

faced Glossy Ibis was observed June 14 one and a half miles south of Rupert. This, apparently, is a new record for this area.

SUMMARY

A review of the bird population of a restricted area in the vicinity of Rupert, Minidoka County, Idaho, based upon observations during the years 1919-1921, reveals the presence of 147 species of birds.

This population is segregated into five classes as follows: Permanent residents, 19; summer visitants, 41; winter visitants, 18; regular migrants, 26; erratic in occurrence, 43.

The large number of erratic occurrences is explained by the hypothesis that Rupert is between two major migration routes; hence the frequent appearance of stragglers. Also, the limited size of the area studied resulted in erratic presence of birds whose natural habitats were adjacent, but not strictly within the area.

Comparison of the avifauna of Bannock County, Idaho, with that of the Rupert area revealed certain differences. Contrasts in size, topography and climate of the two areas (plus geographical location) probably explain these.

Recent (1934) changes in the avifauna are noted. Some species have decreased in numbers due to the drought and to the intentional drainage of marshy areas; Black and Caspian terns have increased. Brewster Egrets, first observed in 1919, have established themselves during the past few years; the appearance of the White-faced Glossy Ibis is recorded.

Museum of Vertebrate Zoology, Berkeley, California, November 16, 1934.

NOTES ON BIRDS IN DEATH VALLEY

By M. FRENCH GILMAN

A residence of more than six months in Death Valley, from October 23, 1933, to May 9, 1934, gave me unusual opportunity to study the bird life of the below-sea-level area. Adopting sea level as a limit to the area of operations as done by Joseph Grinnell in his articles, was a most logical idea. This limit has been adhered to (except where otherwise stated) in this report. As Acting Custodian of Death Valley National Monument my duties called for a somewhat general supervision of the area and necessitated many trips, these giving extra opportunities.

A feeding station for attracting wild animals was established near the overflow ponds nearly half a mile below Furnace Creek Ranch. This proximity to the ponds afforded a good chance to observe migratory water birds, particularly as trips were made almost daily to replenish the food at the station. As an attraction for the wild animals, coyotes, foxes and wildcats in particular, the station brought little result other than tracks of these animals in the morning. Burros were the best customers until the station was moved inside a fenced field nearby in order to give the desired visitors a chance. Ravens became most numerous, forty being counted one morning and several being present regularly and becoming somewhat tamer. From October till along in February the Magpies were regular visitors at the "table," ten being the most counted at one time.

Besides watching these overflow ponds, trips were made to the ponds at Eagle Borax Works where water birds were usually seen. All notes in this paper are based on "sight identifications," which fact may detract from its highest scientific

value in the eyes of some. As a matter of fact my duties as custodian included the protection of all wildlife and I could not consistently shoot birds while trying to prevent all shooting. So perforce I was obliged to use binoculars and what stalking experience I had. I believe my identifications to be fairly accurate.

Podilymbus podiceps. Pied-billed Grebe. One seen on April 24 and 28 at Furnace Creek Ranch (hereafter called the Ranch).

Ardea herodias treganzai. Great Blue Heron. Four records; January 20, February 8, March 15 and 21, at the Ranch.

Casmerodius albus egretta. America Egret. One record. On the morning of April 18, four were seen at the ponds below the Ranch. They were not very wild and allowed a fairly near approach before flying. On November 8, 1933, I saw one at Saratoga Springs at the south end of Death Valley about 20 feet above sea level, hence not a part of the area considered. However, it is mentioned as possibly indicating that both fall and spring migration routes of this bird may include Death Valley.

Butorides virescens anthonyi. Anthony Green Heron. Four records, at the Ranch: April 24, one; April 28, one; May 4, one; May 7, two.

Ixobrychus exilis. Least Bittern. One record. One seen the morning of May 4 on the edge of a pond below the Ranch.

Plegadis guarauna. White-faced Glossy Ibis. One record. At Eagle Borax Works, one bird was seen May 2 and May 5.

Chen hyperborea. Snow Goose. One record. October 30, one was seen at Eagle Borax Works. When first seen it was eating grass and allowed an approach to within about 25 yards before taking flight. It circled and then lit and resumed its meal.

Anas platyrhynchos. Mallard. Three records, at the Ranch, November 21, two; April 12, one; April 17, two. Previously reported but once, January 23, 1891.

Chaulelasmus streperus. Gadwall. Five records. Eagle Borax Works, December 27, two; at the Ranch, February 10, two; April 16 and 17, three, probably the same birds, as there were two females and one male; April 18, one female on the pond. Quite tame, showing no indication of having been shot at recently.

Mareca americana. Baldpate. Six records. Seen December 5, five birds; December 17, six birds; March 4 and 5, one and three birds; April 2, one bird.

Dafila acuta. Pintail. Ten records. First recorded at the Ranch, where six were seen on October 27. At Eagle Borax Works, October 30, five. At the Ranch, February 9, two males and a female, and on February 12 and 25, one on each date; March 5, 6 and 7, one bird each day; and on March 15 and 22, two birds each day. The last appearance was March 24, when two birds were seen.

Nettion carolinense. Green-winged Teal. Many records. First seen November 29 when three were on the pond at the Ranch. Seen during December six times, totaling 24 birds. In January were six occurrences, totaling 36 birds. In February, 14 occurrences with total of 133 birds; March, 11 instances with total of 59 birds; April, with three recorded dates and 10 birds; and May, two records, 2 birds. The last one was seen on May 7. Twenty-eight birds formed the largest flock and 267 of these ducks were recorded for the season.

Querquedula discors. Blue-winged Teal. On the ponds at the Ranch, April 1, a male and a female. Along with them were 27 Cinnamon Teal and 2 Green-winged Teal. Also noted on April 2, 3, and 4. At Eagle Borax Works, April 13, 16, and 20, possibly the same bird. April 24, two at the Ranch, undoubtedly new arrivals. I think at least three records were different groups of birds, the other dates being repeaters.

Querquedula cyanoptera. Cinnamon Teal. Many records. The most numerous duck. First observed February 25, when two were on the pond below the Ranch. During March, seen on 20 days, total of 203 ducks. In April there were 19 dates of occurrence with a total of 204 birds; in May, 7 dates with 24 birds. The last appearance was on May 7 with two birds. In all, 365 Cinnamon Teal were seen, the largest flock numbering 29.

Spatula clypeata. Shoveller. Five records totalling eleven birds. One record in November and the others in December.

Nyroca americana. Redhead. Three records. At the Ranch, January 15, five; at Eagle Borax Works, February 21 and 22, one, probably the same bird. The last one was seen at the Ranch on April 9.

Nyroca affinis. Lesser Scaup Duck. Six records. At the Ranch, January 15, one; February 5, ten. At Eagle Borax Works, February 22, three; March 17, one; April 9, one. Furnace Creek Ranch, March 17, one.

Glaucionetta clangula americana. American Golden-eye. One record. On the pond at the Ranch, April 24, one. I took a chance and tried to collect it. It fell over on its side a few feet from the shore and floated toward the bank. I laid down the gun and went to pick up the duck. When I came within four feet of the bird it rose from the water and soon flew out of sight; my gun was too far to reach in time for another shot.

Charitonetta albeola. Buffle-head. First seen at Saratoga Springs, which is not below sea level, on November 8, three, one male and two females. Five records: On the pond at the Ranch, November 29, one, a female; December 3, two, a male and a female; February 25, one, a female; April 9, one; April 20, one. At Eagle Borax Works, April 13, one; April 16, 18, and 19, one, probably the same bird.

Erismatura jamaicensis rubida. Ruddy Duck. One record. At Eagle Borax Works, May 5, one male and two females.

Mergus merganser americanus. American Merganser. On a pond below Furnace Creek Ranch, March 19, one, quite tame and stayed around all day, being seen in the morning and again in the evening; but was gone the next morning.

Accipiter velox. Sharp-shinned Hawk. Seen a few times at the Ranch and at Eagle Borax Works where they frequented the growth near the water where small birds lingered. First noted in November.

Accipiter cooperii. Cooper Hawk. Commonest of all hawks in Death Valley. First appeared in November and from then on seen frequently. Hung around all the water holes, and one day I saw one strike a teal in the air, but fail to get it as the duck reached the water and hid in some weeds. I really think this hawk should be thinned out in this vicinity as it tends to disturb the balance of nature where said balance is so diluted. But it may be better to let nature take her course. Noted once at the meat table, but not seen actually eating the scraps.

Buteo borealis calurus. Western Red-tailed Hawk. Frequently seen sailing around and sometimes perched on a mesquite tree. Frequents the watered localities where rabbits reside and where two species of ground squirrels are more frequent than on the alkali and salt flats. Seen once patronizing the meat table.

Buteo albonotatus. Zone-tailed Hawk. One record. On the morning of January 11, I saw one perched on a mesquite tree near the ponds below the Ranch. It allowed me to approach to within thirty yards where I studied it through binoculars at my leisure, easily making out the distinguishing marks. A nearer approach scared the bird into flight. A search on the next day and later failed to reveal it again.

Buteo regalis. Ferruginous Rough-leg. One record; at Mesquite Well a few miles south of Bennett's Well, November 13, one perched on a mesquite tree not far from the road. It allowed me to approach as near as 80 yards before taking flight.

Circus hudsonius. Marsh Hawk. First noted, October 30, and seen occasionally until spring. Observed on three occasions eating meat scraps at the feeding station. Once a big black cat ran at the bird and scared it from the meat, but the hawk circled and made a swoop at the feline which thereafter kept at a respectful distance.

Falco mexicanus. Prairie Falcon. A few observed at various points in the Valley. Seemingly has no favorite hunting ground but is a free rover. Noted a few times near water holes where ducks were the objective. One day I saw a falcon strike a Shoveller in flight and the duck dropped to the water along with the rest of the flock. They hit the water a few feet from where I stood but seemed unafraid of me, swimming at once toward some brush at the edge of the water. I experimented by walking near them, but not one took to the air, seeming to prefer the lesser evil.

Porzana carolina. Sora. One record. At the Ranch one was flushed at the edge of the water from some bushes and ran into other shelter a few feet away, affording a good sight of itself in transit.

Fulica americana. American Coot. Many records. Seen frequently at all watering places during the months from December to May. The greatest number seen

together was four, except at Saratoga Springs outside our limits, where thirty were seen at once.

Oxyechus vociferus. Killdeer. Many records. Seen at all watering places as often as visited. First one observed on October 30 and thereafter on to date when I left the Valley, in May. One with four little ones was noticed, April 30, at a small pool of water between the Ranch and Furnace Creek. Later these were seen near the swimming pool at the Inn. The breeding of this bird in Death Valley is thus established.

Capella delicata. Wilson Snipe. Many records. I notice with one exception that all occurrences of this bird recorded by Grinnell were in the month of April. The one exception was a record by Mr. Dane Coolidge of date December 30, 1919. My first record was on November 24, 1933, and from that time on to May 2, when the last was seen, snipe were much in evidence, mostly at Eagle Borax Works, where they found better feeding grounds, but also in the wet lands at the Ranch. They undoubtedly winter to some extent in Death Valley.

Actitis macularia. Spotted Sandpiper. Five records. At the Ranch, April 24 and 28, two; April 30, one; May 3, four. At Eagle Borax Works, May 2, two.

Tringa solitaria cinnamomea. Western Solitary Sandpiper. Four records. At the Ranch, April 19, one; April 29, one; May 4, one. At Eagle Borax Works, April 20, two.

Totanus melanoleucus. Greater Yellow-legs. Eight records. At Eagle Borax Works, February 27, four; April 13, one. At the Ranch, March 9, one; March 19, one; April 4, two; April 9, one; April 16, four; April 3, two. A total of sixteen observed.

Pisobia minutilla. Least Sandpiper. Four records. At Eagle Borax Works, November 24, three; March 12, one; April 20, fourteen. At the Ranch ponds, April 21, two.

Recurvirostra americana. Avocet. One record. At the Ranch ponds, April 28 and 29, one each day, undoubtedly the same bird.

Steganopus tricolor. Wilson Phalarope. Five records. At Eagle Borax Works, May 2, three. At the Ranch, May 2, one; May 4, one; May 5, three; May 7, one.

Geococcyx californianus. Road-runner. I must have been fortunate in my experience with this bird, as previously only tracks and the so-called singing have been recorded. Single birds were noted frequently and pairs sometimes seen. Below the Ranch, at Tule Springs and at Eagle Borax Works, pairs of the birds were encountered. Several old nests were noted and at Eagle Borax Works a nest containing two partly incubated eggs was found, May 2. The nest was placed in a mesquite tree about three and one-half feet off the ground and in construction it was typical for the species.

Speotyto cunicularia hypugaea. Burrowing Owl. Seen but once. On one of the few damp days one was flushed from under a section of galvanized roofing iron, and a few hours later while a light shower was falling the bird was again scared from beneath the same shelter.

Asio flammeus. Short-eared Owl. One record. On December 8, Mr. A. E. Borell picked up a dead male Short-eared Owl at Furnace Creek Ranch. The bird was in fine plumage and was preserved as a specimen.

Phalaenoptilus nuttallii. Nuttall Poorwill. First observed November 13. Noticed in the spring catching insects in the evenings around the electric lights at the Ranger Station. Apparently a few winter in Death Valley, as a dead one was picked up in January.

Megaceryle alcyon caurina. Western Belted Kingfisher. Seen but once, below the Ranch, on April 16.

Myiarchus cinerascens cinerascens. Ash-throated Flycatcher. Seen but once, March 24, at the Ranch.

Pyrocephalus rubinus mexicanus. Vermilion Flycatcher. Four occurrences, March 15 and 27, April 2 and 14, one bird on each date, all males.

Pica pica hudsonia. Black-billed Magpie. Observed almost daily from October until February 13 when five were seen below the Ranch. Noted but three times at Eagle Borax Works. They were consistent customers of the feeding station below the Ranch and not infrequently as many as ten were seen at one time. They never were tame, but became less wild as time went on.

Corvus corax sinuatus. American Raven. Numerous to both ear and eye. Frequented the feeding station in numbers, forty being counted there one morning. A nest was found in a crevice high on an inaccessible cliff not far from the sea level line.

Corvus brachyrhynchos hesperis. Western Crow. Observed twice flying over the floor of the valley. Another seen at Stovepipe Wells Hotel, that two ravens had attacked and had driven into the lobby of the hotel.

Mimus polyglottos leucopterus. Western Mockingbird. Only two seen, May 4, at the Ranch.

Oreoscoptes montanus. Sage Thrasher. First seen, November 24; last, April 16. Present in small numbers at varying dates during the intervening time, from the Ranch down the valley as far as Bennett's Well.

Sialia mexicana occidentalis. Western Bluebird. The nearly complete absence of this bluebird is strange when the Mountain Bluebird was comparatively common. The only individual noticed was a male at the Ranch on January 25.

Sialia currucoides. Mountain Bluebird. First noticed in January; from then on till the middle of April seen occasionally in small numbers at the Ranch, and in greater numbers at Eagle Borax Works where small flocks were encountered and a few noted on nearly every visit made to that locality.

Bombycilla cedrorum. Cedar Waxwing. One record. Mr. Borell saw a flock of six at the Ranch on December 15.

Phainopepla nitens lepida. Phainopepla. On May 6 a female was seen in the mesquites at the Ranch.

Vermivora celata. Orange-crowned Warbler. Two records. At Eagle Borax Works, April 13, one in mesquites. At the Ranch, May 7, four in mesquite trees.

Vermivora ruficapilla ridgwayi. Calaveras Warbler. One record: May 6, one in a mesquite tree. By making careful movements was able to get within six feet of the bird.

Icteria virens longicauda. Long-tailed Chat. At the Ranch, May 6, one; May 7, two.

Wilsonia pusilla pileolata. Northern Pileolated Warbler. At the Ranch, May 5, one; May 7, two in the mesquites. The warblers were just coming in when observations ceased.

Icterus cucullatus nelsoni. Arizona Hooded Oriole. At the Ranch, May 5, one in the cottonwood trees.

Piranga ludoviciana. Western Tanager. At the Ranch, May 5, two, both males; May 7, one male.

Hedymeles melanocephalus. Black-headed Grosbeak. At the Ranch on May 7, one. Doubtless more could have been seen later, as several migrant species appeared at about this time; but no observations were made subsequent to this date.

Passerina amoena. Lazuli Bunting. At the Ranch, May 5, one. Same notation applies to this bird as to the Grosbeak.

Junco hyemalis. Slate-colored Junco. At the Ranch, November 23, one.

Junco oreganus shufeldti. Shufeldt Junco. During November two or three seen a few times, and on November 30 seven were seen, at once, at the Ranch.

Junco mearnsi. Pink-sided Junco. At the Ranch, November 6 and 7, two allowed me to approach within ten feet of them, permitting the distinguishing marks to be closely studied. One was observed to jump several times into the air and catch insects. On the same two dates two were seen between the Ranch and Furnace Creek Inn. They may possibly have been the same two birds. As I was familiar with these juncos in Colorado I do not think I was mistaken in my diagnosis of their identity.

Zonotrichia leucophrys. White-crowned Sparrow. Two records; May 2, two. These were close enough to see easily the distinguishing black lores. May 7, two more; may have been the birds seen earlier.

Death Valley, California, February 3, 1935.