## ARRIVAL AND DEPARTURE OF AVIAN VISITANTS IN THE SAN FRANCISCO BAY REGION

## By AMELIA S. ALLEN

For more than twenty years I have been recording the dates of arrival and departure of birds visiting the San Francisco Bay region as I have had opportunity to observe them. Since 1920 reports based upon the records of various observers have been printed in the Season Department of *Bird-Lore*. Making use of these series of dates I have made out the accompanying charts in an attempt to show the average dates of arrival and the latest dates on which the different species have been seen. The species have been arranged in the order of the average dates of arrival, and only those for which a fairly accurate series is available are included in the list.

Three birds have changed their habits during the period covered. The Point Pinos Junco and the Western Robin which up to 1917 were considered winter visitants in the Bay region have become permanent residents since that date and are now quite abundant during the nesting season. In the summer of 1932 and again in 1933 the Red-breasted Nuthatch was also found breeding in one locality in the Oakland Hills. The extensive plantings of Monterey pines in the hills in the East Bay region may be responsible for this change as well as for the later dates of arrival recorded after 1924. Before that date the species was commonly observed on the University Campus and in the lower hills during the first half of September. But now one must make a special effort to find them, and consequently they are probably not recorded when they first arrive.

Until 1927 records for the Cedar Waxwing were in the main confined to midwinter or to the spring migration, but the increase in abundance of berry-bearing shrubs in cultivated gardens has apparently attracted them earlier in the season. Averages of dates of arrival have therefore been based upon the records of the last six years. The Say Phoebe is not a common winter bird in the region, but a series of eight dates of arrival have been given to me by Mrs. Edwin Blake who has exceptional opportunities for observing it. The Sierra Junco is not accurately distinguishable from the resident Point Pinos Junco in the field. I have therefore made use of only six dates covering the years before the Point Pinos Junco became established in the region. The Coast Varied Thrush escapes observation some years but I have a series of seven dates before the end of October, the earliest of which, September 24, 1929, is based upon a few feathers which Dr. Grinnell found on a newly mowed lawn on the campus of the University of California. In 1928 a Varied Thrush was found in an exhausted condition on our east porch on the afternoon of October 11 where it was left undisturbed until it was able to fly. The next morning I picked up from the spot where it had rested half a dozen dark seeds which I sent to Professor Jepson with a request that he indentify them. He very kindly sent me the following reply, dated October 20, 1928.

## Dear Mrs. Allen:

Your "seeds" are drupelets from berries of the genus Rhamnus, black-berried series. They do not belong to the red-berried series (*Rhamnus crocea* or *ilicifolia*); I am quite certain that these drupelets are those of the Coffee Berry (*Rhamnus Californica*).

This species is, however, extremely variable. It has a large number of minor geographic variants, not all of which, probably, we have as yet discovered. These drupelets are, it is to be said, slightly different from anything I have before seen and possibly indicate that your bird may have been migrating several hundred miles. Yours sincerely,

W. L. Jepson.

THE CONDOR

From this evidence it seems probable that this individual Varied Thrush had just arrived on October 11 and may have traveled several hundred miles after feeding upon the fruit of the coffee berry in question.

The difficulty of discovering the date of departure of summer visitants is complicated by the fact that the local breeding population seems to disappear before the members of the species which breed farther north or at higher altitudes pass through the region on their southward migration. Probably almost every latest date in the column of departures is a record of such a migrant bird and, in the case of the Yellow and Pileolated warblers, should be credited to the subspecies which breeds in Alaska.

Species	SUMMER VISITANTS Arrival			Departure
	Earliest date	Average date	No. years recorded	Latest date
Allen Hummingbird		Feb. 13	21	
Lutescent Warbler	Feb. 21, 1928	Mar. 6	23	Oct. 5, 1924,-30
Golden Pileolated Warbler	Mar. 12, 1916	Mar. 24	22	Oct. 16, 1920
Western Warbling Vireo	Mar. 13, 1916	Mar. 27	<b>25</b>	Oct. 6, 1924
Western House Wren	Mar. 4, 1921	Mar. 27	16	Nov. 4, 1931
Western Flycatcher	Mar. 18, 1928	Mar. 29	22	Oct. 16, 1920
Cliff Swallow	Feb. 28, 1918	Mar. 31	9	Oct. 4, 1931
Tolmie Wårbler	Apr. 3, 1926	Apr. 13	18	Nov. 27, 1920
Black-headed Grosbeak	Apr. 4, 1916	Apr. 15	23	Oct. 7, 1923
California Yellow Warbler	Apr. 8, 1932	Apr. 18	16	Oct. 16, 1920
Russet-backed Thrush	Apr. 11, 1918	Apr. 23	17	Oct. 2, 1927
Lazuli Bunting	Apr. 13, 1914	Apr. 23	17	Aug. 28, 1933
Olive-sided Flycatcher	Apr. 12, 1917	Apr. 30	18	Sept. 15, 1928
Western Wood Pewee	Apr. 18, 1922	May 2	14	Sept. 30, 1932

The Western House Wren is near the northern limit of its winter range and this may account for the November date. The whole series for the species shows three mid-winter records, and, omitting these years, the spring arrivals vary from March 4 to April 20. There are such discrepancies in reports of the departure of the Allen Hummingbird that more careful observation is needed before the blank can be filled. In my series the latest date for Berkeley is August 23; Mount Hamilton, September 15, and Marin County, October 11. In the spring the earliest records come from Golden Gate Park and Lake Merced where the bird is abundant for a week or more before it becomes conspicuous in Berkeley. The earliest date for Berkeley is based upon a nest containing one fresh egg on February 13, 1920, indicating an arrival during the first week of February.

WINTER VISITANTS						
Species	Arr		Departure			
-	Earliest	Average No. years				
	date	date recorded				
Cedar Waxwing	Sept. 5, 1929	Sept. 18 6	June 5, 1921			
Red-breasted Nuthatch	Sept. 7, 1922	Sept. 23 8	May 5,1932			
Gambel Sparrow	Sept. 11, 1917	Sept. 23 22	May 4, 1933			
Townsend Warbler		Sept. 25 19	May 15, 1933			
Golden-crowned Sparrow	Sept. 18, 1928	Sept. 26 22	May 18, 1933			
Say Phoebe	Sept. 20, 1931	Sept. 26 8				
Fox Sparrow	Sept. 14, 1930	Sept. 27 19	May 2, 1933			
Audubon Warbler	Sept. 10, 1932	Sept. 30 23	May 5, 1929			
Ruby-crowned Kinglet	Sept. 22, 1931	Sept. 30 23	Apr. 20, 1927			
Dwarf Hermit Thrush	Sept. 20, 1928	Oct. 3 23	Apr. 27, 1924			
Sierra Junco	Sept. 19, 1918	Oct. 6 6	•			
Western Golden-crowned						
Kinglet	Sept. 19, 1918	Oct. 7 11	Apr. 17, 1927			
Coast Varied Thrush	Sept. 24, 1929	Oct. 8 7	Apr. 28, 1932			
Western Robin	Nov. 1, 1915	Nov. 6 5	••••••			

## Nov., 1933 ARRIVAL AND DEPARTURE OF AVIAN VISITANTS

Already the dates of departure for the Gambel, Golden-crowned and Fox sparrows have been pushed forward several days by the records of persons who are banding birds. It remains to be seen just how general will be the knowledge accumulated by this new method of observation, but it is easy to predict that many uncertainties will be cleared up and more exact information as to the movements of the different subspecies will be made possible.

Berkeley, California, August 28, 1933.