

When a cat or dog would come into the house she would fly down, give it a vicious peck and dash away to safety. She would repeat this until the animal left or she was put out.

Of the three birds, Maggie and Jiggs are the only ones that talk. Maggie has quite a record vocabulary. She imitates all the parrots and the neighbors, and once in a while she sings. There are many amusing sayings accredited to her.

In April of this year we put all of the birds together to see if they would breed. They did not breed, but we had the good fortune of seeing them build a nest. Maggie and Jiggs were the ones that worked on it. The nest was made in an old nail keg, first a layer of sticks was put in the bottom. When we thought they had finished with this part we gave them a pan of mud. They went to work immediately, using their bills as trowels to work the mud. Then they swallowed as much mud as their bills would hold, waited for a few minutes and then went to the nest and disgorged it in the shape of a ring. Then they worked the mud into a cup shape with their bodies. After a thin layer of mud was laid they got some fine twigs and straws, and after working them in the mud they would put a layer of this in the nest, then another of mud. After two days of this they were such a sight, black couldn't be told from white. The birds then ceased work for a day and cleaned up. The following day they began again and lined the nest with a large amount of horsehair.

The most peculiar thing about it all is that as soon as the nest was completed they began to fight fiercely for possession of it. Because of this we have come to the conclusion that all of the birds are females.—GLEN VARGAS, *Route 3, Jensen Road, Hayward, California, July 27, 1933.*

Nesting of the Western Robin in Solano County, California.—The Western Robin (*Turdus migratorius propinquus*) has nested for several years in suitable parts of Napa County, which adjoins Solano County on the west, and I have been expecting to find this species nesting in the latter county for some time. Heretofore, the only evidences I have had of robins nesting in Solano County are: an adult on the lawn of the Vacaville High School in the early summer, date not recorded (about 1929); a pair of birds on the lawn of the Benicia City Park, several times in June, 1932; a young bird with spotted breast in my front yard at Benicia on July 31, 1932; an adult robin filling its beak with earthworms on my lawn many times in May and June, 1933; and an adult male on the lawn surrounding the Benicia Arsenal office building, on June 1, 1933.

My first actual sight of a nest, however, in this county was on June 15, 1933, when a typical mud structure of the robin was found by two boys and taken to the home of one of them where it was shown to me. One of the lads took me to the site where the nest was found—a crotch of a eucalyptus tree in our city park. The nest had been placed ten feet up and was well hidden by the bushy growth where the tree had been "topped." The young had left the nest when found.

The increase in the area devoted to green lawns has, I think, been the deciding factor in inducing some of the robins to stay here to nest.—EMERSON A. STONER, *Benicia, Solano County, California, July 19, 1933.*

Problems in the Classification of Northwestern Horned Owls.—Dr. L. B. Bishop has recently described a form of Great Horned Owl, *Bubo virginianus leucomelas*, based upon winter-taken specimens from the vicinity of Victoria, British Columbia (see Proc. Biol. Soc. Wash., 44, June 29, 1931, p. 93). Having occasion to refer to this account, it struck me as desirable to make comparisons with other specimens that were available, and in response to my request Dr. Bishop kindly forwarded the type of *leucomelas* and one other skin of the same sort. Comparison with my own material sufficed to show that the new name applied to the breeding Horned Owl of the Atlin region, British Columbia. It should be a source of satisfaction to Dr. Bishop that his published description contains the following statement: "These facts would indicate that *leucomelas* is a form of very limited distribution, and probably breeds east of the coast range in northern British Columbia, near where the ranges of *lagophonus* and *subarcticus* approximate."

This is all right so far as it goes, but I feel very strongly that we are still a long way from a proper understanding of the Horned Owl variants of the northwest,

and I do not believe that the continued application of new names to observed modes of coloration is the proper solution of the problem. There are a number of varietal names in the literature of this species that are still undigested; unconsidered application of the conventional subspecies concept may lead us still farther astray.

Breeding Horned Owls that Major Allan Brooks and myself collected about Atlin in 1924 were reported upon by me under the name *Bubo virginianus subarcticus*, with comment upon their appearance (Univ. Calif. Publ. Zool., 30, 1926, pp. 113-114). This identification called forth emphatic criticism from Brooks (Condor, 29, 1927, p. 114), but without presentation of any alternative; under the circumstances I did not feel justified in applying to these birds any name other than that of the form they most nearly resembled. They are not quite as dark as Dr. Bishop's specimens, a difference that may be due to the greater wear and fading that the summer birds had undergone. Then, of two partly feathered young owls from the same nest, one is of the black-and-white *leucomelas* mode, the other an excellent example of the pale colored and more rufescent *subarcticus*. During the summer I collected also two adults of the brown *lagophonus* mode of color, one of these certainly, the other possibly, a non-breeding bird. So, here is required a satisfactory explanation of the simultaneous occurrence of three "good" subspecies.

During the summer of 1929 Horned Owls were almost entirely absent about Atlin. In the summer of 1931 they were scarce, but an influx of birds, presumably from the north, set in early in September, and some were seen every evening. I shot three, all very dark colored, one almost black above, the extreme of the *leucomelas* mode.

My experience in the northwest enables me to a certain extent to outline conditions among the Horned Owls in the regions I have visited, and the situation as I see it is as follows. On the Alaskan coast (mainland and some islands) of the Sitkan district, and probably much farther south, there is a very dark colored, brownish bird, to which the name *saturatus* has been applied. This form does not extend into the interior of northern British Columbia east of the Coast Range. In the upper Skeena Valley, the Hazelton region, during the summer of 1921, W. D. Strong and myself collected twenty specimens of the breeding form of Horned Owl, which birds are distinctly brown colored, though not as dark as the coastal *saturatus*. I applied the name *lagophonus* to this series, but with mental reservations. This whole region, some two hundred miles inland, displays in a most interesting way coastal influences upon fauna and flora; the broad valley of the Skeena is an open gateway to the coast such as does not exist anywhere in the country to the northward. Various bird species characteristic of the humid coast extend inland commonly here as far as Hazelton; it is a question in my mind whether these superficially *lagophonus*-like Horned Owls may not represent an inland extension, slightly modified, of the coastal *saturatus*. In the next valley to the north, the Stikine, I spent a summer in what was an off-year for Horned Owls, and saw none. I would expect the birds of that valley to be the same as at Atlin.

The breeding Horned Owls of the Atlin region are, as we have seen (and most surprisingly, it seems to me), predominantly dark colored, but with hardly a trace of the dark browns so characteristic of coastal *saturatus*. They are black and white. Then, a little farther to the north in the Yukon drainage, apparently rather abruptly, there is a very pale colored form, white and with light rufescent markings, which I have regarded as probably representative of *subarcticus*. I have seen birds of this sort from Forty-mile (June), Rampart (nestlings), Russian Mission (December), and Yakutat (May). I shot a migrant near Hazelton, British Columbia, in September.

Obviously the facts above listed do not accord with the treatment of the Horned Owls by Ridgway (Birds N. and Mid. Am., 6, 1914, pp. 736-754), or with that in the A. O. U. Check-List (1931, pp. 164-166). I feel reasonably well satisfied with the coherence of my own observations, but I am not at all sure of the proper application of subspecific names to the variants, local and otherwise, that I have described; nor do I think that at this time anyone else can be. And as to the allocation of specimens collected on migration or in winter, I am sure that, in the present state of our knowledge, there are many occasions when the appearance of the bird may give rise to utterly false conclusions. It is a subject that calls for detailed studies of conditions and specimens at many different localities, by observers who will not

feel themselves bound to make their findings accord with the statements they see already in the literature. The definite application of a subspecific name carries an implication of finality that is often a bar to further enquiry. And in the case of these Horned Owls it is understanding that we need rather than names.

The unexpected occurrence of a distinctly black Horned Owl in this region brings forcefully to my mind the problem presented in another species, that is, the true status of the Black Merlin (*Falco columbarius suckleyi*). I know of no proof that that name represents a valid geographic race, confined within boundaries to the exclusion of other forms of *columbarius*. Most assuredly it is not of the humid coastal strip, as has been supposed. I have collected specimens of "suckleyi" at Hazelton and at Atlin, south-bound migrants all; it must breed somewhere in this general region, where, however, typical *columbarius* also occurs. The Black Merlin may, I think, serve as an example of a case where the definite application of a subspecific name has acted as an obstacle to a true understanding of conditions.

There is still a third raptorial bird of the region that comes to mind in this connection, *Buteo borealis harlani*. This, too, is a local form that has attained dark coloration, again one that is black with none of the rich brown seen in the dark colored coastal races. I will doubtless be accused of inconsistency in according subspecific recognition to the *Buteo* and not to the others, but there is far more information now available concerning this bird. Also, as I have said, the name applied is of relative unimportance compared to an understanding of conditions.—H. S. SWARTH, *California Academy of Sciences, San Francisco, June 26, 1933.*

Additional Notes from Santa Catalina Island.—During the past two years I have accumulated the following notes which add to the knowledge of the Catalina avifauna.

Casmerodius alba. Egret. During the month of May, 1930, a bird of this species appeared at the bird park in Avalon and remained for about three weeks. Several unsuccessful attempts were made to capture it by E. H. Lewis, superintendent of the park. This is an addition to the Channel Island list.

Branta nigricans. Black Brant. Captain Hugh Mackay of Avalon saw one of these birds on the water of Avalon Bay, February 7, 1930. This is apparently the first record from any of the Channel Islands.

Charadrius nivosus. Snowy Plover. Fairly common on the beach at Howland's Landing, May 3, 1933.

Columba fasciata. Band-tailed Pigeon. Twelve birds were feeding in the scrub oak trees near the summit of Orizaba Peak (elevation 2000 feet), January 10, 1932. Twenty more were seen in the same locality, January 16, 1932.

Colaptes cafer collaris. Red-shafted Flicker. Five eggs were found in a nest excavated in the rotten trunk of an elderberry tree, three feet from the ground, on the golf course at Avalon, May 15, 1933.

Progne subis. Purple Martin. Two birds seen on the wing around the streets of Avalon during the entire afternoon of May 10, 1933.

Ixoreus naevius meruloides. Northern Varied Thrush. A dead male bird was found on the grounds of the Avalon High School, December 28, 1931.

Agelaius phoeniceus neutralis. San Diego Red-wing. Several competent observers have told me that red-wings have been seen on Catalina many times during the past twenty years.

Carpodacus purpureus californicus. California Purple Finch. A male bird was under close observation for a half hour, at Avalon on January 26, 1933.

On March 22, 1930, I saw five Song Sparrows (*Melospiza melodia*), subspecific status undetermined, in some brush near the summit house, about three miles north of Avalon. During five years of residence on Catalina Island these are the only Song Sparrows I have seen; they were probably migrants from the mainland rather than any of the subspecies reported from the other islands.—DON MEADOWS, *Avalon, California, September 3, 1933.*

Fossil Bird Remains from the Pliocene and Pleistocene of Texas.—From a large collection of fossil vertebrates secured in Hemphill County, Texas, by the Bureau of Economic Geology of Texas and the University of California Museum of Paleon-