

the most plausible supposition is that soon after leaving Point Barrow, perhaps when they encounter the main ice pack, they turn and retrace their steps so far out at sea as to be unnoticed from land and pass the winter at the edge of the ice field, proceeding north to their breeding ground as the pack travels north in the spring." The specimens which we secured were feeding entirely upon a small "ice-shrimp" which abounds in the vicinity of large bergs. According to the notes on this species in Bent's "North American Gulls and Terns" their food seems to be wholly insectivorous when on their breeding grounds. From what the whalers told me, these birds doubtless are not different from other gulls, however, in that they will greedily take any offal lying about.

SABINE GULL. *Xema sabini*.

This gull was met with generally along the coast, but in the greatest numbers at St. Michael July 18 to 23. There we secured a good series of adults about the wharves. A few examples were noted at Wainwright August 5, at Point Barrow the 6th, and at Cape Halkett the 10th. The first young was observed at Wainwright by Hendee on August 6, in company with an adult. A few scattering birds were seen during the fall months at Wainwright; two on August 21, one on August 31, four September 1, and two September 4. Wainwright is situated in a bight, so that birds in direct migration would pass well offshore where they would not be observed. Several large flocks passed Icy Cape, going south, September 7, and our last observation was made September 16, when we collected a young bird at Wainwright.

In the spring, Hendee saw the first Sabine Gull on May 28 in company with Glaucous Gulls and Pomarine Jaegers over an open lead, and several others were seen the next day. They were not abundant during the summer but were observed practically every day. These little gulls breed sparingly about Wainwright, choosing the small islets and hummocks of the tundra lagoons as their nesting sites. On several occasions, broken eggs of this species were found. One set of three eggs was secured on the tundra some miles north of Wainwright on the bank of a lagoon.

At Cape Prince of Wales a few birds were observed on June 3 and others on June 16. On Lopp Lagoon, about twenty miles from Wales, they were fairly abundant, and I found several nests in construction the first week of July. The nests were of grass, upon a muddy peninsula of a tundra lagoon. These birds were a month later in nesting than Nelson records them at St. Michael, which seems to be the average for the other species as well, a fact which speaks ill for the climate in the vicinity of the cape.

Denver, Colorado, January 12, 1925.

ADDITIONAL INFORMATION CONCERNING THE BIRDS OF YOSEMITE VALLEY

By CHARLES W. MICHAEL

THE AUTHOR of this article has been a resident of Yosemite Valley since May 1, 1920. The information contained in the following report was gleaned from daily records kept during all these years; and a complete copy of these detailed records has been filed for permanent keeping and reference in the Museum of Vertebrate Zoology at Berkeley. All the birds mentioned in the following report were seen on, or from, the floor of the Valley, and within four miles of Yosemite village. No specimens were taken to back up these records, but the observer was cautious and it

is believed that the records are substantially correct. As a rule, all of the facts here presented are supplementary or additional to those given in Grinnell and Storer's "Animal Life in the Yosemite" (University of California Press, 1924) which summarized our knowledge of Yosemite ornithology up to the end of 1920.

Colymbus nigricollis californicus. American Eared Grebe. A single bird was noted on the Merced River March 17, 1923.

Larus californicus. California Gull. A single bird noted May 28 and August 1, 1923.

Anas platyrhynchos. Mallard. Has been known to nest here two different years. A female noted on Mirror Lake July 15, 1920, with three half-grown young. Two female birds, each with downy young, were noted June 27, 1922, in the swamp at Leydig Meadow. July 30, 1922, a female with three young not much past the downy stage was seen in the same swamp. Taking all the years of observation into consideration it is found that Mallards have been seen every month of the year.

Marila collaris. Ring-necked Duck. A small flock of from four to ten birds is usually seen some time during December. The earliest date is December 6, 1920. In January, 1923, a flock was present the entire month. In February, 1922, six female and four male birds were present daily. Latest date noted was March 23, 1922.

Charitonetta albeola. Buffle-head. A single male bird was noted on the river near Sentinel Bridge April 3, 1923.

Histrionicus histrionicus. Harlequin Duck. Harlequin Ducks were first noted by us May 11, 1920, when a pair appeared on the Merced River in front of camp. A pair (no doubt the same) was noted May 26 and June 4, and on July 28 a lone female was seen. The following year, March 30, 1921, the male appeared on the river in front of camp and on April 6 this bird was joined by his mate. This pair was coaxed to eat from a floating lunch counter and they stayed with us until May 10, when both birds suddenly left. March 30, 1922, the male again appeared and came at once to our lunch counter. The female, however, failed to keep her tryst and on May 2 the male died. The mounted specimen is now on display at the Yosemite Museum. No Harlequins have since been noted in the Valley. (For further information regarding this pair of Harlequins, see Auk, XXXIX, January, 1922, pp. 14-23, pls. II-III.)

Ardea herodias. Great Blue Heron. Never numerous. Single individuals noted every month in the year, except May and June. Strange that they should be seen flapping off across the snow fields in the middle of winter!

Porzana carolina. Sora Rail. A single male bird in full plumage noted April 27, 1923.

Fulica americana. Mud-hen. A lone individual was noted April 6, 1922. Again, in 1924, a single bird was present on a bit of back-water of the Merced from April 4 to 9 inclusive.

Oxyechus vociferus. Killdeer. Rare. The only records are of lone birds noted on the following dates: November 11, 1921, November 29, 1922, and March 17, 1924.

Dendragapus obscurus sierrae. Sierra Grouse. Rarely noted below the rim of the valley, except during April when their drumming notes are likely to be heard daily coming from the south wall. Records in other months are: June 27, 1924, an old bird with three young appeared in camp. A week later one young bird was noted. August 6, 1921, an old bird with two half-grown young.

Cathartes aura septentrionalis. Turkey Vulture. On the morning of November 10, 1922, during a heavy snow storm, one of these birds was picked up exhausted. After being fed and cared for he gained strength and after a few days he took wing and was seen no more.

Aquila chrysaetos. Golden Eagle. Has been noted every month in the year. Usually two birds are seen sailing together. In summer they are likely to be seen sailing over the Illilouette Canyon; in winter they sail along the north wall of the valley. During the winter of 1921-22 two young birds accompanied the parents, and the young were forever yelping for attention.

Falco sparverius. American Sparrow Hawk. These birds have been noted every month in the year, except March. During the winter months single individuals are noted. Pairs are noted from April 10 on. Several pairs nest here, and for a nesting site they choose an abandoned flicker hole in some dead cottonwood.

Glaucidium gnoma californicum. California Pigmy Owl. With the exception of July the Pigmy Owl has been noted every month in the year. It appears from the

records, however, that a gap occurs between late June and the latter part of August. It is likely that they wander away after the nesting season, as fledgling young have been noted in June.

Geococcyx californianus. Road-runner. A single individual was noted November 13, 1924, at the edge of the Kenneyville field.

Ceryle alcyon caurina. Western Belted Kingfisher. Kingfishers have never been missing from the valley in all the last four years. During 1924 three pairs nested here. The nests were in the sandy river-bank about two miles apart.

Sphyrapicus varius daggetti. Sierra Red-breasted Sapsucker. This bird has not been noted on the floor of the valley until early fall; the first date in our record is August 8, 1924. During September, October, November and December single birds are likely to be found in any of the three apple orchards. During 1921-22 a lone bird was present in the Sovulewski orchard all through January and up until February 24. The only time a sapsucker was noted between February and August was April 18, 1922.

Asyndesmus lewisi. Lewis Woodpecker. October 8, 1921, a flock of Lewis Woodpeckers appeared in the valley; from this date on, three of these birds were present until May 8, 1922. We have no records for June or July, August 11, 1924, being the earliest date. August 29, 1924, Lewis Woodpeckers arrived in numbers; and eight of these birds were still present January 20, 1925.

Cypseloides niger borealis. Northern Black Swift. Our only records for these birds are: May 21 and 25, 1924, a flock of twelve noted; June 5, 1924, a flock of twenty-five seen sailing low over the Stoneman Meadow.

Calypte anna. Anna Hummingbird. Anna hummers have been noted frequently during June, July and August. Earliest date, June 11, 1923. Latest date, September 8, 1924.

Stellula calliope. Calliope Hummingbird. The arrival of the Calliope hummer corresponds with the blooming of the manzanitas, and this blooming varies with the seasons. Arrivals during the past four seasons were: April 6, 1921, May 9, 1922, April 27, 1923, and March 2, 1924. During the season of 1922 the manzanitas failed to bloom, and this we believe accounts for the late arrival of the Calliopes. Latest date on our records is September 10, 1924.

Tyrannus verticalis. Western Kingbird. Stragglers wander into the Valley before and after the nesting season. Frequently noted during May and August. The only time noted other than the above months was September 27, 1923.

Myiarchus cinerascens. Ash-throated Flycatcher. The only records we have for the Valley are August 1, 7, and 19, 1924, when a lone bird was noted (no doubt the same individual).

Sayornis sayus. Say Phoebe. A single bird was noted on the following dates: March 24, 1922, March 24, 1924, and September 11, 1924.

Sayornis nigricans. Black Phoebe. These birds do not nest here, but unattached stragglers have been noted off and on from April until September. Earliest date, March 27, 1921. Latest record, November 17, 1924. A single individual was present daily from July 9 to November 17, 1924.

Otocoris alpestris. Horned Lark. The only records we have are the two following. A dead specimen found March 1, 1922, and a single bird noted November 9, 10, and 11, 1924. This last bird was grayish and had none of the reddish cast of color of *actia*, wherefore we took it to be *merrilli*, from the Mono Lake region.

Aphelocoma californica immanis. Interior California Jay. A rare straggler in the Valley. Noted August 30, 1921, November 12, 19, and 26, 1922, and September 22, 1924.

Corvus brachyrhynchos hesperis. Western Crow. A few crows pass through the Valley each year. In spring we may see six or eight. In fall we have never seen more than three. In fall they stay but a few days, while in spring they may remain about the Valley for two weeks. Following is the record of arrivals: March 28, 1922, April 13, 1923, April 2, 1924, and March 30, 1921. Fall arrivals: November 3, 1921, October 22, 1922, October 22, 1923, and November 17, 1924.

Nucifraga columbiana. Clark Nutcracker. These birds appeared in numbers on the floor of the Valley late in September, 1922. They were present daily until the end of January of the following year. Small groups were noted frequently through February, March and April. The only record after April 26 was on June 25, 1923, when a single bird was noted.

Sturnella neglecta. Western Meadowlark. Meadowlarks are not common in the Valley, but stray birds are likely to be noted any time from early April until the end

of September. Early dates are: April 1, 1922, May 4, 1923, and April 10, 1924. Late dates are: November 13, 1921, October 27, 1923, and October 4, 1924. During 1923 three of these birds were present daily in the Stoneman Meadow from May 4 until July 1. During 1924 a flock was present in the Kennyville Meadow from July 23 until September 29. On several occasions during this period fifteen birds were counted.

Icterus bullocki. Bullock Oriole. Wandering groups of two or four birds occasionally appear in the Valley during May and June, and during 1924 they again appeared after the nesting period. Complete data are as follows: May 27 and June 8, 1922; May 14 to 25, 1923; April 30, May 7 and 9, 1924; August 1, 11, 14, 19, and 29, 1924. A lone bird noted September 8, 1924.

Hesperiphona vespertina californica. California Evening Grosbeak. Evening grosbeaks are commonly present in flocks from early spring until the end of September. During the month of May there are usually four or five flocks of from ten to thirty birds. From the middle of June until the middle of July they are not so common and only scattered individuals are noted. From the middle of July until the end of August they are likely to be more numerous. There is no evidence to indicate that evening grosbeaks nest in the Valley. Early records are: April 12, 1921, March 2, 1923, and May 10, 1924. Late records are: October 21, 1922, October 11, 1923, and October 2, 1924.

Loxia curvirostra bendirei. Sierra Crossbill. The only records for crossbills are of a flock of thirty birds March 1 and 12, 1923.

Astragalinus psaltria hesperophilus. Green-backed Goldfinch. A few of these birds nest here every season. They are irregular in time of arrival. Stray birds have been noted on the following dates: February 13, 1921; June 4, 1922; March 24, 1923; May 22, 1924. They are most abundant during June, July and August. Last noted, September 3, 1921; September 3, 1922; October 6, 1924.

Spinus pinus. Pine Siskin. Taking the last four years into consideration, siskins have been noted in the Valley every month in the year, except August and September. They always appear in flocks. The fall records are: September 3, 1921; October 12 to 20, 1922; November 6 and 26, 1922; December 1 to 20, 1922; not present in the fall of 1923; December 11, 1924, a flock of 100. Further dates: A flock of 20 noted January 23 and 24, 1921; a flock of 20 twice noted in January, 1922. Present the entire month of February, 1921. Common birds in March, April and May. During 1922 a flock was present in the Valley until June 16. This last record is the only one we have for June.

Passer domesticus. English Sparrow. Two of these birds appeared in the village street April 27, 1924. They were noted the two following days, but we failed to locate them on the last day of the month. A pair at Kennyville stables May 10 and 16. Again we saw the pair at Kennyville June 2, 1924; and this was the last seen of English Sparrows in the Valley.

Poocetes gramineus. Vesper Sparrow. A single bird was noted in Leydig Meadow, April 26, 1924.

Chondestes grammacus strigatus. Western Lark Sparrow. A single bird noted April 12, 1922. August 16, 1924, eleven birds were seen in the Kennyville field, and on August 16, 20 and 30, lone individuals were noted in the same locality. Last noted September 11, 1924, when a single bird was seen.

Zonotrichia leucophrys. White-crowned Sparrow. These sparrows are never numerous in Yosemite Valley, but each spring we find a certain number. The dates of arrival are as follows: Three birds April 23, 1922. Two birds April 17, 1923. Three birds April 19, 1924. Scattering individuals are occasionally seen during May and June, but usually after the first week in June they are not again noted until fall. An exceptional record is this: Young being fed by parent birds were noted June 28 and July 2 and 6, 1922. First noted in fall: September 3, 1922, October 28, 1923, and September 11, 1924. Last noted November 9, 1922, December 24, 1923, and November 10, 1924. The spring White-crowns and the nesting pair were believed to be *Z. leucophrys leucophrys*. The fall birds may have been *Z. l. gambeli*.

Zonotrichia coronata. Golden-crowned Sparrow. The only records we have for these sparrows are: October 21, 1921, five birds; October 22 and 30, 1922; October 17, and October 26 to November 2, 1923; September 16, 1924, a young bird noted at the feeding table. The following day this latter bird was joined by a male in full plumage. Both birds remained about camp until October 8. A single bird was noted November 1, 1924.

Stelgidopteryx serripennis. Rough-winged Swallow. On June 11, 1924, a pair of Rough-winged Swallows was discovered working on a nest in the gravel bank below Stoneman Bridge. The nest-hole was located ten feet away from a kingfisher's nest and not fifty feet from campers on the bank above. It is believed that a family was successfully reared. They were last seen July 26, 1924. The above is our only record for these swallows in the Valley.

Dendroica auduboni. Audubon Warbler. Audubon Warblers have been noted in the Valley every month in the year. The migratory wave strikes the Valley about the last of April. Hundreds are usually here during May, but only a few remain to nest. During October there comes another wave, and a few stragglers remain through the winter.

Mimus polyglottos leucopterus. Western Mockingbird. A single bird was noted September 21, 1924.

Troglodytes aedon parkmani. Western House Wren. A single pair of birds has nested in the eaves of a certain old building in the village for the last three years. This pair arrived May 12, 1922, and was present until July 1. After this date a single bird was noted July 26, August 20 and 24, 1922. Arrived April 26, 1923. Present until June 24, 1923. Arrived April 24, 1924. Present daily until September 14. Latest record, October 8, 1924.

Sitta carolinensis aculeata. Slender-billed Nuthatch. Our first record of these birds in the Valley is November 5, 1923. During 1924 a bird was noted June 28 and July 19. Again seen August 10. From this date on they became common and by September 1 there were at least ten birds in the Valley. Thereafter they were present daily until the present writing (January 26, 1925).

Sitta pygmaea. Pigmy Nuthatch. Not noted during 1921, 1922 or 1923, but during 1924 small flocks of from eight to ten birds were noted on the following dates: February 5, November 2, 11, 15, 18 and 28, and again December 25.

Baeolophus inornatus. Plain Titmouse. Two birds noted frequently during January and February, 1921. One bird noted occasionally during February and March, 1922. Next noted November 26, 1924. Probably three birds, not more, were present daily through December and up to the present writing (January 26).

Psaltriparus minimus californicus. California Bush-tit. It would appear that bush-tits are resident birds, for they nest here and may be found every month in the year. During the winter months three flocks of from fifteen to forty birds are usually present.

Regulus calendula cineraceus. Western Ruby-crowned Kinglet. For the last four years ruby-crowns have not been present during the summer months. They appear in the Valley during September and remain until the following May, as indicated by the following records: September 3, 1921; September 3, 1922; September 23, 1923; and September 4, 1924. Last noted, May 10, 1921, May 15, 1922, May 6, 1923, and May 4, 1924.

Polioptila caerulea obscura. Western Gnatcatcher. Rare birds on the floor of the Valley. A single bird noted September 1, 1921. They were not again noted until June 9, 1924, but after this date they were noted frequently until the end of August; possibly a dozen birds in the Valley. Last noted September 20, 1924. July 20, 1924, a parent gnatcatcher was seen feeding young in the oaks back of Camp Curry.

Sialia currucoides. Mountain Bluebird. These birds are erratic in their visits to the Valley. Flocks of from three to ten birds are usually noted in late fall and again in early spring. Fall dates when they appeared are: December 3, 1921; December 1 and 4, 1922; October 11, 23, November 1 and 2, 1923. Spring dates: May 7, 1921; March 14 and 25, 1922; April 2, 3, 8, 12, 18 to 30, 1922; May 4, 5 and 12, 1922; March 1 and 28, April 1, 15 and 27, 1923; February 14, March 16, April 4 to 10, 1924. A flock of twelve birds was present during the latter period. A surprising record was that of June 30, 1921, when a flock of thirteen birds was noted in the meadow below the village.

Yosemite, California, January 26, 1925.