry Mountains, September 12, 1929; Wolverton Mill, Straight Creek, east side of Mt. Pennell, August 15, 1956, and July 2, 1936. Total specimens, 13. We saw the species at Beaver Creek on September 13, 1955, and at the King ranch at the west base of Mt. Ellen in the Henry Mountains on August 11, 1956. Tanner and Hayward (1934:231) reported them to be common in the aspen belt in the La Sal Mountains and obtained three specimens at Warner Ranger Station. Benson (1935:445) obtained a specimen on Navajo Mountain in mid-June, 1933. Woodbury and Russell (*loc. cit.*) list in addition a specimen from Riverview on the San Juan River taken April 27, 1892 (AMNH), and one from the southwest side of Navajo Mountain, August 11, 1935 (GC). Summer resident.

Dendroica nigrescens (Townsend): Black-throated Gray Warbler. Green River, May 8, 1933; Moab, April 30, 1937; Cooley Pass, Abajo Mountains, August 25, 1956; Ekker's Ranch, 25 miles east of Hanksville, May 18, 1957; Sanford Ranch, 30 miles south of Hanksville, May 17, 1952; Pennellen Pass, Henry Mountains, August 12, 1956; and also listed in Woodbury and Russell (1945:123): Bluff, May 11, 1933; 2 miles below head of Beaver Creek, north foot of Navajo Mountain, August 2, 1936; Kaiparowits Plateau, July 31, August 5, 9, 1937. Total specimens, 11. Tanner and Hayward (1934:231) found this warbler numerous on the west side of the La Sal Mountains in the piñon-juniper belt and obtained four specimens. Benson (1935:443) lists it from the mesa at the base of Navajo Mountain in mid-June, 1933. Woodbury and Russell (*loc. cit.*) list an additional specimen from Navajo Mountain taken August 14, 1935 (GC). Summer resident.

Dendroica townsendi (Townsend): Townsend's Warbler. Beaver Creek, La Sal Mountains, September 13, 16, 1955; Cooley Pass, Abajo Mountains, August 24-25, 1956; Henry Mountains: Pennellen Pass, August 13, 16, 1956; Wolverton Mill, Straight Creek, east base of Mt. Pennell, August 13, 1956; and the following also listed in Woodbury (1939:160) and Woodbury and Russell (1945:125): Beaver Creek Canyon, north foot of Navajo Mountain, August 10, 1936 and Kaiparowits Plateau, August 12, 1937. Total specimens, 14. Woodbury (*loc. cit.*) and Woodbury and Russell (*loc. cit.*) give an additional sight record for Navajo Mountain on August 13, 1935. Stanford (1931:8) apparently took a specimen in the Henry Mountains on September 12, 1929, which he proclaimed as a new Utah record, but this has not been located in the collection. Transient.

Dendroica occidentalis (Townsend): Hermit Warbler. Head Copper Basin, 10,000 feet, southeast slope of Mt. Ellen, Henry Mountains, August 13, 1956; Navajo Mountain, August 13, 1936 (Woodbury and Russell, 1945:125). Total specimens, two. Woodbury and Russell (*loc. cit.*) report that a second specimen was taken August 11, 1935 (GC), and the species was considered to be a common member of the bands of migrant warblers found on the mountain in August, 1935. Transient.

Dendroica graciae graciae Baird: Grace's Warbler. Kigalia Ranger Station, Elk Ridge, August 27, 1956. One specimen. Benson (1935:445) lists the species for Navajo Mountain in mid-June, 1933. Woodbury and Russell (1945:125) report that one was taken on June 15, 1938, at War God Spring, Navajo Mountain, but not prepared as a specimen; and another seen on June 16. Summer resident.

Seiurus noveboracensis notabilis Ridgway: Northern Waterthrush. Bluff, May 11, 1933 (Woodbury, 1959:161 and Woodbury and Russell; 1945:125). One specimen. Transient.

Oporornis tolmiei monticola Phillips: MacGillivray's Warbler. North of Green River, 6.5 miles, August 18, 1956; Dewey, May 22, 1953; Beaver Creek, La Sal Mountains, July 17-18, 1956; Geysers Pass, La Sal Mountains, September 14, 1954; Cooley Pass, Abajo Mountains, August 24, 1951; Kigalia Ranger Station, Elk Ridge, June

12, 1936, August 27-28, 1956; Ekker's Ranch and Robbers Roost Springs, 25 miles east of Hanksville, May 19-20, 1951; Trachyte Ranch, 35 miles south of Hanksville, May 17, 1952; Pennellen Pass, Henry Mountains, August 16, 1956; Bluff, August 26, 1956, and also listed in Woodbury and Russell (1945:126): Bluff, October 27, 1931; Monument Valley, August 16, 1936. Total specimens, 22. Summer resident.

Oporornis tolmiei tolmiei (Townsend): MacGillivray's Warbler. Kigalia Ranger Station, Elk Ridge, August 28, 1956; Pennellen Pass, Henry Mountains, August 16, 1956; Beaver Creek Canyon, north foot of Navajo Mountain, August 5, 1936 (Woodbury and Russell, 1945:125). Total specimens, three. Transient.

Geothlypis trichas occidentalis Brewster: Yellowthroat. Dewey, May 22, 1953; Moab, May 9-10, 1933, and June 7-9, 1956; and the following also listed in Woodbury and Russell (1945:126): San Juan River above Nokai Canyon, July 29, 1938; San Juan River, 35 miles above Colorado River, July 30, 1938; San Juan River, 18 miles above Colorado River, August 1, 1938; Colorado River below mouth of Bridge Canyon, July 12-13, 1936; Colorado River near Rock Creek, July 20, 23, 26, 1937; Colorado River 60 miles above Lee's Ferry, August 6, 1938; Colorado River 25 miles above Lee's Ferry, August 9, 1938. Total specimens, 22. Higgins found both adults and immatures in the willow fringe at Lee's Ferry on August 8, 1958. Woodbury and Russell (*loc. cit.*) also list a specimen from near Bluff, April 28, 1935. Several additional records of Woodbury for the San Juan River and lower Glen Canyon in July and August, 1938, are given by Behle and Higgins (1959). Summer resident.

Icteria virens auricollis (Deppe): Yellow-breasted Chat. Moab, June 6, 1956, and the following also listed in Woodbury and Russell (1945:127): San Juan River, 35 miles above Colorado River, July 31, 1938; Colorado River, July 11, 1936; Colorado River, 50 miles above Lee's Ferry, August 7, 1938; Colorado River, 41 miles above Lee's Ferry, August 8, 1938. Total specimens, six. One was seen at Warner Ranger Station on September 16, 1954. They were common along the Colorado River near Moab, June 6-7, 1956. Higgins found them to be abundant breeders along the length of Glen Canyon during the summer of 1958. They were noted virtually every day of the trip and frequented the densest streamside vegetation. Tanner and Hayward (1934:231) found this species to be fairly common along streams in the sagebrush belt in the La Sal Mountain region and took two specimens at La Sal Creek and Moab. Woodbury and Russell (1945:127) also list two specimens from near Bluff, taken May 15, 17, 1892 (AMNH). Several of their additional records for Glen Canyon are given in Behle and Higgins (1959). Summer resident.

Wilsonia pusilla pileolata (Pallas): Wilson's Warbler. Four miles north of Green River, May 24, 1947; Dewey, May 22, 1953; Beaver Creek, La Sal Mountains, September 16, 1955; Cooley Pass, Abajo Mountains, August 25, 1956; Kigalia Ranger Station, Elk Ridge, August 27, 1956; King Ranch, Henry Mountains, September 12, 1929 (Stanford, 1931:9); Wolverton Mill, Straight Canyon, east side Mt. Pennell, August 12, 1956. Total specimens, ten. In addition, one was seen at Geyser Pass in the La Sal Mountains on September 14, 1954. Whitney saw three transients, a male and two females, in August, 1957, at Coyote Gulch on the north side of the Kaiparowits Plateau, 40 miles southeast of Escalante, Utah. Woodbury and Russell (1945:128) indicate that the species was seen at War God Springs, Navajo Mountain, on September 1, 1934, and one or two daily in aspens on the mountain from August 9 to 16, 1935. Summer resident in the mountains, common transient, especially in fall in lowlands.

Passer domesticus domesticus (Linnaeus): House Sparrow. Moab, October 25, 1931. One specimen. The species was seen at Dewey on May 21-23, 1953 and May 14, 1954. Permanent resident.

Dolichonyx oryzivorus (Linnaeus): Bobolink. Woodbury and Russell (1945:129) list a pair taken at Bluff on May 19, 1892 (AMNH). Transient.

Sturnella neglecta neglecta Audubon: Western Meadowlark. Moab, October 26, 1931. One specimen. Tanner and Hayward (1934:231) found it fairly common about the base of the La Sal Mountains. Woodbury and Russell (1945:129) record that it was common in small flocks in the fields at Bluff, November 8-15, 1893, and that stragglers occurred at Noland's Ranch near Four-Corners, Utah, November 17-27. Summer resident.

Xanthocephalus xanthocephalus (Bonaparte): Yellow-headed Blackbird. Green River, April 14, 1934; Moab, June 8, 1956. Total specimens, two. Woodbury and Russell (1945:130) indicate that a specimen was taken at Riverview on the San Juan River, May 1, 1892, and another at Goodridge, Utah on July 27, 1933. Higgins saw three females on August 6, 1958, at the mouth of a small canyon entering Glen Canyon 25 miles above Lee's Ferry. Transient.

Agelaius phoeniceus fortis Ridgway: Redwinged Blackbird. Green River, April 14, 1934; Castle Valley, 15 miles northeast of Moab, April 13-14, 1934; Moab, October 26, 1931; May 9, 1933, April 10-11, 1934, April 9, 1938 (Behle, 1941:183), June 7-9, 1956; Bluff, May 20, 1947. Total specimens, 64. The species was also observed at Dewey, May 21-23, 1953 and May 14, 1954. A flock of a hundred or more was seen at the Moab sloughs on December 21, 1955. Tanner and Hayward (1934:231) indicate that six specimens were taken at Moab and various other points in Grand and San Juan counties. One of these was evidently taken at Bluff on July 2, 1927, according to Woodbury and Russell (1945:130), who further report that several small flocks and a single bird were observed near Bluff November 8-15, 1892, and a single bird several times at Noland's Ranch near Four-Corners, November 17-27. Several migrants were reported by Behle (1948:306) along the Colorado River at mile 132 at the mouth of Smith Fork, April 14, 1947, and two at 68.5 mile at the mouth of Aztec Creek, April 16. Summer resident.

Icterus parisorum Bonaparte: Scott's Oriole. Ekker Ranch, 25 miles east of Hanksville, May 20, 1951. One specimen. This is a female in first-year plumage and has been reported by Behle and Selander (1952:31), Benson (1935:443) lists the species as having been seen on the mesa at the base of Navajo Mountain in June, 1933, which by implication would be in Utah, but Woodbury and Russell (1945:131) indicate that the observation was made 5 miles south of Navajo Mountain in Coconino County, Arizona. Summer resident.

Icterus bullockii bullockii (Swainson): Bullock's Oriole. Green River, May 7, 1933; Pine Flat, 6 miles southeast of Geyser Pass, east side of La Sal Mountains, July 18, 1956, and the following also listed in Woodbury and Russell (1945:132): East Gypsum Drainage, 3 miles below Totem Pole, Monument Valley, August 15, 1936; Beaver Creek Canyon, north foot of Navajo Mountain, August 11, 1936. Total specimens, four. The species was also seen at Dewey on May 21-23, 1953. Tanner and Hayward (1934:231) found it to be fairly common along streams at the base of the La Sal Mountains. Woodbury and Russell (1945:131) list specimens taken at Bluff on May 8, 1892 (AMNH), and July 2, 1927 (BYU), and indicate that it was common in the cottonwoods on the latter date. Additional records of the species from the San Juan River and lower Glen Canyon for August, 1938, by Woodbury are given in Behle and Higgins (1959). Summer resident.

Euphagus cyanocephalus (Wagler): Brewer's Blackbird. Ekker's Ranch, 25 miles east of Hanksville, May 19, 1951; Sanford Ranch, 30 miles south of Hanksville, May 17, 1952. Total specimens, three. Two were seen near the junction of the Dolores and Colorado rivers near Dewey on May 14, 1954, and two were seen along the Colorado River at Moab on June 6, 1956. Higgins observed five at the mouth of Kane Creek in Glen Canyon, river mile 41, on August 1, 1958. Tanner and Hayward (1934:231) noted them along streams in the lower zones of the La Sal Mountains. Woodbury and Russell (1945:132) give records for Riverview on the San Juan River, April 28, 1892, and at Noland's Ranch near Four-Corners, November 17-27, 1893. Permanent resident.

Molothrus ater obscurus (Gmelin): Brown-headed cowbird. Two miles south of Green River, May 15, 1952; Moab, June 9, 1956; Colorado River at Rock Creek, July 22, 1937 (Woodbury and Russell, 1945:133). Total specimens, four. Gerald Smith saw one in Glen Canyon at the mouth of Rock Creek on July 28, 1958. Woodbury and Russell (*loc. cit.*) indicate that a specimen was taken near Bluff, July 2, 1927 (BYU), and at Goodridge, July 27, 1933 (MVZ). Summer resident.

Piranga ludoviciana (Wilson): Western Tanager. Beaver Creek, La Sal Mountains, July 16, 1956; Geyser Pass, La Sal Mountains, September 14, 1954; Cooley Pass, Abajo Mountains, August 25, 1956; Kigalia Ranger Station, June 12, 1936; Bromide Basin, southeast slope Mt. Ellen, Henry Mountains, August 13, 1956; Wolverton Mill, Straight Creek, east side Mt. Pennell, August 12, 1956; and the follow-

ing also listed in Woodbury and Russell (1945:134): Colorado River near Rock Creek, July 27-28, 1937; Beaver Creek Canyon, north foot Navajo Mountain, August 7, 1936; Navajo Mountain, July 13, 1936; Kaiparowits Plateau, August 6, 1937. Total specimens, 12. In addition tanagers were seen at Dry Lake, north slope Mt. Hiller, Henry Mountains, August 14, 1956, and 6.5 miles north of Green River on August 18, 1956. The latter was a transient in the lowlands. Higgins saw a lone male flying over camp in Glen Canyon at the mouth of Aztec Canyon, river mile 68.5, on July 7, 1958, and a second lone male at the mouth of Kane Creek, river mile 41, on August 1. However, several birds of both sexes were seen along the Escalante River, about 1 mile upstream from its mouth on July 19, 1958.

Stanford (1931:9) found the species at King's Ranch, Henry Mountains, in mid-September, 1929. Tanner and Hayward (1934:231) indicate that specimens were collected in the aspen belt at Warner Ranger Station and in the oak belt at La Sal Pass in the La Sal Mountains. Benson (1935:445) obtained one on Navajo Mountain, which, according to Woodbury and Russell (1945:134), was taken at War God Spring on June 14, 1933. Summer residents.

Pheucticus melanocephalus melanocephalus (Swainson): Black-headed Grosbeak. Green River near Gunnison Butte, May 6, 1932; 14 miles north of Green River, May 24, 1947; Colorado River at mouth of Castle Valley, May 14, 1933; Beaver Creek, La Sal Mountains, July 16, 1956; Pine Flat, 8 miles southeast of Geysers Pass, east side of La Sal Mountains, July 19, 1956; Moab, June 6-8, 1956; Cooley Pass, Abajo Mountains, August 25, 1956; Kigalia Ranger Station, Elk Ridge, August 27, 1956; Wolverton Mill, Straight Creek, east side of Mt. Pennell, August 12, 1956, and the following also listed in Woodbury and Russell (1945:135): Beaver Creek Canyon, north foot Navajo Mountain, August 4, 1936; San Juan River, 35 miles above Colorado River, July 30, 1938. Total specimens, 15. In addition the species was seen at Dewey, May 21-23, 1953. Higgins saw only two individuals enroute down Glen Canyon during the summer of 1958, one in the top of an oak near the mouth of Aztec Creek, river mile 68.5, on July 26, the other in willows at river mile 46 on July 30.

Tanner and Hayward (1934:231) indicate that a specimen was taken in the aspen belt at Warner Ranger Station in the La Sal Mountains and the species observed at various other points. Benson (1935:443) lists the species for the mesa at the base of Navajo Mountain for June, 1933. Woodbury and Russell (*loc. cit.*) state that the species was seen many times on Navajo Mountain in the pine-oak belt between July 3 and 23 and in the spruce-fir forest on July 7 and 17, 1936. They list an additional specimen from Navajo Mountain taken August 15, 1935 (GC). Yet another observation given in Behle and Higgins (1959) is of one in Glen Canyon between miles 63 and 50 on August 5, 1938. Summer resident.

Guiraca caerulea (Linnaeus): Blue Grosbeak. Six miles north of Green River, August 18, 1956; Moab, June 8, 1956. Total specimens, four (2 juveniles). Woodbury (1939:162) reports a specimen in the collection of the High School at Moab taken at Moab in April, 1936. Woodbury and Russell (1945:136) found it along the banks of the Colorado River among tamarix and willows from mile 13 to Lee's Ferry (14 birds, a nest, and two nestlings), August 10-11, 1938. Higgins found blue grosbeaks to be abundant breeders along the length of Glen Canyon. They were usually found in the dense streamside vegetation, but occasionally were seen on the terraces or up side canyons. A young one was seen at Hite on July 2, 1958. Summer resident.

Passerina amoena (Say): Lazuli Bunting. Four miles north of Green River, June 22, 1941; Wolverton Mill, Straight Creek, east side of Mt. Pennell, Henry Mountains, August 12, 1956; Colorado River near Rock Creek, July 20, 1937 (Woodbury and Russell, 1945:137). Total specimens, three. Observed at Dewey, May 21, 1953, at Bromide Basin, Mt. Ellen, Henry Mountains, August 13, 1956, and at Bluff, August 26, 1956. Higgins saw only one in Glen Canyon, a singing male, at Kane Creek, river mile 41 on August 1, 1958. Tanner and Hayward (1934:231) found the species to be fairly common in the lower zones of the La Sal Mountains and took a specimen on July 2, 1927 at Bluff. Woodbury and Russell (*loc. cit.*) report the species common at Bluff and Rock Creek, where the specimens were taken, and note a specimen taken at War God Spring, Navajo Mountain, on August 13, 1935 (GC). Summer resident.

Hesperiphona vespertina brooksi Grinnell: Evening Grosbeak. Greenhalgh saw four at the head of Castle Creek, 9000 feet, on the northwest slope of the La Sal Mountains, on October 27, 1955, and later the same day a flock of twenty. Ghimelin observed six at Buckboard Flat, 5 miles west of Monticello, Abajo Mountains, on July 28, 1958. They were drinking from a puddle of water in a road in an aspen forest. Tanner and Hayward (1934:232) report a specimen taken and several birds noted at the lower edge of the spruce belt near Geyser Pass in the La Sal Mountains in late July, 1934. A number of these birds remained in the same locality during the party's entire stay in the region, thus suggesting nesting status. Winter visitant and possibly a sparse breeder.

Carpodacus cassinii Baird: Cassin's Finch. Beaver Creek, La Sal Mountains, July 16-19, 1956; 5 miles northeast of La Sal Post Office, April 8, 1938 (Behle, 1941:184); between Blanding and Verdure, May 12, 1933; Blanding, April 16, 1928. Total specimens, nine. Tanner and Hayward (1934:232) took a specimen from a small flock near Geyser Pass in the La Sal Mountains. Woodbury and Russell (1945:137) report two specimens from Navajo Mountain taken August 9 and 14, 1935 (GC). Summer resident.

Carpodacus mexicanus frontalis (Say): House Finch. Green River, April 14, 1934; Moab, April 30, 1937 and June 6-7, 1956; 19 miles southeast of Moab, April 2-6, 1938 (Behle, 1941:184); and the following also listed in Woodbury and Russell (1945:138): Bluff, April 28-29, 1935; Oljato, July 13, 1937; San Juan County, July 8, 1937; Colorado River, July 12, 1936; Colorado River at mouth and east of Rock Creek, July 20, 26, 1937; Navajo Trading Post, July 26, 1936. Total specimens, 26. The species was also observed at Dewey, May 21, 1953, and at the junction of the Dolores and Colorado rivers May 14, 1954. Higgins found them abundant throughout Glen Canyon during the summer of 1938. They were observed nearly every day in the streamside vegetation and on the terraces and hillsides. Tanner and Hayward (1934:232) took a specimen near Moab and found the species to be fairly common about the foothills of the La Sal Mountains. Benson (1935:442) found the species at Bridge Canyon, June 21-24, 1933. Woodbury and Russell (*loc. cit.*) cite early records from Bluff, Riverview, and Noland's Ranch on the San Juan River in 1892-93 and list three specimens from Noland's Ranch taken April 19, 21, 28, 1892 (AMNH); also one from Bluff, May 5, 1892 (AMNH). The many sight records of the Rainbow Bridge-Monument Valley expeditions for the San Juan River and lower Glen Canyon areas are listed in Behle and Higgins (1959). Behle (1948:306) found them abundant along the Colorado River at the mouth of Smith Fork, river mile 132, April 14, 1947, and at the mouth of Aztec Canyon, river mile 68.5, on April 15. Permanent resident.

Pinicola enucleator montanus Ridgway: Pine Grosbeak. We have but one sight record for Geyser Pass, La Sal Mountains, September 15, 1954. Tanner and Hayward (1934:232) took a juvenile there in late July, 1934, and noted several adults. Summer resident.

Leucosticte atrata Ridgway: Black Rosy Finch. Rock Creek, 3 miles north of Ferron, December 30, 1953; 6 miles north of San Rafael River, Emery County, February 7, 1953; near Crescent Junction, November 20, 1953; 12 miles south of Moab, October 28, 1931. Total specimens, 14. Greenhalgh observed a flock of about a hundred of these winter visitants near Fisher Point at the northwest portion of the La Sal Mountains on October 27, 1955.

Spinus pinus pinus (Wilson): Pine Siskin. Castle Valley, 15 miles northeast of Moab, October 30, 1931, and April 13, 1934; Beaver Creek, La Sal Mountains, July 16, 1956; Moab, June 8, 1956; 19 miles southeast of Moab, April 3-4, 1938 (Behle, 1941-184); Henry Mountains, September 12, 1929 (Stanford, 1931:9). Total specimens, eight. The species was seen at Pennellen Pass in the Henry Mountains on August 12, 1956. Tanner and Hayward (1934:232) found great numbers of these birds in the La Sal Mountains and obtained specimens at Geyser Pass. Benson (1935:445) lists the species for Navajo Mountain in mid-June, 1933. Woodbury and Russell (1945:139) report that they were seen daily at War God Spring, Navajo Mountain, July 13-21, 1936. Summer resident.

Spinus tristis pallidus Mearns: American Goldfinch. Castleton, October 30, 1931. One specimen. In our field work we did not observe the species, and Higgins saw only a lone bird in Glen Canyon at the mouth of Seven Mile Canyon, river mile 141, on July 8, 1958. Woodbury and Russell (1945:139) give an early observation that they were common near Bluff, November 8-15, 1893. Behle (1948:306) saw a flock of 45 or more along the Colorado River at the mouth of Smith Creek on April 14, 1947. Permanent resident.

Spinus psaltria hesperophilus (Oberholser): Lesser Goldfinch. Woodbury and Russell (1945:140) give sight records for War God Spring on Navajo Mountain, July 10-13, 1936, and Navajo Mountain Trading Post, July 27, 29, 1936. Permanent resident.

Loxia curvirostra bendirei Ridgway: Red Crossbill. War God Spring, Navajo Mountain, August 13, 1935 (Woodbury, 1939:162 and Woodbury and Russell, 1945:141). One specimen. Status uncertain; may be transient.

Loxia curvirostra benti Griscom: Red Crossbill. Five miles northeast of La Sal Post Office, April 8, 1938 (Woodbury, 1939:162 and Behle, 1941:184). One specimen. According to Griscom this is an intergrade between *benti* and *grinnelli*, with a long bill. Status uncertain; may be transient.

Loxia curvirostra stricklandi Ridgway: Red Crossbill. War God Spring, Navajo Mountain, August 12, 1935 (Woodbury, 1939:162 and Woodbury and Russell, 1945:141). One specimen. Transient or vagrant.

Although erratic in their movements and breeding times, crossbills probably are summer or fall residents of all the mountains of southeastern Utah. In addition to the three specimens listed representing three different races, three individuals were seen in the La Sal Mountains at Beaver Basin on July 19, 1956. There is a head only in the collection from Jackson Ridge, 25 miles north of Blanding in the Abajo Mountains, which represents all that was saved of a specimen found on July 11, 1947. Woodbury and Russell (*loc. cit.*) report a flock of 30 or 40 birds seen in the pine and spruce-fir forest on Navajo Mountain many times between July 2 and 23, 1936. A group of 12 was observed there on August 13, 1936.

Chlorura chlorura (Audubon): Green-tailed Towhee. Muddy Creek Canyon 3 miles northwest of Emery, May 11, 1937; Beaver Creek, La Sal Mountains, July 16, 1956; Geyser Pass, La Sal Mountains, September 14, 1954; Kigalia Ranger Station, August 27, 1956; Trachyte Ranch, 35 miles south of Hanksville, May 16, 1952; Pen-nelien Pass, Henry Mountains, August 12, 16, 1956, and the following also listed in Woodbury and Russell (1945:141): Bluff, May 11, 1933, and April 29, 1935; Kaiparowits Plateau, August 3, 12, 1937. Total specimens, 13. The species was also seen in the La Sal Mountains at Warner Ranger Station on September 17, 1954, and Beaver Creek, September 13, 1955, and at 6 miles north of Green River on August 18, 1956. Tanner and Hayward 1934:232) found this to be one of the most common birds in the La Sal Mountains, occurring in open parks in the spruce belt. They report a nest being found near La Sal at 8000 feet on June 17, 1927. Summer resident.

Pipilo erythrophthalmus montanus Swarth: Rufous-sided Towhee. Moab, October 25, 1931, and April 30, 1937; 15 miles southeast of Moab, April 9, 1934; 5 miles northeast of La Sal Post Office April 7-8, 1938 (Behle, 1941:184); Natural Bridges National Monument, June 11, 1936; Woodruff Spring, 20 miles northwest of Hite, southern base of Mt. Hillers, Henry Mountains, May 16, 1952; Sanford Ranch, 30 miles south of Hanksville, May 17, 1952; junction Colorado River and Aztec Creek, July 26, 1958; and the following also listed in Woodbury and Russell (1945:14): Beaver Creek Canyon, north foot of Navajo Mountain, August 7, 1936; Navajo Mountain, July 3, 1936; Kaiparowits Plateau, July 30-31 and August 10, 1937. Total specimens, 36. In addition the species was seen along the lower portion of Beaver Creek in the La Sal Mountains on September 12, 1955, and July 13, 1956, and at timberline, above Bromide Basin, Mt. Ellen, Henry Mountains, August 13, 1958. In his trip down Glen Canyon during the summer of 1958, Higgins saw only two individuals, both at the mouth of Aztec Creek, on July 26, one of which was obtained as a specimen. An observation of H. N. Russell, Jr., of eight being seen at Navajo Creek Canyon on July 9, 1936, is given in Behle and Higgins (1959).

Tanner and Hayward (1934:232) found the species to be common in the oak belt of the La Sal Mountains. A nest was located near La Sal at 8000 feet, on June 13, 1927. Benson (1935:445) obtained three specimens on Navajo Mountain, according to Woodbury and Russell (*loc. cit.*) on June 13, 14 and 17, 1933. They also give an early record indicating that the species was common around Bluff, November 8-15, 1893. Behle (1948:306) saw one along the Colorado River at the mouth of Smith Fork, river mile 132 on April 14, 1947. Summer resident.

Passerculus sandwichensis nevadensis Grinnell: Savannah Sparrow. Near Emery, May 11, 1937; 1 mile west of Moab, April 10, 1934; Blanding, April 15, 1928; Henry Mountains, September 12, 1929 (Stanford, 1931:10). Total specimens, five. Transient with possibly some localized breeding, but suitable habitat for the species is rare in this arid region.

Pooecetes gramineus confinis Baird: Vesper Sparrow. Near Emery, May 11, 1937; Castle Valley, 15 miles northeast of Moab, April 13, 1933. Total specimens, three. Also observed at Dewey, May 21-23, 1953. Tanner and Hayward (1934:232) found it abundant in the sagebrush around La Sal and obtained one specimen. Woodbury and Russell (1945:143) list a specimen from Bluff taken July 2, 1927 (BYU), which is probably the one referred to by Tanner and Hayward. Summer resident.

Pooecetes gramineus affinis Miller: Vesper Sparrow. Warner Ranger Station, La Sal Mountains, September 16, 1954; King Ranch, Henry Mountains, September 9, 1939 (Stanford, 1931:10). Total specimens, two. Transient.

Chondestes grammacus strigatus Swainson: Lark Sparrow. Near Emery, May 11, 1937; Dewey, May 21, 1953; Castle Valley, May 13, 1933; Moab, June 8-9, 1956; Cooley Pass, Abajo Mountains, August 25, 1956; Starr Ranch, 22 miles west of Hite, May 16, 1952; Wolverton Mill, Straight Canyon, east side Mt. Pennell, Henry Mountains, August 12, 1956; Pennellen Pass, August 13, 1956; and the following listed in Woodbury and Russell (1945:144): Bluff, April 29, 1935; near Navajo Mountain Trading Post, July 26, 1936; Kaiparowits Plateau, August 4, 1937. Total specimens, 14. The species was seen at Castle Valley on September 16, 1955. Higgins found them breeding at Hite on July 2, 1958, and found a nest with three young under rabbit brush. Tanner and Hayward (1934:232) report a specimen from Moab. Woodbury and Russell (*loc. cit.*) list one from Riverview on the San Juan River, April 28, 1892 (AMNH), and from Bluff, July 2, 1927 (BYU). Two observations of Woodbury for 1938 of birds seen at the mouth of the San Juan River and at mile 75 of Glen Canyon on August 2 and 3 are given in Behle and Higgins (1959). Summer resident.

Amphispiza bilineata deserticola Ridgway: Black-throated Sparrow. John's Canyon, 22 miles northwest of Mexican Hat, May 2, 1935; Ekker's Ranch, 25 miles east of Hanksville, May 19, 1951; and the following all listed in Woodbury and Russell (1945:145): Bluff, April 29, 1935; Garnet Ridge, 6 miles southeast of Mexican Hat, July 8, 1937; Gouldings, July 12, 1937; Ojato, July 13, 1937; Colorado River near Rock Creek, July 21, 26, 1937; 1 mile north of Navajo Trading Post, July 27, 1936. Total specimens, nine. Whitney saw the species at Coyote Gulch, north side Kaiparowits Plateau, 40 miles southeast of Escalante, in August, 1957, and Higgins observed the species singing from the tops of shadscale and rabbit brush on terraces along the Colorado River in Glen Canyon near Aztec Creek at about river mile 68. Woodbury and Russell (*loc. cit.*) also list a specimen from Bluff taken July 2, 1927 (BYU), and Monument Valley, July 4, 1927 (BYU). A nest with eggs was found at Ojato, July 14, 1937, which they surmised represented a second nesting. Several of their sight records along the San Juan River and lower Glen Canyon for August, 1938, are presented by Behle and Higgins (1959). Summer resident.

Amphispiza belli nevadensis (Ridgway): Sage Sparrow. Moab, April 30, 1937; Ekker's Ranch, May 19, 1951; Colorado River at Warm Creek, July 15, 1936 (Woodbury and Russell, 1945:147). Total specimens, four. Benson (1935:443) found this species on the mesa at the base of Navajo Mountain in June, 1933. Summer resident.

Junco hyemalis hyemalis (Linnaeus): Slate-colored Junco. Five miles northeast of La Sal Post Office, April 7, 1938 (Behle, 1941:184). One specimen. Winter visitant.

Junco hyemalis cismontanus Dwight: Slate-colored Junco. Nineteen miles southeast of Moab, April 3, 6, 1938 (Behle, 1941:184). Total specimens, two. These show some characters of *Junco oreganus*. Winter visitant.

~ *Junco oreganus montanus* Ridgway: Oregon Junco. Green River, October 31, 1931; Mill Creek Canyon, 4 miles northeast of Moab, December 20, 1935; 9 miles south of Moab, December 22, 1955; 19 miles southeast of Moab, April 3, 6, 1938 (Behle, 1941:184). Total specimens, seven. Winter visitant.

Junco oreganus mearnsi Ridgway: Oregon Junco. Nineteen miles southeast of Moab, April 3, 6, 1938, and 5 miles northeast of La Sal Post Office, April 7, 1938 (Behle, 1941:184). Total specimens, four. Winter visitant.

Junco oreganus shufeldti Coale: Oregon Junco. Five miles southeast of Moab, April 9, 1934; John's Canyon, 22 miles northwest of Mexican Hat, May 1, 1935, and Bluff, April 28, 1935 (Woodbury and Russell, 1945:148). Total specimens, three.

In addition, the species was seen at Dead Horse Point March 17, 1956, and at Hite on October 21, 1958; and Behle (1948:306) noted some at Hite on April 13, 1947. Woodbury and Russell (1945:148) under the subspecific listing of *J. o. shufeldti* give a sight record that juncos were common near Bluff, November 8-15, 1893. Winter visitant.

Junco caniceps caniceps (Woodhouse): Gray-headed Junco. Beaver Creek, La Sal Mountains, September 13, 15, 1955, and July 16, 1956; 19 miles southeast of Moab, April 2-8, 1938 (Behle, 1941:184); Cooley Pass, Abajo Mountains, August 24, 1956; Kigalia Ranger Station, Elk Ridge, June 12, 1936; Henry Mountains, Bromide Basin, Mt. Ellen, August 13, 1956; Dark Canyon, north slope of Mt. Pennell, August 16, 1956; Wolverton Mill, Straight Creek, eastern slope of Mt. Pennell, August 12, 15, 1956; Navajo Mountain, August 14, 1935, and July 10-12, 18, 1936 (Woodbury and Russell, 1945:148). Total specimens, 27. In our late summer and fall field work this junco was the commonest bird in all the mountain ranges as they were feeding at the edges of clearings. Tanner and Hayward (1934:232) found this to be the most abundant species in the open parks of the spruce-aspen belt in the La Sal Mountains and obtained specimens at Geyser Pass. A nest was found on July 17, 1934, containing three newly hatched young and one egg. Nearly full-grown young were seen on July 23. Benson (1935:445) obtained three specimens on Navajo Mountain, the date of which, as given by Woodbury and Russell (*op. cit.*:149), was June 16, 1933. They further state that breeding birds were common on Navajo Mountain from July 1 to 23, 1936. Woodbury and Russell (*loc. cit.*) consider their birds to be atypical of *J. c. caniceps*, inclining toward *J. c. dorsalis*. Summer resident.

Spizella arborea ochracea Brewster: Tree Sparrow. Moab, December 21, 1955. Total specimens, three. These winter visitants occurred in willows along the Colorado River. Woodbury and Russell (1945:150) give an early observation that the species was common in small flocks around Bluff from November 8 to 15, 1893. Winter visitant.

~ *Spizella passerina arizonae* Coues: Chipping Sparrow. Three miles northwest of Emery, May 11, 1937; Castle Valley, 15 miles northeast of Moab, April 13-14, 1934; Beaver Creek, La Sal Mountains, July 16, 1956; Warner Ranger Station, September 16, 1934; Ekker's Ranch, 25 miles east of Hanksville, May 19, 1951; Pennellen Pass, Henry Mountains, August 14, 16, 1956; Henry Mountains, September 12, 1929 (Stanford, 1931:10); and the following also listed in Woodbury and Russell (1945:150): Navajo Mountain, July 4, 1936; near Navajo Mountain Trading Post, July 23, 1936; 12 miles west of Mexican Hat, May 1, 1935. Total specimens, 12. The species was seen at Dewey, May 21-23, 1953, and they were common at the edges of clearings in the spruce-fir forest at Cooley Pass, Abajo Mountains, August 24-25, 1956. Higgins saw several in Glen Canyon at the White Canyon Post Office near Hite on July 2, 1958. Tanner and Hayward (1934:233) found this species to be common throughout all the zones to the alpine in the La Sal Mountains and obtained two specimens. Benson (1935: 443) lists this as occurring on the mesa at the base of Navajo Mountain as well as on the mountain in mid-June, 1933.

Woodbury and Russell (*loc. cit.*) list another specimen from Navajo Mountain taken August 16, 1935 (GC), and state that the species was most common there in the pines, July 1-18, 1936, when young just out of the nest were seen. They also report that the species was observed in Monument Valley, August 15-18, 1936, and a juvenile on the Colorado River 69 miles above Lee's Ferry, August 3, 1938. Yet another observation of Russell of four in Beaver Creek Canyon, August 5, 1936, is given in Behle and Higgins (1959). Summer resident.

↳ *Spizella breweri breweri* Cassin: Brewer's Sparrow. Three miles northwest of Emery, May 11, 1937; 7.6 miles north of Green River, August 18, 1956; Moab, April 30, 1937; La Sal Mountains, Beaver Creek, September 14, 1955; Warner Ranger Station, September 16, 1954; Geyser Pass, September 14, 1954; 7 miles north of Bluff, August 26, 1956; Ekker's Ranch, 25 miles east of Hanksville, May 18-19, 1951; King's Ranch, Henry Mountains, September 10, 1929 (Stanford, 1931:10); and the following also listed in Woodbury and Russell (1945:151): 12 miles west of Mexican Hat, May 1, 1935; Beaver Creek Canyon, north foot of Navajo Mountain, August 8, 1936; Kaiparowits Plateau, July 31, 1937. Total specimens, 15. Higgins observed two birds on a terrace of Glen Canyon near Ticaboo Creek, river mile 148, on July 6, 1958. Benson (1935:443) lists the species for the mesa at the base of Navajo Mountain, the dates being, according to Woodbury and Russell (*loc. cit.*), on June 12 and 27, 1933. They found it there on June 20 and July 30, 1936. Russell saw one at Beaver Creek Canyon on August 8, 1936 (see Behle and Higgins, 1959). Summer resident.

Zonotrichia leucophrys gambelii (Nuttall): White-crowned Sparrow. Castle Valley, 15 miles northeast of Moab, April 13, 1934; Beaver Creek, La Sal Mountains, September 13, 16, 1955; near Moab, October 25, 1931; 19 and 23 miles southeast of Moab, April 5, 1938 (Behle, 1941:184); Bluff, April 28-29, 1935 (Woodbury and Russell, 1945:153). Total specimens, ten. Woodbury and Russell (*loc. cit.*) list three specimens from Noland's Ranch and Riverview on the San Juan River taken April 20, 27-28, 1892 (AMNH), and further indicate that the form was common around Bluff on November 8-15, 1893. Transients and winter visitants.

↳ *Zonotrichia leucophrys oriantha* Oberholser: White-crowned Sparrow. Near Emery, May 11, 1937; Moab, April 30, 1937; near Bluff, May 20, 1947; Ekker's Ranch, 25 miles east of Hanksville, May 19, 1951. Total specimens, four. Probably summer residents in the mountains and winter visitants in the lowlands.

White-crowned sparrows were seen near timberline in Beaver Basin at the head of Beaver Creek in the La Sal Mountains on July 19, 1956, and were probably breeding. Tanner and Hayward (1934:233) found them fairly common in the open parks in the spruce belt and made collections at Geyser Pass. We saw the species at Cooley Pass, Abajo Mountains, August 25, 1956. Winter visitants were common in the river side vegetation at Moab on December 22, 1955. Migrants were seen at Hite on October 21, 1958, where Behle (1948:306) also noted a few on April 13, 1947.

Passerella iliaca swarthi Behle and Selander: Fox Sparrow: Beaver Creek, La Sal Mountains, September 15, 1955, and July 16-17, 1956. Total specimens, five. Three of the July specimens are juveniles. The species occurred in dense willow thickets bordering and interspersed in a meadow area. Summer resident.

Melospiza lincolni lincolni (Audubon): Lincoln's Sparrow. Moab, April 9, 1938 (Behle, 1941:184). Total specimens, five. Transient.

Melospiza lincolni alticola (Miller and McCabe): Lincoln's Sparrow. Beaver Creek, La Sal Mountains, July 16, 1956. Total specimens, two. One is a juvenile. Summer resident.

↳ *Melospiza melodia montana* Henshaw: Song Sparrow. Little Castle Valley, October 30, 1931; Beaver Creek, La Sal Mountains, July 16-18, 1956; Moab, April 9, 1938 and December 21, 1955; Mill Creek Canyon, 4 miles northeast of Moab, December 20, 1955; 19 miles southeast of Moab, April 4-5, 1938 (Behle, 1941:184). Total specimens, 19. In our experience breeding birds were uncommon because of the scarcity of breeding habitat, namely willow thickets along streams or bordering

wet meadows at middle elevations around 6500-7500 feet. Transients and winter visitants were common. Probably there is altitudinal migration, but mostly an influx of winter visitants from the north. During non-breeding times song sparrows ranged widely and were not dependent upon water for their occurrence. Two were seen at the mouth of Kane Creek on October 18, 1958. Tanner and Hayward (1934:233) state that a specimen was collected at La Sal in the oak belt and that the species was uncommon in the region. Woodbury and Russell (1945:153) give an early observation that the species was common along the river banks and in the brush of gardens and farms at Bluff and Noland's Ranch near Four-Corners, November 8-15, 1893. Permanent resident.

LITERATURE CITED

- BEHLE, W. H.
 1941. A collection of birds from the La Sal Mountain region of southeastern Utah. *Wilson Bull.*, 53:181-184.
 1943. Birds of Pine Valley Mountain region, southwestern Utah. *Bull. Univ. Utah*, 34(2):1-85.
 1944. Check-list of the birds of Utah. *Condor*, 46:67-87.
 1948. Birds observed in April along the Colorado River from Hite to Lee's Ferry. *Auk*, 65:303-306.
 1955. The birds of the Deep Creek Mountains of central western Utah. *Univ. Utah Biol. Ser.*, 11(4):1-34.
 1957. The birds of the Raft River Mountains, northwestern Utah. *Univ. Utah Biol. Ser.*, 11(6):1-40, 6 figs. in text.
- BEHLE, W. H., J. B. BUSHMAN and C. GREENHALGH
 1958. The birds of Kanab Utah and adjacent high plateaus. *Univ. Utah Biol. Ser.*, 11(7):1-92, 8 figs. in text.
- BEHLE, W. H., and H. HIGGINS
 1959. The birds of Glen Canyon. In *Ecological studies of the flora and fauna in Glen Canyon. Univ. Utah Anthropological Papers*, No. 40 (Glen Canyon Series, No. 7): 107-133.
- BEHLE, W. H. and R. K. SELANDER
 1952. New and additional records for Utah birds. *Wilson Bull.*, 64:26-32.
- BENSON, S. B.
 1935. A biological reconnaissance of Navajo Mountain, Utah. *Univ. Calif. Publ. Zool.*, 40(14):439-456.
- COTTAM, C.
 1941. Indigo bunting and band-tailed pigeon in Utah. *Condor*, 43:122.
- FLOWERS, S.
 1959. Vegetation of Glen Canyon. In *Ecological studies of the flora and fauna in Glen Canyon. Univ. Utah Anthropological Papers*, No. 40 (Glen Canyon Series, No. 7):21-61.
- MILLER, A. H., and L. MILLER
 1951. Geographic variation of the screech owls of the deserts of western North America. *Condor*, 53:161-177.
- RIPLEY, S. D.
 1954. Olathe quail in Utah. *Wilson Bull.*, 66:139.
- SELANDER, R. K.
 1954. A systematic review of the booming nighthawks of western North America. *Condor*, 56:57-82.
- STANFORD, J. S.
 1931. Records of birds in central and southeastern Utah. *Bull. Univ. Utah*, 21(8) April, 1931, *Biol. Ser.* 1(5), pp. 1-10.
- TANNER, V. M., and C. L. HAYWARD
 1934. A biological study of the La Sal Mountains, Utah. *Proc. Utah Acad. Sci., Arts, Letters*, 11:209-235.
- TWOMEY, A. C.
 1942. The birds of the Uinta Basin, Utah. *Ann. Carnegie Mus.*, 28:341-490.

WOODBURY, A. M.

1939. Bird records from Utah and Arizona. *Condor*, 41:157-163.

1958. Annotated check list of the birds. In Preliminary report on biological resources of the Glen Canyon reservoir. *Univ. Utah Anthropological Papers*, No. 31 (Glen Canyon Series No. 2):181-208.

WOODBURY, A. M., C. COTTAM and J. W. SUGDEN

1949. Annotated check-list of the birds of Utah. *Bull. Univ. Utah*, 39(16), Biol. Ser., 11(2):1-40.

WOODBURY, A. M., and H. N. RUSSELL, JR.

1945. Birds of the Navajo country. *Bull. Univ. Utah*, 35(14) Biol. Ser., 19(1), 160 pp. + Map.