SOUTHERN PACIFIC COAST REGION.—The spring season in southern California was marked by unseasonably late rains and slightly below normal



temperatures. Most of the precipitation fell during a severe storm on April 30. Precipitation figures for the climatological subdivisions of this Region are as follows: Santa Maria-April, total 2.25 in. (normal 1.20 in.),

May, 0.41 in, (normal 0.33 in.); Los Angeles-April, 2.20 in. (normal 0.96 in.), May, 0.42 in. (normal 0.30 in.); San Diego—April, 0.90 in. (nor-mal 0.83 in.), May, 0.49 in. (normal 0.26 in.); Big Bear—April, 1.47 in. (normal 2.50 in.), May, totals slightly below normal; Bishop—April, 0.41 in. (nor-mal 0.25 in.), May, 0.88 in. (normal 0.22 in.); Thermal-April, 0.00 in. (normal 0.44 in.), May, 0.00 in. (normal 0.03 in.). The total precipitation for the Region was slightly above normal; however, the storms of late April arrived at the height of the spring migration. Since the desert areas (Thermal and Bishop) were relatively free from rain during the period there was little effect upon the migrants. These entered during March and April and moved slowly north and west across the deserts, then just coming into bloom and abounding with insect life. The real effects were felt in the coastal, foothill, lowland, and, particularly, the mountain areas. Those migrants which reached the mountain areas were dammed up by the severe storms of late April and congregated in depressions or hollows where they escaped the fury of the storms. The author and three others attempted a Big List on the week end of April 30 and expected to be thwarted by the rain and high winds. Despite the weather (or because of it) a total of 184 birds was reached and all the expected migrants were recorded in great concentrations. It was unexpected to find literally flocks of hundreds of migrating warblers, grosbeaks, swallows, and other small land birds. Many large flocks of migrating warblers were found in the Big Bear basin, a great many in full song despite the snow and sleet. This was totally unlike the expected spring migration in California and in many ways it resembled an eastern "wave." One can only speculate as to the fate of the swarms of small insectivorous birds which were trapped in the mountains by a 3-in. snowfall on the night of April 30. An attempt was made to return the following day but the roads were blocked by snow. At Big Bear the temperature fell to as low as 9° F. on three successive nights-April 30, May 1, and May 2-and remained below freezing on several later nights. The week of April 30 to May 7 remained heavily overcast particularly near the coast and in lowland areas. During this time there was a large and prolonged migration of Vaux's Swifts through the interior valleys. There were literally tens of thousands of the birds moving in a solid stream between the San Gabriel Mountains and San Bernardino Mountains and the Santa Ana Mountains to the southwest. This week was also marked by a heavy swallow migration through this same region. In general, most of the migrants passed through on time with Western Tanagers about a week late in reaching the mountain areas. Cloudy and cool weather prevailed on the coast well into June. The San Diego Audubon Society is to be congratulated for conducting an extremely successful Spring Bird Count in San Diego and Imperial Counties under the leadership of Burt L. Munroe. A count was taken on April 30 which totaled 228 full species; this was followed by a count on May 1 which recorded 219 species, giving a grand total of 34,418 individuals of 249 species in the two-day census. The high degree of success achieved by this group can best be ascribed to the excellent planning, organization, and leadership of Mr. Munroe and the enthusiasm of the participants. Fifty observers participated in the count which included the following areas: 1) coastal areas inland as far as the 2000-foot level; 2) Palomar, Laguna, and Cuyamaca mountains above

2000 feet; 3) Borrego and Anza Desert State Parks; 4) Imperial Valley from the Salton Sea National Wildlife Refuge to El Centro; and 5) Colorado River Valley from Imperial National Wildlife Refuge to Winterhaven. Limitations of space prevent more than a cursory summary of the highlights of the count. Some of the outstanding birds are as follows: Horned Grebe, Least Bittern, Blue-winged Teal, Am. Goldeneye, Hooded Merganser, Ferruginous Hawk, Harris's Hawk, Surf-bird, Solitary Sandpiper, Baird's Sandpiper, 3 species of phalarope, Short-billed Gull, Gilded Flicker, Gray Flycatcher, Vermilion Flycatcher, Gray Vireo, and a Tennessee Warbler (C. H. Channing, May 1 and 4 near Santee). Other areas of southern California ought to be investigated by local bird clubs as possible census areas to spread the fine work started by the San Diego Audubon Society in this field. A disastrous fire in the woodland of the Audubon Center of Southern California (San Gabriel River Wildlife Sanctuary) resulted in heavy damage to the ground cover and standing trees. The fire occurred just at the time when many of the birds were commencing to construct their nests. It was reported by Alma Stultz, Director, that very shortly after the fire the birds resumed their nest construction in areas not touched by the fire. Time will tell how well the virgin riparian growth of the Sanctuary will be able to spring back to leafage.

Loons, Grebes. Pelagic Birds.-Many Western Grebes remained in southland waters well into May. More than 950 were seen in the waters between Carpinteria and Santa Barbara, May 28 (Burt L. Munroe, Maureen Heraty). Two Eared Grebes remained on San Diego Bay until May 26 (BLM) and an Arctic Loon was present there until May 21 (BLM). A single Black-footed Albatross was seen about 5 miles south of Point Loma, May 21 (BLM, Robert Smart). On May 22 a boat trip to the Anacapa Islands encountered a vast flock of migrating shearwaters (mostly Sooty) which numbered about 10,000 birds. Among these were some 25 Pink-footed Shearwaters and a few Slender-billed Shearwaters. More than 80 Xantus Murrelets were observed in the waters off Anacapa Island together with 12 Pigeon Guillemots. Another flock of more than 11,000 Sooty Shearwaters was seen in the waters a hundred yards from the beach at Point Mugu, May 22, moving in a great swirling stream (Ed., Mimi Small, Dudley Ross, Vivian Ross, RS). A single Black Petrel was also seen near Anacapa Island on this trip.

Geese. Ducks and Coots.—A flock of 14 Snow Geese flew over Santa Barbara, April 11 (Waldo G. Abbott). A single male Blue-winged Teal was at Upper Newport Bay, April 30 (Ed., RS, Pat Gould, John Tramontano). Two female Hooded Mergansers were at Mission Bay, San Diego Co., May 4 (CHC). The spring migration of waterfowl from the Imperial Valley occurred as follows: the estimated population of waterfowl on the Salton Sea National Wildlife Refuge on Feb. 4 was 39.000 birds (23,000 ducks, 11,000 geese, and 5000 coots); on Feb. 11 there were 33,000 birds (20,000 ducks. 8800 geese, and 4500 coots); on Feb. 27 there were 30,000 birds (20,000 ducks, 4100 geese, and 6000 coots); on March 15, 26,000 (20,000 ducks, 1200 geese, and 5000 coots); on April 1, 11,000 (10,000 ducks, 70 geese, and 1500 coots); and on April 28, 1100 (800 ducks, 5 geese and 300 coots). Canada and Whitefronted Geese started to leave the Imperial Valley during the first half of February. The latest note of White-fronts was Feb. 26 when 10 were still present; the latest note of Canada Geese (large race) was March 5 and 6 when 60 were still present. After Feb. 15 Snow Geese started to decrease in numbers and the decline was steady until the last few days of March when the remaining Snow Geese departed. There was a sudden influx of about 5000 Pintail into the Imperial Valley during the first week of February. These were no doubt birds up from Mexico. Two Blue-winged Teal were banded late in February on the Salton Sea National Wildlife Refuge (Ed. J. O'Neill).

Birds of Prey.—An Osprey was at San Fernando Reservoir, May 2 (Bess M. Hoffman) and another was at the south end of the Salton Sea. May 15 (Ed., MS, RS). A pair of Bald Eagles was seen near Idyllwild, March 20 and April 4 (Norman H. Mellor) and a single Bald Eagle flew over Ramona, March 20 (Eleanor A. Pugh). A single Ferruginous Hawk was in the Mount Laguna area, May 1 (BLM, E. C. Trowbridge). At least one Peregrine Falcon was noted in downtown San Diego all spring and was last noted, June 5 (BLM). Two Saw-whet Owls were heard on Palomar Mountain, May 29 (James F. Clements).

Cranes, Shorebirds, Gulls and Terns .- Two Sandhill Cranes were on the Salton Sea National Wildlife Refuge, Feb. 18, and 5 were there on March 19. Four Sandhill Cranes flew over Santa Barbara, March 29 (Mary Erickson, fide WGA). A pair of Black Oyster-catchers was seen on the Coronados Islands, May 21, and since the species is not listed by Blake in his "Birds of Mexico" this constitutes a sight record of the species for the first time recorded in Mexico (BLM). Wandering Tattlers moved through our coastal areas in small numbers from early March until late May with as many as 5 as late as May 18 on the Sunset Cliffs, Point Loma (Mrs. T. H. Brown, fide BLM). Other shorebirds migrated through in about normal numbers with phalaropes fairly numerous and early in many areas. Forty Wilson's and 4 Northern Phalaropes were at the south end of the Salton Sea, May 15 (Ed., RS, MS). From the San Diego area, we had the following reports of phalaropes: Red-one female at south end of San Diego Bay, May 1 (Mrs. THB, fide BLM); Northern -over 250 birds near Santee, May 1 (BLM, MH) and nearly 150 birds on Sutherland Reservoir near Ramona, May 1 (EAP); Wilson's-from 1 to 6 birds on a pond at the Naval Training Center, San Diego, from May 9 until May 18 (BLM). Four Red Knots, a single Ruddy Turnstone and 2 Stilt Sandpipers were near the south end of the Salton Sea, May 15 (Ed., RS, MS). A Solitary Sandpiper was near Corona, June 5, and constituted the only record of this species this spring NHM). More than 100 Surf-birds were on the rocks near Laguna Beach, March 29, with 69 on March 30 and 95 on March 31 (Francis Raymond). A single Sabine's Gull was seen

6 miles south of Point Loma offshore, May 21 (BLM, RS) and 14 were seen the next day migrating north near Anacapa Island (ED.). Gull-billed Terns started to arrive at the Salton Sea, March 29, when 2 were seen. On March 30 they began arriving in numbers (EJO'N) and on May 15 more than 200 were present in the valley. Two adult Gull-billed Terns were present on the south end of San Diego Bay, June 5 (BLM). These birds are extremely uncommon near the ocean at any time of the year on the Pacific Coast. Black Terns moved through the Imperial Valley in large numbers early in May and more than 400 were present at the State Refuge on May 15 (Ed., RS, MS). More than a dozen Common Terns were at Playa del Rey, June 5 (Ed., James Huffman).

Partridges, Swifts, Hummingbirds.-A covey of Rock Partridges was established in Temescal Canyon near Corona (NHM). There were a number of reports of some of the consequences of the very heavy Vaux's Swift migration. Many large flocks were seen to roost in chimneys throughout the lowlands, particularly near the coast. Many home owners lighted fires in their chimney places in an attempt to drive them out. Four hundred and sixty-nine Vaux's Swifts were drowned in a 12-foot irrigation standpipe on the University of California Citrus Experiment Station grounds when they mistook it for a chimney. More than 500 White-throated Swifts passed over Corona, April 21 (NHM). Twelve Black Swifts passed north over Corona, April 21 (NHM). The hummingbird migration was normal with most of the birds passing through during late March, April, and early May. Calliopes were about 5 days late in arriving in numbers by the second week in May.

Perching Birds.—The migration of most of our passerine birds may be compared this year to an eastern "wave." The late storms of late April and

early May had a damming effect on the migrants, and observers from all parts of the Region reported similar weather conditions and great numbers of migrants present in their areas. A few species such as the Western Tanager were about 10 days late in arriving in the foothill areas but were reported from desert areas as occurring in large flocks which lingered through the stormy weather. Many observers reported flocks of "hundreds" of Black-capped and Audubon's Warblers while birds such as Hermit Warblers, Townsend's Warblers, Macgillivray's Warblers, Nashville Warblers, Yellow-breasted Chats, Lazuli Buntings, and swallows of various species were reported in unusually large flocks. Hermit Warblers, Townsend's Warblers, and Macgillivray's Warblers together with the Lazuli Buntings constituted the most conspicuous migrants in many areas where normally they slip quietly and inconspicuously through the Region. The Bullock's, Scott's, and Hooded Orioles all had arrived on their nesting grounds during April and consequently were not noticeably affected. Observers in the field on the weekend of April 30-May 1 were treated to some bad weather but some very unusual California ornithology. Gray Flycatchers were reported as follows: April 30 (2), Box Springs (Ed., RS, JT, PG); May 2, near Mint Canyon (Blum's Ranch) (1) (BMH). Cassin's Kingbirds were widely reported with as many as 7 near Laguna, April 2 (FR). Western Kingbirds arrived in normal numbers. Many of the Empidonax (sp.) flycatchers were, seen to be moving along the northern (desert) side of the San Gabriel Mountains on April 30 for the fourth year of observation. Most of the White-crowned and Golden-crowned Sparrows had departed by the end of April, although a few lingered shortly into May .--ARNOLD SMALL, Audubon Camp of California, Norden, Calif.