

Cinnamon Teal with broods of young. I flushed the Blue-wing drake from the pond and watched it settle in another pond. I again flushed it, and it returned to pond No. 8 where it had been with the female and young. This, in my mind, is pretty convincing that the young were the offspring of these two birds.—C. H. FREYSCHLAG, *Bass Hatchery, Elk Grove, California, July 24, 1942.*

**Blue-winged Teal with Young in Honey Lake Valley, California.**—On June 17, 1941, Jay Dow and I were driving along the first road to the north of Hartson Lake in Honey Lake Valley, Lassen County, California. As we crossed a small, wet swale a pair of Blue-winged Teal (*Querquedula discors*) was noted close to the road; with them was a brood of young which was without doubt their own. The male was in full breeding plumage and thus was positively identified.—J. S. HUNTER, *Division of Fish and Game, San Francisco, California, July 24, 1942.*

**Food of the California Clapper Rail.**—The recent article on the food of the Clapper Rail by Moffitt (*Condor*, 43, 1941:270-273) records crabs as the only crustacean food of 18 California Clapper Rails (*Rallus o. obsoletus*) examined by him, and our perusal of the literature has not revealed others.

To make published data as complete as possible, it seems desirable to record our finding of several amphipods in the upper esophagus of a female Clapper Rail. This bird was collected October 29, 1938, about one-half mile north of Alviso, Santa Clara County, California, as it fed through the low vegetation of the salt marsh. Unfortunately, we have no record of its stomach contents. Another individual was watched for several minutes at distances of a few feet as it foraged among salicornia and sedges. It appeared to be picking small objects from the vegetation, and we supposed it to be feeding on insects and small crustaceans. Two or three small areas of exposed mud were crossed without probing. These observations were made in mid-morning of a heavily clouded, partly drizzly day. The tide was low.

It should be noted that many mud snails (*Ilyanassa obsoleta*), to which the rail paid no attention, were in full view on the surface of the mud. Although not seen on that day, large numbers of the horse mussel, *Modiolus demissus*, were known to occur in the mud of the area. Also present in large quantities was the small mud crab, *Hemigrapsus oregonensis*. Because these species are all mentioned by Moffitt as forming considerable percentages of the stomach contents of the birds examined by him, it is of particular interest that they were not hunted by the two rails we watched, even though known to be present in quantity in the immediate area concerned.—FREDERICK H. TEST and AVERY R. TEST, *University of Michigan, Ann Arbor, Michigan, July 1, 1942.*

**The Scissor-tailed Flycatcher on the Florida Keys.**—Supplementing previous evidence indicating that the Scissor-tailed Flycatcher (*Muscivora forficata*) is a more or less regular winter visitant to the Florida keys, the authors wish to report four individuals seen January 3, 1942, at the eastern end of Lower Maticumbe Key, about 80 miles east of Key West. The birds were observed for about ten minutes at distances of 15 to 60 feet while they were perched on wires beside the Overseas Highway and while catching insects on the wing. Because of their short tails and pale colors they were adjudged females.

Previous winter records include five listed by A. H. Howell (*Florida Bird Life*, 1932:319) for the period from 1885 to 1930, three by Alexander Sprunt, Jr. (personal letter), for the winters of 1937, 1938 and 1939, and one by Joseph E. Warren and Earl R. Greene who recorded two birds seen on December 26, 1941, near Key West (*Audubon Mag.*, supplement, January-February, 1942:34). Howell (*loc. cit.*) also cites five winter records for the mainland of Florida between 1885 and 1930.—GEORGE A. PETRIDES and MIRIAM P. PETRIDES, *Washington, D.C., June 13, 1942.*

**An Avifauna from Indian Kitchen Middens at Buena Vista Lake, California.**—Excavations of two large shell heaps on the southwesterly shores of Buena Vista Lake, Kern County, California, were made in 1933 and 1934 under the direction of the Smithsonian Institution. These sites were chosen because it seemed likely that they would contain quantities of archaeological material (Wedel, *Smithsonian Inst., Bur. Amer. Ethnol., Bull.* 130, 1941:194). Most of the remains found there are probably not more than 500 years old. The bones of birds, mammals, reptiles, and fishes, taken from the village middens together with the artifacts, were sent to the United States National Museum for examination. A study of the mammal remains showed that almost every available species

of any size was utilized by the Indians. The bones of dogs, coyotes, and jackrabbits were most abundantly represented in the collection. Four species of birds were identified by Dr. Alexander Wetmore of the United States National Museum, but nearly all of the bird bones remained unclassified. A study of this collection of more than 3000 specimens was recently undertaken by the writer at the suggestion of Dr. Wetmore and Dr. Alden H. Miller.

The following species were found to be represented in the avifauna:

	Number of bones			Number of bones	
	Site 1	Site 2		Site 1	Site 2
<i>Gavia arctica</i> . Pacific Loon	1	0	Unidentified ducks	48	10
<i>Colymbus nigricollis</i> . Eared Grebe	19	1	<i>Accipiter cooperi</i> . Cooper Hawk	2	0
<i>Aechmophorus occidentalis</i> . Western Grebe	74	9	<i>Buteo jamaicensis</i> . Red-tailed Hawk	1	5
<i>Podilymbus podiceps</i> . Pied-billed Grebe	439	9	<i>Buteo lineatus</i> . Red-shouldered Hawk	2	0
<i>Pelecanus erythrorhynchos</i> . White Pelican	31	2	<i>Buteo lagopus</i> . Rough-legged Hawk	4	0
<i>Pelecanus occidentalis</i> . Brown Pelican	1	0	<i>Buteo</i> , spp. Hawks	9	1
<i>Phalacrocorax auritus</i> . Farallon Cormorant	4	3	<i>Aquila chrysaetos</i> . Golden Eagle	2	0
<i>Phalacrocorax</i> , sp. Cormorant	1	0	<i>Circus hudsonius</i> . Marsh Hawk	6	2
<i>Ardea herodias</i> . Great Blue Heron	22	1	<i>Pandion haliaetus</i> . Osprey	1	1
<i>Casmerodius albus</i> . American Egret	25	0	<i>Falco mexicanus</i> . Prairie Falcon	1	0
<i>Butorides virescens</i> . Green Heron	1	0	<i>Falco</i> , sp. Falcon	8	0
<i>Nycticorax nycticorax</i> . Black-crowned Night Heron	30	0	<i>Lophortyx californica</i> . California Quail	2	0
<i>Botaurus lentiginosus</i> . American Bittern	23	2	<i>Grus canadensis</i> . Little Brown Crane	2	0
<i>Ixobrychus exilis</i> . Least Bittern	1	0	<i>Rallus limicola</i> . Virginia Rail	1	0
<i>Cygnus columbianus</i> . Whistling Swan	4	0	<i>Gallinula chloropus</i> . Florida Gallinule	3	0
<i>Branta canadensis</i> . Canada Goose	10	1	<i>Fulica americana</i> . American Coot	1310	101
<i>Anser albifrons</i> . White-fronted Goose	4	0	<i>Recurvirostra americana</i> . Avocet	1	0
<i>Anser</i> or <i>Chen</i> . Goose	18	2	<i>Himantopus mexicanus</i> . Black-necked Stilt	1	0
<i>Chen hyperborea</i> . Snow Goose	1	0	<i>Larus</i> , sp. Gull	8	0
<i>Chen rossi</i> (?). Ross Goose	3	0	<i>Hydroprogne caspia</i> . Caspian Tern	1	0
Unidentified geese	118	4	<i>Zenaidura macroura</i> . Mourning Dove	1	0
<i>Anas platyrhynchos</i> . Mallard	43	3	<i>Tyto alba</i> . Barn Owl	2	1
<i>Mareca americana</i> . Baldpate	16	3	<i>Bubo virginianus</i> . Great Horned Owl	2	1
<i>Dafila acuta</i> . American Pintail	22	4	<i>Speotyto cunicularia</i> . Burrowing Owl	0	1
<i>Nettion</i> or <i>Querquedula</i> . Teal	24	5	<i>Asio flammeus</i> . Short-eared Owl	20	0
<i>Spatula clypeata</i> . Shoveller	26	3	<i>Chordeiles</i> , sp. Nighthawk	1	0
<i>Nyroca</i> , sp.	73	13	<i>Balanosphyra formicivora</i> . California Woodpecker	1	0
<i>Nyroca affinis</i> . Lesser Scaup Duck	17	3	<i>Corvus corax</i> . Raven	6	0
<i>Glaucioneitta</i> , sp. Golden-eye	10	1	<i>Corvus brachyrhynchos</i> . Western Crow	21	0
<i>Charitoneitta albeola</i> . Buffle-head	2	0	<i>Agelaius phoeniceus</i> . Red-winged Blackbird	1	0
<i>Erismatura jamaicensis</i> . Ruddy Duck	283	44			
<i>Mergus merganser</i> . American Merganser	38	13	Totals	2852	249

As would be expected in a lake shore deposit, the bones of water birds are in the vast majority. The Coot is by far the most abundant species in the collection, represented by 46 per cent of the total number of identified bird bones. Fourteen per cent of the specimens are assigned to the Pied-billed Grebe, and 10 per cent to the Ruddy Duck. All other species taken together constitute but 30 per cent of the assemblage. What combination of factors accounted for the preponderance of these three forms is not known. They are common residents today in the region, but so are other species which are poorly represented here. They may have served as an important source of food for the Indians because they were easily caught. Possibly they were the most abundant game birds throughout the year at Buena Vista Lake.

That bones of almost all of the species of birds were used in several ways is indicated by the presence in the collection of both cut and broken bones. The numbers of the latter are much greater than might be expected to result from natural causes. For example, 738 distal ends of tibiotarsi

were counted in the collection from Site 1, with only 27 proximal ends and 24 complete tibiotarsi! No other skeletal element is represented by more than half this number of bones. Why the Indians should have broken the tibiotarsi just distal to the inner cnemial crest is not clear to me, and I have found in the literature no mention of a similar condition in the collections of bones from other kitchen middens along the California coast. If the legs were broken off when the birds were being prepared for cooking, it seems likely that the tibiotarsi would be broken near the distal rather than the proximal end. It is interesting to note that the smaller collection from Site 2 does not show a comparable disproportion in numbers of tibiotarsi, although some of the bones from this locality were broken in the same way. Except for the fact that there is a gradual decrease in numbers of bones from the surface to a depth of 6 feet in the shell heaps, there does not seem to be any significant difference in the species or the relative proportion of skeletal elements occurring at the various levels at either site.

Two of the species of birds in the collection (*Gavia arctica* and *Pelecanus occidentalis*) are nearly always found along the coasts rather than inland. Perhaps most surprising is the presence of the Brown Pelican, which is practically never found on fresh water. It is represented in the assemblage by a single scapula. The California Woodpecker may seem a little out of place in this association, but oaks probably occurred around the margin of the San Joaquin Valley as they do today. The bird may have been killed some distance from the lake and brought in for its plumage.

The species of birds previously identified by Dr. Wetmore (see Wedel, *loc. cit.*) are: *Plegadis guarauna* (White-faced Glossy Ibis), *Pelecanus erythrorhynchos* (White Pelican), *Grus canadensis canadensis* (Little Brown Crane), and a goose (Anserinae). The ibis was represented by a single specimen from Site 1, at a depth of 1 to 2 feet. Evidently it was not included in the collection sent to the University of California, for no bones assignable to this species were found.

A few forms, such as the Short-eared Owl represented by a fairly complete skeleton, may have left their remains in the deposit quite fortuitously, but it is probable that most of the bones are those of birds used for food by the Indians. Most of the long bones are broken, some have been cut, and some are blackened by fire. Obviously the relative abundance of the various skeletal elements is not normal, but it seems likely that the species found in the deposit are fairly representative of the larger birds occurring in the Buena Vista Lake region.—IDA S. DEMAY, *Museum of Vertebrate Zoology, Berkeley, California, April 20, 1942.*

**The Yellow Rail and the Caspian Tern in New Mexico.**—Presence of the Yellow Rail (*Coturnicops noveboracensis*) at Bitter Lake Wildlife Refuge, 10 miles northeast of Roswell, New Mexico, on the Pecos River, appears to be a new record for the state. The specimen, which was in good flesh, was collected on February 24, 1942, in a dense growth of salt grass.

The occurrence of the Caspian Tern (*Hydroprogne caspia*) also appears to be a new record for New Mexico. Two individuals were seen at Elephant Butte Lake, New Mexico, on February 20, 1942. Neither individual was collected, although the birds were observed through field glasses at a distance of not more than fifty yards.—CLARENCE COTTAM, CLARENCE A. SOOTER, and RICHARD E. GRIFFITH, *Fish and Wildlife Service, Washington, D.C., May 12, 1942.*

**Records of the Herring Gull, Sanderling, and Lark Bunting in Utah.**—First intimation that the Herring Gull might occur in the state of Utah was given by E. W. Nelson (Proc. Boston Soc. Nat. Hist., 17, 1875:358) when he listed with a question the species *Larus argentatus*, accompanied by the following comment: "I saw a large gull at the mouth of the Jordan [River] which I am quite sure was this species." An actual specimen did not come to hand, however, until April 27, 1937, when a decomposing bird was picked up on the Bear River Migratory Bird Refuge. This was recorded by Marshall (Condor, 39, 1937:258) who also mentioned that another specimen was later found on the refuge. Stanford (Proc. Utah Acad. Sci., Arts and Letters, 15, 1938:138) recorded a specimen in the collection of the Utah State Agricultural College taken at the Bear River Refuge, November 25, 1937. Since this was contributed by Marshall, it possibly is the second specimen referred to by Marshall (*op. cit.*).

On March 13, 1940, Dr. E. R. Quortrop brought a third specimen of the Herring Gull from the Bear River Refuge to the University of Utah. It had been picked up sick on the refuge in late September or early October, 1939, and was kept alive for some time until it died, presumably of botulism. Then it was placed in cold storage. Upon receipt at the University it was prepared by the writer as a study skin.

On May 8, 1942, the writer visited Egg Island, Great Salt Lake, where thousands of California Gulls were nesting. There a decomposing adult Herring Gull (*Larus argentatus smithsonianus*) was