

30 seconds is the length of its ordinary dive (p. 259). In this connection he points out that the Lesser Scaup usually feeds in water from 3 to 8 feet deep and remains under from 20 to 25 seconds. When I approached too closely, I observed that the length of time spent in the water was slightly shortened while the time spent on the surface between dives was more than doubled.

When the birds flew, I went to the place where they had been feeding, but found no trace of plant material on the water, indicating that the birds were probably feeding on mollusks, which is a common practice. I was much surprised to find that I could not reach the bottom with a 15 foot pole, so I am certain that the birds were feeding in water more than 16 feet deep. This greater depth undoubtedly accounts for the unusually long period under the water and the long period on the surface between dives. When the birds were frightened, they flew some 300 yards up the river and again commenced feeding as before. The water here also was found to be more than 16 feet deep.

The united behavior of this flock showed up in marked contrast to that of a flock of 23 Horned Grebes (*Colymbus auritus*) that were observed near by. When the boat approached, the ducks gracefully flew off as a compact unit, while the grebes, which had been in an unusually compact formation, began diving, swimming and laboriously flapping off in different directions.—CLARENCE COTTAM, *U. S. Biological Survey, Washington, D. C., February 9, 1933.*

**New Bird Records for California.**—*Arquatella ptilocnemis couesi*. Aleutian Sandpiper. A male was taken on December 13, 1925, near the entrance to Humboldt Bay. It was in a large flock of Black Turnstones. I saw Aleutian Sandpipers every weekend from that date until March 6, 1926. I am positive nine wintered on the Bay. December 19, 1926, until January 8, 1927, there were only five birds in the flock of turnstones.

*Icterus spurius*. Orchard Oriole. A female was found dead near a railroad track in town, on October 6, 1932. It had struck overhead wires, as a few feathers were missing from the forehead; also the tail was missing. The night before, Eureka was treated to a real thunder-storm.

*Loxia curvirostra sitkensis*; *Loxia curvirostra bendirei*. A large flock of Crossbills was found in scrub pines about 1½ miles from Samoa Post Office, across Humboldt Bay from town. The flock was there January 21, February 4, and February 18, 1923. It seemed to be divided equally between the above two forms; a specimen of each race was collected on January 14.

*Calcarius lapponicus alascensis*. Alaska Longspur. A lone female was taken on October 23, 1925, on the ocean beach across the Bay from town.

*Melospiza melodia caurina*. Yakutat Song Sparrow. A male was taken on October 8, 1922, in town, a block from the water front. Another male, taken on October 11, 1931, was taken on the salt marsh at the lower end of town.

*Geothlypis trichas sinuosa*. Salt Marsh Yellow-throat. A male was taken on November 26, 1922. It was in a small willow patch nearly a mile from Samoa Post Office, across the Bay from town.

*Penthestes gambeli abbreviatus*. Short-tailed Mountain Chickadee. Two males were taken on December 6, 1924, in a small patch of mountain lilac within the town limits.

Specimens of the above birds were identified for me by Dr. J. Grinnell at the Museum of Vertebrate Zoology, University of California.—JOHN M. DAVIS, *Eureka, Humboldt County, California, March 14, 1933.*

**White-crowned Sparrows Banded in Coachella Valley, California.**—The January issue of *The Condor* (p. 34) carried a list of *Zonotrichia leucophrys leucophrys* banded at the Michener station in Pasadena. Believing a supplementary list of those banded in Coachella Valley might also be of interest we submit the following records of this race banded at Coral Reef Ranch, Coachella, California.

Band number	Date of capture	Band number	Date of capture
A131765	April 8, 1930	B142950	March 7, 1931
A131779	May 3, 1930	B161986	September 29, 1931
B104700	September 29, 1930	C101641	December 16, 1932
C67267	January 16, 1931	C101663	December 27, 1932
A175090	February 23, 1931	H74647	January 10, 1933
C67294	February 23, 1931	C161501	January 18, 1933

Since preparing the above list we have added the following item to our records: White-crowned Sparrow no. 161501 banded on January 18, 1933, has repeated in our traps on the following dates: February 16, 1933; February 24, 1933; March 1, 1933. The six weeks covered by the dates suggest the possibility of this individual having been resident throughout the winter. In addition a number of the birds have been seen through field glasses at different times during the winter months at sufficiently close range to make identification reasonably certain.—MR. and MRS. BEN L. CLARY, *Coachella, California, March 15, 1933.*

**Analysis of Some Trapping Statistics from Berkeley.**—Although the writer started the banding of birds in the summer of 1923, he did not band any at his present location until the summer of 1926. The present banding station is located at the writer's home, which is just to the north of Berkeley, California, in what is known as Kensington Park.

In 1926 there were scattered houses in the neighborhood, and the only trees were large acacias planted along the streets. Weeds covered all of the vacant lots. Shrubbery was at once planted around the house, so that at present there is considerable cover for the birds. Cats, dogs and hawks are quite common, although efforts are exercised to keep them away from the traps. Two Sharp-shinned Hawks have been shot on the traps during the past month, and another was seen flying past.

In spite of the adverse conditions which are present, records show the following numbers of birds banded since starting at this station: Last half of 1926, 355; 1927, 688; 1928, 560 (during this year the writer was away over a considerable period of time); 1929, 739; 1930, 626; 1931, 833; 1932, 786. It seems as though the planting of shrubbery, and the control of cats and other predatory animals, has apparently kept the bird population nearly the same as before the neighborhood was built up.

Crown sparrows (*Zonotrichia*) are the most abundant birds, among which are the Golden-crowned Sparrows (*Zonotrichia coronata*). The table given below is for the Golden-crowned Sparrow, and is an indication of the returns that can be expected from a group of ground-feeding migratory birds.

Winter	Banded	Returns First Year		Returns Second Year		Returns Third Year		Returns Fourth Year		Returns Fifth Year	
		No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
1926-27	213	35	16.4	18	8.5	7	3.3	4	1.9	3	1.4
1927-28	180	24	13.3	5	2.8	3	1.7	2	1.1	..	....
1928-29	146	17	11.7	2	1.4	3	2.1	..	....	..	....
1929-30	108	10	9.3	8	7.4	..	....	..	....	..	....
1930-31	60	7	11.7	..	....	..	....	..	....	..	....
1931-32	177	..	....	..	....	..	....	..	....	..	....

Much has been said relative to the turnover each year in a bird population due to natural and unnatural causes. The number of eggs laid by any species of bird is an index of the number that must be born each year to replace those that have died, in order that the bird population may be kept at a constant figure. If this balance in nature is decreased or is exceeded, then there is the danger of extinction, or the danger of an over-population of an area.

It is thought by the writer that another index may be obtained of this overturn in population by a survey of birds trapped, in a given locality, over a period of years. The proportion of adult birds to the total trapped, should give the proportion for that particular bird, that survives each year.

The following results are from the records of the writer, of birds banded in Berkeley, over a period from July 1, 1924, to June 30, 1932. The records used in the table are those of the Nuttall and Gambel sparrows (*Zonotrichia leucophrys nuttalli* and *Z. l. gambeli*), as the adults of these species are readily distinguished from the immature birds.

YEAR	1924-	1925-	1926-	1927-	1928-	1929-	1930-	1931-	1932-	Total
	1925	1926	1927	1928	1929	1930	1931	1932		
Total number birds captured.....	104	72	415	599	599	557	497	465	3308	
Adults captured.....	45	24	127	204	182	111	110	71	874	
Percent of adults to total birds captured.....	43.2	33.3	30.6	34.0	30.4	19.9	22.1	15.3	26.4%	

(Average)

—ERNEST D. CLABAUGH, 44 Lenox Road, Berkeley, California, January 22, 1933.