

been shot, in the following species: Peregrine, Pigeon Hawk, Sharp-shinned and Cooper hawks. In the case of the Pigeon Hawk it was the female that acquired three successive mates, the last a brown immature. As it is now recognized that all hawks (except eagles) pass into the adult plumage at their first moult, these immatures must in every case have been less than a year old.—ALLAN BROOKS, *Okanagan Landing, B. C., June 30, 1927.*

**A Note on the Dietary Habits of the Barn Owl.**—The abode of a pair of Barn Owls (*Tyto alba pratincola*) was discovered on October 4, 1925, the nesting and roosting place being located in a cave in the cliffs of Wildcat Canyon about three miles north of the University of California campus, Berkeley. Pellets were collected at intervals over a period of one and one-half years in an attempt to learn whether there be any significant seasonal variation in the relative numbers of the different animals taken by the owls for food. The observations were interrupted by press of other duties sooner than was expected. The results are presented in the table herewith. For the sake of brevity the several collections of pellets are condensed into two categories, those belonging to the dry season (March to November) and those of the rainy season (November to March).

A total of 571 pellets yielded 1780 individual animals, recognized from the skeletal remains found in the pellets. Of the mammals, by far the most numerous was the common California meadow mouse, which comprised 64 percent of the catch. In order of decreasing frequency were white-footed mice (mostly *Peromyscus maniculatus gambeli*, together with a few which were probably *P. truei gilberti*), harvest mice (*Reithrodontomys*), pocket gophers (*Thomomys*), shrews (*Sorex*), and pocket mice (*Perognathus*), with a few scattering individuals of wood rat (*Neotoma*), mole (*Scapanus*), brush rabbit (*Sylvilagus*), house mouse (*Mus*), house rat (*Rattus*) and one kangaroo rat (*Dipodomys*), the last named of rather rare occurrence in this locality. In the late summer and autumn the Jerusalem cricket (*Stenopelmatus*) is represented quite numerously in the pellets.

	Actual number of individuals			Relative number of individuals (percent of catch)		
	Dry Season: March to November	Rainy Season: November to March	Total	Dry Season: March to November	Rainy Season: November to March	Total
Microtus	767	364	1131	60.00	72.00	64.00
Peromyscus	196	44	240	15.00	8.75	14.00
Reithrodontomys	116	37	153	9.10	7.30	8.60
Thomomys	51	34	85	4.00	6.70	4.80
Sorex	31	2	33	2.40	.40	1.80
Perognathus	14	2	16	1.10	.40	.90
Scapanus	2	5	7	.16	1.00	.40
Neotoma	6	2	8	.47	.40	.50
Sylvilagus	1	1	2	.08	.20	.10
Stenopelmatus	84	15	99	6.60	3.00	5.60
Mus	2	0	2	.16	.00	.10
Rattus	0	2	2	.00	.40	.10
Dipodomys	1	0	1	.08	.00	.05
Total	1272	508	1780			

In regard to seasonal variation of the dietary, nothing very striking was found. The shrews, pocket mice and Jerusalem crickets were taken mostly in the dry season but these species make up only a small part of the catch. White-footed and harvest mice were taken somewhat more frequently in the dry months, whereas the reverse is true of the pocket gophers. Finally, certain animals are conspicuous by the complete absence of their remains from the pellets. No bird remains were found. There were no ground squirrels, which is good evidence that these animals have retired to their burrows before the owls come out to hunt. Nor were there any remains of jack rabbits, though the writer has often seen these animals abroad at night on hill sides where barn owls are seen and heard.

The writer expresses his thanks to members of the staff of the Museum of Vertebrate Zoology, especially to Mr. Joseph Dixon, for the help received in the identification of material from the pellets.—G. L. FOSTER, *Berkeley, California, July 1, 1927.*

**California Brown Pelicans Nesting at Point Lobos, Monterey County, California.**—During the last two summers I had, from time to time, observed that a number of Cali-

ifornia Brown Pelicans (*Pelecanus californicus*) frequented a little island on the south side, and at the base, of Point Lobos. From the mainland I could see the birds sitting on suspicious-looking piles of sticks on the top of the island. Of course I knew that if these were actually nesting birds, it would establish a new northern breeding limit which heretofore has been accepted as Anacapa Island, fully 200 miles to the southward. When I mentioned the matter to an ornithologist friend, he took no stock in my surmise. Nevertheless, I thought it worthy of investigation.

But this three-acre island, although it is not more than a few hundred feet from Point Lobos, is extremely difficult to land on, because of constant high seas and the



Fig. 75. ISLAND NEAR POINT LOBOS, MONTEREY COUNTY, CALIFORNIA, OCCUPIED BY A NESTING COLONY OF CALIFORNIA BROWN PELICANS.



Fig. 76. NEARER VIEW OF PELICAN COLONY NEAR POINT LOBOS, CALIFORNIA.

rocky shores. Moreover, there are no boats available in the immediate vicinity. So my conjecture was not proven correct until May 25, 1927.

A friend in Carmel, Mr. David Prince, suggested that we borrow the catamaran belonging to another mutual friend, living directly opposite this island. This catamaran is nothing more than a raft of two hollow pontoons, each a foot wide and about six feet long, connected by several slats for seats. To navigate the craft, two persons sit on the slats, one at the bow, the other at the stern, and dig at the water with ordinary canoe paddles. The water comes to the top of the pontoons and waves lap over it all the time. It is quite necessary, therefore, to wear bathing-suits. The craft, however, is quite safe, that is, it will always float, provided the plugs in the vents of the pontoons do not come out.

I accepted the invitation to take this perilous voyage more in the spirit of a lark than with the idea of settling in a scientific way the question concerning the pelicans. Under the circumstances, how could I safely bring equipment with me to do the work properly? It wasn't even possible to carry a note-book and pencil!

Our route to the place of landing, my friend told me, would be through the "inland passage". He might have said the *underland* passage, for we had not gone far when we proceeded toward a cavern under the cliffs of the mainland. In the mouth of it we waited till a large roller came along and carried us in. The grotto was not more than six feet wide, but it was quite high and long. When we were half-way through, the wave receded and started to suck us back. We had to paddle furiously to hold our own. At last the wave changed its direction again and with great speed shot us out at the other end. We found ourselves in a little cove almost surrounded by cliffs. At one end was another cavern through the rock, even narrower than the first. To this hole my friend steered us. When half-way through, the side of the raft caught on a projecting piece of rock as the rising wave buoyed us up. We could not move. The water rose over the raft; the raft tilted precariously; we were immersed to our waists. And we weren't freed till the wave went down again. Suddenly my friend exclaimed, "The plug's out." I glanced, horrified, at the hole in the pontoon, with water entering fast. But luckily the plug was floating just within reach.



Fig. 77. NESTS AND EGGS OF CALIFORNIA BROWN PELICAN ON ISLET NEAR POINT LOBOS.

At last we landed on the one place on the island where the rocks are shelving. The island, although small, reaches quite a height. There are two knolls on top of the hill which suggest the humps of a camel. All sides of these knolls are steep except the north side. Here the slope is covered by a low but exceedingly thick and matted growth of poison oak. When we approached the island, these knolls were covered by pelicans which flushed as soon as we landed. On crossing a grassy place at the foot of the knolls, we found several nests with eggs of the Western Gull. About 200 nests of the Brandt Cormorant were discovered on the edge of the cliffs, also containing eggs.

To reach the place where the pelicans were, we had to walk through the poison oak. The growth was so thick, however, that we found ourselves walking *on top* of the plants. On the very summit of the hill we found the pelicans' nests, just where I thought they might be. Upon the eastern knoll were twenty or thirty nests,

though only a few were more than rude bundles of sticks. But on the two knolls, we found altogether ten well-formed nests containing eggs. Of these, eight contained two, one contained one egg, and another held three eggs. From the set of three, I took one, wrapped it in a handkerchief, which one of us had in an old pair of trousers worn over his bathing suit, and tied it securely to my shoulder strap. This egg is now no. 2031 in the collection of the Museum of Vertebrate Zoology.

Because it was a foggy day, with a cold wind blowing, our visit was necessarily cut short. Three weeks later (June 16) I succeeded in hiring a launch at Pebble Beach, about five miles away. After coming all that way, it seemed at first impossible to land because of the high seas. But, by sacrificing my bulky 4 x 5 camera and only taking the two hand cameras, I was able to jump from the rowboat onto the cliff. Nearby a Black Oystercatcher scolded loudly. I estimated the number of California Brown Pelicans on top of the island as about 85, and possibly another 70 more were perched on the neighboring rocks. However, this time there were only eight nests with eggs, six

with two eggs, and two with one apiece. A chick was in the process of emerging from its egg as I watched. When I returned from inspecting other nests, it had freed itself. The color of its skin was purplish blue.\*

The question whether this is a new colony of nesting pelicans formed since the days when Loomis and Beck studied this region, or whether these gentlemen never discovered the nests because of the island's inaccessibility, seems at present to be undetermined. Perhaps, judging from the meagre numbers, the colony has come into existence only recently, assembled from migrating or winter-visiting birds.—LAIDLAW WILLIAMS, *Carmel, California, July 26, 1927.*

**Freak Nesting Site of a Magpie.**—During a walk on the morning of June 5, I had occasion to cross the Frenchman River by the railway bridge nearby. As I was stepping over the ties I heard the "wheezing" of young birds right under my feet. Getting down on my knees and peering through an inch space between two cross girders that were level with the ties I could see, just below, five or six nestlings with mouths agape. I took them for young crows and had no time just then to wait for a parent bird to appear; but on visiting the nest a week later I could tell by the black and white feathering that they were Magpies (*Pica pica hudsonia*).

The nest is directly under one of the rails and between two ties. It is supported by two intersecting braces and protected from above by the aforementioned girders. The usual "dome" is, therefore, absent, being both unnecessary and impossible in the restricted space available; and altogether there is not much nest, but for security it could scarcely be improved upon. The parent bird would come and feed the young while I was standing overhead, but would not venture so far when I stood looking up from below.

It would have been interesting to know whether the sitting bird maintained her position during the deafening roar of a passing train, only about 18 inches above her head, though the regular service is not more than one train per day. Under the rail opposite is another, half finished nest which was apparently abandoned in favor of the present site.—LAURENCE B. POTTER, *Gower Ranch, Eastend, Saskatchewan, Canada, June 14, 1927.*

**Can Hawks Prevent Mouse Plagues?**—An editorial note in the May issue of the CONDOR (XXIX, 1927, p. 172) supports Mr. Wyman's contention that the control of mouse or other rodent plagues lies in protecting their natural enemies, both winged and four footed. Now, while I am most anxious to see useful hawks protected it is more than doubtful that either these or mammalian mouse destroyers can prevent the plagues that periodically occur in many species of rodents.

I spent a large part of the year 1923 in California, in the San Joaquin Valley and the southern portion of the Sacramento Valley. Hawks were especially plentiful and a few were seen lying dead by the roadside, the victims of ignorant gunners, but only a few. At Snelling, Merced County, only some 180 miles north of the region where the mouse plague occurred in the latter part of 1926, hawks were more numerous than I have seen them at any point in North America in the last forty-six years, and my wanderings during that period cover a pretty wide field. On January 2, 1923, just four years before the height of the mouse plague I counted 120 hawks of the *Buteo* type in the air at once. This was not a migrating assemblage but just a normal concentration near a roosting point. Redtails constituted the majority of this gathering, Ferruginous Rough-legs, the "notably scarce or altogether wanting" California Squirrel Hawk, were well represented, and a few Red-bellied Hawks completed the list. All of these are notable mouse catchers and in addition Marsh Hawks and Sparrow Hawks were abundant and seen at all points in the San Joaquin and Sacramento valleys.

Owls of several species were also numerous as well as coyotes, skunks, coons and weasels. In fact never in my life have I seen such a notable abundance of mouse catchers, including feral domestic cats in extraordinary numbers. Yet only four years later comes this devastating plague of rodents!

\* On August 4, 1927, Dr. Louis B. Bishop with some friends and myself visited the island. We found eight young pelicans, all covered with down except where the juvenal plumage was coming through at the primaries, secondaries and scapulars, and on the head and tail.—L. W.