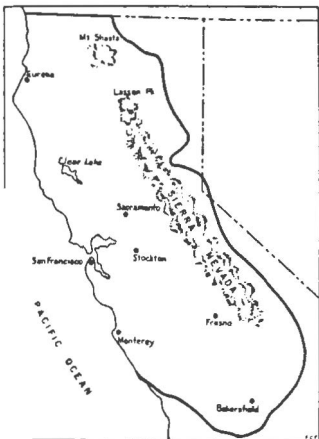


rains of February abated somewhat in early March; but there were nevertheless 21 days that month with some rain (at San Francisco). A series of major rains began on March 15-16 and carried over, with interruptions of only a few days, through the first six days of April. By April 2, lowlands were extensively flooded through much of the Central Valley and the larger coastal valleys also. After April 6 there were no rains of any great consequence, yet the precipitation totals for the winter stood at far above normal and the standing water in parts of the Central Valley continued to provide habitat for waterbirds well into May in areas where it is not normal at this season. Temperatures during the stormy period were normal or above, with no minima at key weather stations falling to freezing after March 9. Maximum temperatures were below 70° until April 8, the second day after the end of the big rains, when it became warmer, then reached 81° at San Francisco and Fresno on the 12th. More or less normal temperatures prevailed subsequently (cool on the coast, and gradually warmer inland into 90's in mid-May) except for a one-day heat wave that reached the coast on May 15, when it was 91° in San Francisco.

*Relation of Migration to the Weather.*—In an attempt to correlate the arrival dates and also certain later movements of migrants (a few "waves" even being reported) with the actual weather conditions, including the late March—early April storms, wind directions and "grounding" factors such as cold fronts or rain were tabulated from the daily weather maps for each of the five major topographic sectors of the Region, not including the higher Sierra Nevada from which no weather data are available. These sectors, with pertinent information as to their extent and application to the locations of contributors, are as follows: 1) SOUTH COAST RANGES, from northern San Luis Obispo County northward through Monterey and San Benito Counties (no key weather station in this sector, so Santa Maria just S of it was used; northbound migrants would presumably have passed areas near there); 2) WEST-CENTRAL CALIFORNIA, largely the San Francisco Bay Area plus Santa Cruz County and parts of Sonoma and possibly Lake County, although data on migrants from these latter indicate that they are intermediate toward the next sector (key station, San Francisco); 3) NORTHWESTERN CALIFORNIA, all observations close to the coast in the area of normally very rainy winters and cool, overcast summers (key station, Eureka); 4) SAN JOAQUIN VALLEY, that part of the Central Valley from Stockton south to the Tehachapi Mountains (key stations, Fresno and Bakersfield); and 5) SACRAMENTO VALLEY, the part of the Central Valley from about Lodi north (key station, Red Bluff, which is, however, close to the north end of the valley). It is assumed in the analysis which follows that the bulk of migrants proceed from southwestern California northwesterly and westerly (along the trends of the mountains there) into sector 1, thence to sector 2, and on to 3 for the coastal sectors; and it is also assumed that there is a major migration from both coastal and inland southern California over the Tehachapis into

**MIDDLE PACIFIC COAST REGION.**—Since the Winter Season report from this Region was compiled from observations through March 8 only, the present one will include migration reports based on observations from that date to the end of the period, May 31. Nesting notes which were submitted will be deferred to the Summer Season report, although, as is usual in this Region, there were *many* species nesting in April and May.

The heavy



sector 4 and from it to sector 5. There is possibly some crossing from 4 to 2, and from 5 to 3, but no definite evidence of such exists. The traditionally greater scarcity of grounded migrants in western California, where "waves" are in some observers' opinions essentially unknown, would not suggest that there is much of such crossing—for many migrants and at least some waves of them do occur interiorly in the state, and through southern California as well. Few or no observations were reported this season from sectors 1 and 4, which is unfortunate, as these are the first parts of the Region to be reached by northbound migrants. Tabulation of the weather in them is of significance, however, since it might determine the number of migrants aloft.

In the table below the degree of favorability of night winds for migrants "northbound" along these presumed routes is indicated by S, SSW, SE, ESE, etc., for winds from those directions at the key stations at 10 P.M., and similarly N, NW, NNE, etc., for the unfavorable northerly winds. Wind speeds of over 15 m.p.h. are indicated by italicizing the designation for the direction (as *NW*). In scanning the table it should be borne in mind that an ESE or even due E wind, especially in the southern sectors (1 and 4), is distinctly more favorable than a W wind—if the above hypothesis on major routes be correct. In the northern third of the state this is less and less true, as the major topographic features trend more N-S there, as does the coast. Anywhere along the coast itself easterly winds would, of course, tend to carry birds out over the ocean. The wind direction entries for sector 4 taken from the Fresno station, are preceded by small -, +, or o symbols which indicate whether the winds at Bakersfield (first symbol when two are present) and Los Angeles are unfavorable, favorable, or neutral, respectively, for bringing migrants to the middle San Joaquin Valley. In addition, specific dates on which migrants could be expected to be grounded within a particular sector are indicated by symbols following the wind direction designation: \*, if the winds encountered here are unfavorable, after favorable ones farther south; r, if rain fell during the night or soon after dawn; and f, if a cold front or occluded front passed across the sector during these same times.

All this assumes that northward surges and groundings of migrants operate in the same way in this Region as in the eastern half of the United States, where the pattern has been so beautifully worked out during the past ten years. As will be seen later, there is at least some evidence that this is true; but many migrants also appear within this Region and pass northward through it in spite of adverse winds, although these are usually mild ones. Perhaps this is one reason for the lack of noticeable "waves" in coastal California. Note from the table that the only really favorable northward air flow during the main migration period (March 20 to April 30) took place *during* the late March and early April rains. Such is frequently the case, though the rains are often not so heavy as they were this year.

That there *are* waves of migrants grounded by encountering such rains after moving northward in

## FAVORABILITY OF NIGHT-TIME WEATHER FOR MOVEMENT AND GROUNDING OF MIGRANTS

By Sectors of the Region (see text for limits)

Sector Number					
Date †	1	2	3	4	5
Mar. 20	WNW	SW <sup>r</sup>	SW	-SE	W *
Mar. 21	SE rf	W <sup>r</sup> r	SE r	SE	SSE r
Mar. 22	WNW r	WSW r	SSE	+ NE * r	S r
Mar. 23	0	S r	E *	+ oE	SE
Mar. 24	SE	S r	S ?	- NE r	SE
Mar. 25	WNW	W r	S r	- NNE	SE
Mar. 26	NW	WNW	SE	oNNW	NW
Mar. 27	0	SW	0	-ESE	SE
Mar. 28	SW	W	NW *	- oSE r	NE
Mar. 29	0	SW	S rf	o-NW	SE r
Mar. 30	ESE rf	W <sup>r</sup> rf	SE r	- oESE f	SSE r
Mar. 31	W	0 r	S r	- oSE r	SSE
Apr. 1	SSE rf	S rf	SSE rf	- + SSE r	SSE r
Apr. 2	0 r ?	SE r	SW <sup>r</sup> rf	o SSE	SE ? rf
Apr. 3	S rf	SW rf	SSE r	+ SSE rf	S r
Apr. 4	W r	W r	SSE r	o-S r	SSE
Apr. 5	0	0	SSE r ?	o + SSE	SSE r ?
Apr. 6	SSE rf	SSE rf ?	SSE rf ?	+ SE f	SE rf
Apr. 7	SE r	ENE * r	NNE *	+ + ENE * r	NNE
Apr. 8	NW	NW	NNW r	o-NE	NNE
Apr. 9	0	NW *	NW r ?	+ + NNW *	NE
Apr. 10	NNW	NW	N	- + W * ?	NNW
Apr. 11	0	W	NNW	o0	NNW *
Apr. 12	NW	WNW	SW	+ + W * ?	NW
Apr. 13	0	ENE ? f	WSW f	+ + ENE * ?	0
Apr. 14	0 f	WNW * f	N	-ENE	SW f
Apr. 15	0	NW *	N	o-NW	NW
Apr. 16	0	WNW *	NW ? rf	-NNW	NNW
Apr. 17	0	W	WSW r	o + W * ?	N * ?
Apr. 18	NW r ?	NW r	N	-NW	NW
Apr. 19	NW	WNW	0	-NW	NW
Apr. 20	WNW	WNW	0 f	+ NNW *	NW f
Apr. 21	0	W <sup>r</sup> W <sup>r</sup>	0	NW	WNW
Apr. 22	WNW * f ?	NW <sup>r</sup> f	N f ?	+ + NW * f ?	W f

†Weather tabulations are for the night preceding this date.

a favorable air flow, especially one just preceding a cold front, is undoubtedly as true of parts, at least, of this Region as it is of the East. Such waves have been noted on a number of occasions in southern California, especially along the bases or flanks of the E-W or SE-NW trending mountains there, where of course topography augments the concentration (see *Audubon Magazine*, Sec. II, July-Aug. 1942; *Audubon Field Notes*, 1:164, 5:276, 7:291-292, 8:328, 9:360). That the same sort of wave would not occur in more northerly parts of the state is unbelievable, for similar weather conditions *do* occur there. In the far western part of the state the lack of *masses* of migrants destined for the far north may be due to the fact that in most species such numbers pass via the shorter inland route. Hence such waves as do occur in the coastal sectors are perhaps detectable only by intensive and thorough coverage of good birding areas, with *tallying of numbers* of individuals of each species encountered on *repeated dates*—a type of record which is seldom available, unfortunately.

The most obvious effect of the weather this spring on the migration was in the delaying action of the series of storms mentioned above for several common and often reported summer residents. Thus Western Kingbirds, Western Flycatchers, House Wrens, Warbling Vireos, Wilson's Warblers, and Bullock's Orioles normally arrive between March 23 and April 4. All except the wren were noted in limited numbers and at only one or a few localities in this period;

e.g., the Western Kingbird at Dixon on April 4 (Don McLean), a Western Flycatcher at Sebastopol on March 28 (Joseph Kittredge), the first few Warbling Vireos at Sunol on March 30 (Milton Seibert) and at Oakland on April 3 (H. L. Cogswell), many Wilson's Warblers in Tilden Park near Berkeley on March 29 (Golden Gate Audubon Soc.) and the first at Inverness, Marin Co., on April 1 (Grace Miller), and the first Bullock's Orioles at Freeport, S of Sacramento on April 2 (DM) and at Chico on April 4 (Vee K. Curtis). All of these individuals might be said to have moved northward on favorable winds (some of them undoubtedly despite rains) and been grounded, probably by rain. The bulk of the population of these species was, however, delayed until after the rains as evidenced by numerous "arrival" reports for the period of April 6 to 12. Yet if the weather for these dates and preceding ones is examined, it can be seen that there were a number of opportunities for arrival of the delayed species before the dates on which they appeared in numbers, e.g., March 23; March 27 and 28 and April 2 and 4 to sector 5, at least; and April 5 to both sectors 4 and 5. The night of April 5-6, with winds favorable everywhere, but with rain also, brought a House Wren to Sunol (MS) and the Western Kingbird, Rough-winged Swallow, and Brown-headed Cowbird to Howell Mountain, Napa Co., where, however, the House Wren was not noted until April 10 (Donald V. Hemphill).

The following week had night winds *not* conducive to massive northward movement, except possibly in sector 1 on April 6-7 and April 8-9 and in sector 3 on April 11-12-13. Yet many of the "arrivals" for the above species and for others were apparently on these "unfavorable" nights. Among the other species first noted on more or less normal dates during this week after the big rains were: Solitary Vireo, April 9 at Howell Mountain (DVH) and April 12 at Forestville (JK); Barn and Cliff Swallows at Howell Mountain on April 9 (DVH), much later than elsewhere; Purple Martin there on April 10 (DVH) and at Jenner on April 7 (JK); and Chipping Sparrow at Howell Mountain on April 10 (DVH). The greatest concentration of reported arrivals or of presence of grounded migrants after April 6-7 came on April 12 and 13, although the winds were unfavorable on the night of April 11-12 (except sector 3) and the same or neutral on the following night, with little other than a mild cold front to bring birds down. The fact that this was a week end, with more observers afield, may be a more reasonable explanation for the number of "first-seen" records then, which included on the 12th a Lazuli Bunting near Dublin, Alameda Co. (HLC); a Nashville Warbler near Berkeley (David Parmeter); a Yellow Warbler and a Chipping Sparrow at Forestville (JK); a MacGillivray's Warbler and Black-headed Grosbeaks at Howell Mountain (DVH), and the grosbeak also at three other locations (Forestville, Inverness, and Murphys), including one at 2200 feet elevation in the Sierra foothills (JK, GM, and Ednah C. Scoles, respectively). The next day brought Bullock's Orioles to Murphys (ECS) and the Western

Tanager to Howell Mountain (DVH).

The rest of the period, after April 13, was monotonously unfavorable as to night winds, not only through most of this Region but often in southern California and Arizona as well, whence our migrants presumably come. There were, nevertheless, more or less normal arrivals and/or passage of typical mid-April to early May birds: Vaux's Swift, several near Sloughhouse, E of Sacramento, April 9 (Fred G. Evenden), an early date, and general arrival in breeding areas, April 15 at Duncan Mills (JK) and April 18 at Prairie Creek State Park (Ken Legg); Ash-throated Flycatcher, pair at Big Basin State Park on April 15 (Eleanor A. Pugh) and 5 at Lakeport, April 17 (Clark Van Fleet), with widespread arrival by April 25; Western Wood Pewee, first on April 24 at both Mills College, Oakland (HLC), and St. Mary's College, Moraga (A. S. Campbell), and 2 on April 26 at Forestville (JK); Olive-sided Flycatcher, April 19 and 20 in coastal nesting areas from Oakland and Inverness to Arcata (although Hemphill reports an early vagrant at Howell Mountain on April 3, which could have been cited above as evidence of arrival and grounding by the weather then); Swainson's Thrush, none on April 24 but 2 on April 25 at Mills College (HLC) and 2 the next day at Forestville (JK); Black-throated Gray Warbler, April 14 at Howell Mountain (DVH), April 15 at Big Basin (EAP), and one on April 19 at Arcata (KL); Yellow-breasted Chat, April 15 at Lakeport (CVF) and April 19 at Forestville (JK), and one at a bird bath in Chico on April 24 after 3 days of "drying north wind" (VKC); Hermit Warbler, April 22 at Howell Mountain (DVH), 2 by the Sacramento River E of Woodland on May 14 (EAA) and a female at Sunol on May 17 (MS). A MacGillivray's and 2 Black-capped Warblers also near this Sacramento River area on May 4 (EAA) may indicate a slight wave of grounded birds, perhaps due to passage of a mild cold front on the 3rd. Westerly winds across all of central California on April 16-17 may possibly be correlated with the arrival of a Slate-colored Junco and the first White-crowned and Fox Sparrows at Tahoe City, 6250 ft., on the 17th (Guy McCaskie); but no such explanation is possible for the much greater numbers of White-crowns that arrived there on April 20 and subsequent dates. However, the major migration of this species (and perhaps of most birds) to the Tahoe area probably lies along the east flank of the Sierra Nevada, from which we rarely receive notes.

A few other specific instances of appearance of grounded migrants on dates following conditions which would probably have brought them to the localities in question can be cited: White-throated Sparrow, 1 at Glenn on March 22-24 (T. E. Balch); Sage Sparrow, 1 banded at Willows on March 24 (Marjorie M. Elmore), and on the same day, a flock of 8 Evening Grosbeaks eating almond leaf-buds at Chico (VKC); Vesper Sparrows, 20 or more 16 miles N of Chico, March 30, "the day after 40-50 mph winds" (VKC) and with rain the night before in addition, though the winds were favorable in direction; Audubon's Warbler, increased numbers at

Eureka on April 6 after a favorable night, but a second influx of Audubon's plus many Myrtle Warblers along nearby Humboldt Bay on April 12 followed weak SW winds without notable "grounding" factors—these birds staying through the 13th and leaving again by the 14th (Charles I. Clay) in spite of unfavorable winds then; Audubon's Warblers "in numbers everywhere" 10 miles SE of Chico on April 7 (VKC) might have been brought that far on the favorable Central Valley winds of April 5-6 and grounded by the passage of an occluded front with accompanying rain then, rather than on the night of the 6th-7th, when winds were unfavorable at this low altitude locality; two Western Flycatchers and an influx of additional Warbling Vireos appeared at Mills College, Oakland, on April 7 (HLC) after a night of favorable winds in sector 1 to the south but with both rain and unfavorable winds in sector 2; Warbling Vireos arrived at Howell Mountain on the same day, April 7 (DVH), and a "belated flock" of 12 Robins appeared at Lakeport then, too (CVF), with possibly the same explanation.

A single **Black-throated Sparrow** seen closely at Tahoe City on May 8 (Guy McCaskie) was out of habitat and presumably driven there by the unusual southwestward passage of a cold front across the normal range of the species in the Great Basin just to the eastward during the preceding night. Also of major interest, and not mentioned above, is the one distinct "wave" reported later than mid-April, although the "peak" of our land-bird migration period is normally near May 1. This came on May 12. West of Sacramento it consisted of Wilson's Warblers (DM) and followed four nights of favorable winds in that sector (5) but with rain beginning after 9 P.M. on the 11th. At about the same time an influx of Swainson's Thrushes reached Oakland, for 38 were counted on May 12 in the 137-acre Mills College campus which harbors less than half that many breeding individuals (HLC).

*Pelagic Birds.*—Richard T. Holmes contributed a number of interesting observations made from a U. S. Fish and Wildlife Service vessel engaged in study of Alaska Fur Seals from near Monterey northward and to points as far offshore as 60 or 70 miles. Included are two more occurrences of the **Laysan Albatross** (in addition to the one of Feb. 9 reported in the last issue)—one on March 3 at 15 miles SW of Pigeon Point, San Mateo Co. (and the closest to our shores yet!), and one on March 24 at 50 miles NW of Pigeon Point (=few miles SW of Farallon Islands). These occurrences are possibly to be correlated with the warming of the Northeast Pacific waters during the past year as has been discussed in previous issues of AFN by Arnold Small for the South Pacific Coast Region. The few Fulmars observed by Holmes, with the last on April 11, may also be related to the same factor, as are, perhaps, his following observations: a very early Pomarine Jaeger 50 miles W of Point Reyes on March 9; wintering alcids generally scarce, with the only Ancient Murrelet noted, in Monterey Bay on March 25, and the last Rhinoceros Auklets, 60 on March 4, 10 miles NW of the Farallons. Fork-tailed Petrels

were encountered commonly from March 2 to 16 far offshore by Holmes, 3 per hour being seen 30 miles off the Farallons on March 9. The Black and Ashy Petrels were not seen, but Leach's Petrel (a species rarely seen off our shores but which breeds on the Farallons in limited numbers) was—3 at a few miles SW of these islands on March 24 and 6 at 55 miles W of Point Pinos, Monterey Co., on March 27. Black-footed Albatrosses were common 10 or more miles out, up to 20 or 30 being in sight at once; Pink-footed and Sooty Shearwaters were normally numerous; and the Black-legged Kittiwake was "abundant," at least 200 being seen 10 miles W of the Farallons on March 4 and the last one a few miles farther out on March 17 (RTH).

*Loons, Grebes, Pelicans.*—At Tahoe City there was a Common Loon in breeding plumage on April 6, and one in winter plumage from April 9 to mid-May (Guy McCaskie); a migrant Common Loon was on ponds E of Woodland, April 24 (Alice Williams), while along the coast of northern Monterey County this species was common and the Arctic Loon very common on May 4 (DP). Four Common Loons and 4 Horned Grebes were still at Bodega Bay on May 22 (JK). Western Grebes were noted on Clear Lake (a breeding area) from April 10 on (CVF). A Pied-billed Grebe at Tahoe City on March 18 (McCaskie), and a concentration of them in the Sacramento area on March 20 (FGE) probably indicate migratory movement. A flock of 43 White Pelicans passed northeastward over Chico on May 5, a clear sunny day (VKC), this direction trending toward areas of NE California where they breed.

*Waterfowl.*—Large flocks (thousands) of Canada Geese (*minima* race) foraged on flooded and wet lands near Chico, March 26 to April 1, and 3 flocks totaling 240 migrated N over Chico on April 5 (VKC). Migrating Canadas were also flying NW east of Sacramento on April 13 and 17 (FGE), and in the Yolo and Sacramento By-passes on April 20 (Earl A. Albertson). The last flock of the *minima* race was seen at Gray Lodge State Waterfowl Management Area, near Gridley, on April 26 (John Cowan). About 1000 Black Brant were seen in a pasture near Arcata on April 5 (KL); and, although "most" of them were gone from nearby Humboldt Bay on April 14 (CIC), about 100 were still there on May 17 (KL). Some 5000 White-fronted Geese in 6 flocks flew northwestward east of Sacramento on April 20 (FGE). There were at least 20 Ross' Geese among the small Canadas N of Chico on March 30 (VKC). An Oldsquaw was seen 3 miles W of Point Reyes, March 8 (RTH), and there was a late male Harlequin Duck (immature?) at Point Lobos State Park on May 3 (HLC). The Am. Scoter, a species reported with increasing frequency along our northern coast, was seen as late as April 12, when a male and a female were at Crescent City (RTH). A highly unusual concentration of at least 94 Red-breasted Mergansers foraged actively in the mile-long but narrow brackish lake in Berkeley Aquatic Park on April 1 (HLC), during a respite in the sequence of storms.

*Vultures, Hawks.*—The first 13 Turkey Vultures



at Sebastopol (except for 1 that wintered there) were seen on Feb. 26, and normal arrivals were noted in March and early April at widespread localities. A flock of 6 were obviously migrating on April 12 at Danville, passing steadily NNW for over 4 miles along the hills west of the town (HLC). One member of a pair of Red-shouldered Hawks was feeding the other at Deer Creek, N of Chico, on March 27 (VKC); and an "outpost" one was present S of Orick on May 30, where one was noted last spring (KL).

*Rails, Gallinules, Coots.*—At Benicia, young Camm Swift noted the approaching coincidence of heavy rains and high tides on April 2 and donned chest-high waders to explore the marshes of Southhampton Bay for rails. He found only a "few scant bushes" still protruding from the thoroughly flooded marsh, and finally flushed 2 dark, "small, rail-like, Song Sparrow-sized birds" from two of these, the birds flying weakly in characteristic rail fashion to other (and inaccessible) bushes. He feels that they were "unmistakably **Black Rails**." Six Virginia Rails and 3 Clapper Rails were also seen here, one of the latter flying down from the nearby grassy hillside. A Common Gallinule was seen 5 miles S of San Jose on March 16 (Ken Schulz). Flocks of 200 and 120 Am. Coots which gathered in temporary rain pools of the northern Sacramento Valley on March 28 and April 6, respectively, were thought to indicate migratory movements (VKC), as did perhaps large flocks at Lakeport on April 1 (CVF).

*Shorebirds.*—Many shorebirds appeared, in large flocks, on the shores of Humboldt Bay in the early morning of April 5 (CIC), the day *before* the end of the big series of storms, although certain species such as Willet, Dunlin, dowitcher, and Western Sandpiper had been notably scarce or absent there during much of the preceding week. On April 11, Mr. Clay was fortunate enough to observe what appears to have been the actual departure on migration of about 1000 Dunlins at 2 P.M., flying north from the north end of the bay W of Arcata. These were followed during the next 4 hours by a number of smaller flocks of the same species, and also by many smaller "peeps," presumably chiefly Western Sandpipers. It was clear and there was a light northerly wind at the time according to Mr. Clay, though this had changed to WSW by 10 P.M. at nearby Eureka according to the weather map. Of all the common shorebirds, the Marbled Godwit seemed to be holding up best in numbers, a concentration of several thousand being in the Bay Farm Island-San Leandro Bay area on April 17 (HLC), and large flocks on April 11 and 14 along Humboldt Bay (CIC). There was a good coastal flight of Semipalmated Plovers, and also two inland records on May 4 at Sacramento By-pass and on May 10 E of Woodland (EAA). Least Sandpipers appeared at Gray Lodge Waterfowl Management Area on April 10 and remained abundant there until the 16th (JC). Dunlins and dowitchers (presumably Long-billed here) were still plentiful on April 20 in Yolo County (EAA), and 10 dowitchers (sp.) were in a still flooded area NW of Newark on May 20 (HLC). A

most unusual record for the locality is the sighting of 2 Sanderlings, at close range, on the rock-strewn American River at Whitehall, 3500 ft., Eldorado Co., on May 11 (Mr. and Mrs. Ed R. Pickett), providing a clue as to a possible route of their migration from the coast to the Great Basin. No Red Phalaropes were reported within the usual late April and May migration period, but 6 very early ones were seen 40 miles W of Point Pinos on March 26 (RTH), and 11 were at Bodega Bay on April 7 (JK).

*Gulls and Terns.*—Along the coast of northern San Luis Obispo and southern Monterey Counties on April 20 there were small flocks of California Gulls and Ring-billed Gulls totaling at least 60 and 100, respectively, migrating steadily up the rocky coast, which here trends WNW and NW. Individuals in various plumages, from the first-year birds to adults, were involved (HLC). Bonaparte's Gulls made an excellent showing from just after the early April storms to at least May 20. There were large flocks along San Francisco Bay and here and there along the coast of Monterey County on April 19 and 20, respectively, the latter ones migrating like the two preceding species, but in separate flocks (HLC). About 200 passed northward over Point Lobos State Park in similar fashion during two hours in the afternoon of May 3, hundreds were in fields south of Halfmoon Bay on May 6, and at least 100 were foraging in a flooded field NW of Newark on May 20 (HLC). Considerable numbers were found S of Sacramento on April 11 (DM), 3 near the Sacramento River, E of Woodland, on April 20 (EAA), and a flock of 25 at Ferndale, Humboldt Co., on May 11 (Clarence Crane, Jr.). The first 4 Black Terns were seen at Gray Lodge, near Gridley, on April 19 (JC), and the maximum of 45 or more was reached, over ponds E of Woodland, on May 4 (EAA).

*Pigeons, Cuckoos.*—From 50 to 300 Band-tailed Pigeons could be found daily within 15 miles of Chico in late March (VKC), and about 150 were at Gray Lodge from April 7 to 10 and 2 small flocks on May 2-3 (JC); two flocks of up to 200 each were present in the St. Mary's College area, Moraga, through April to May 7 (ASC). Unusually high numbers were also reported widely elsewhere. A **Yellow-billed Cuckoo** was recorded at Ferndale, Humboldt Co., on May 24 (CC), a normal date for the species, which is now rarely reported anywhere in the state. It is not known to breed in the humid northwest coastal part of California.

*Goatsuckers, Swifts, Woodpeckers.*—At Calera Canyon, SW of Salinas, where there is a large breeding population of Poor-wills; the first one was seen on Feb. 21, but then none "due to unfavorable weather" until April 4, after which they were seen and/or heard regularly (Louise M. Hatton). Presumably the early appearances may revert to hibernation at the onset of unfavorable weather in this species. A nighthawk foraging low over an area near the Cosumnes River at 6 miles E of Sloughhouse, eastern Sacramento Co., on May 25 was presumably a Lesser (EAA). A single **Black Swift** was seen in good light at rather close range by A. Laurence Curl as it foraged over downtown Berkeley on May 21.

The known range of the Acorn Woodpecker was extended by about 25 miles at the northwest to Weott, in Humboldt Redwoods State Park, where Legg saw 2 on April 2. At Tahoe City, McCaskie had a Downy Woodpecker (unusual at this 6200+ ft. altitude) at a feeding station from April 12 well into May, also a Lewis' Woodpecker on May 3.

*Swallows, Magpies.*—After normal earlier arrivals of at least some Violet-green Swallows there were notable concentrations during the heavy rains of late March and early April along the river at Sacramento (FGE) and over flooded fields near Chico (VKC). Although 2 advance straggler Cliff Swallows were seen at Hood, 15 miles S of Sacramento, on Feb. 11 (DM), none were located until normal mass-arrival time in mid-March (ERP); and after the first 28 were seen NW of Chico on March 23, none could be found during the big rainy period on an extensive tour of the northern Sacramento Valley; but they were again at Chico on April 7 (VKC). Yellow-billed and Black-billed Magpies were seen on May 9 (VKC) within a mile of each other at Canby, Modoc Co., a point which is well within the range of the Black-billed and which the more sedentary Yellow-billed has not been known to invade heretofore. The most probable and lowest altitude connection between the ranges of these two species is through the Pit River Valley SW of this point, along which the Yellow-billed was seen at about the halfway point in northeast Shasta County on June 9, 1956, by the same observer.

*Mockingbirds, Thrushes, Starlings, Vireos.*—A Mockingbird that spent the afternoon of March 14 at Fort Humboldt, in Eureka (KL), was 14 miles farther north in the coastal area than previously recorded. Robins going to the wintering roost in Joaquin Miller Park, Oakland, on the night of March 9-10 still numbered several thousand (HLC), though the species arrived in numbers at Tahoe City on March 10 (McCaskie). Wintering Varied Thrushes became scarce at Big Basin after April 12, with the last 2 being seen on April 23 (EAP). Several Starlings were seen along the Jackson Road, SE of Sacramento, on April 9 (FGE), and the latest one yet (except for an unconfirmed newspaper account of nesting near Lodi) in this Region was on San Pablo Ridge, NE of Berkeley, on May 25 (ALC). Two Bell's Vireos were heard and seen on May 5 (VKC), along Butte Creek, 4 miles SE of Chico, this being near their northern limit. Obviously transient Solitary Vireos were at Mills College, Oakland, on April 24 and 27 (HLC) and on May 16 (Darl Bowers).

*Warblers, Tanagers.*—In addition to the warblers mentioned above in the "Weather Correlation" section, there was a very early Yellow Warbler in a Sacramento dooryard on March 14 (FGE); the first Audubon's Warblers arrived at Tahoe City on April 9 and increased gradually thereafter (McCaskie), and there were many reports of departure of wintering Audubon's Warblers between April 3 and 15. Thus, although late ones were noted to May 1 at Big Basin (EAP), the general agreement between lowland departure and mountain arrival at

Tahoe was spectacular. Most spectacular of all the warblers were, however, two extreme rarities with us: a **Black-throated Green Warbler** at Sacramento City Plaza on May 5, reported by Don McLean (of California Dept. of Fish and Game) to ERP for the third state record (the first was collected on the Farallon Islands in 1911); and a singing male **Hooded Warbler** observed well and repeatedly by Florence Plymell and several others she rounded up for the purpose on May 4, 5, and 6 in Golden Gate Park, San Francisco. This seems to be the first record of this species in the state. The bird was not found when the area was searched on the following three days. Another "first" for this Region, although it is casual in SW California, is the **Summer Tanager**, an adult male of which was seen at ranges of less than 6 feet as it caught wasps along eaves in a North Berkeley residential area on March 28, 31, and April 6 (John Ralph, ALC). It might well be considered a storm-brought vagrant.

*Fringillids.*—A concentration of 250 to 300 House Finches on March 30 at 16 miles N of Chico (VKC) was unusual for this season and followed a day of 40-50 mph southerly winds. Evening Grosbeaks are becoming commoner as wintering or spring migrant birds in lowland areas both coastally and in the Central Valley, but the largest group yet was encountered in the "Huginwood Area" (near Sacramento?)—a flock of about 300 on April 20 (Muriel Kaminsky). The latest date for a group of 24 that wintered at Ferndale was May 9 (CC). A new breeding area for the erratic Grasshopper Sparrow is indicated by the presence of 2 singing in a half-mile along San Pablo Ridge, NE of Berkeley, on May 25 (ALC).—HOWARD L. COGSWELL, *Dept. of Biological Sciences, Mills College, Oakland 13, Calif.*