SOUTHERN PACIFIC COAST REGION.— After a winter season of almost minimal precipitation, some sorely needed rain fell during the latter part of



April. These late rains stimulated a fairly good display of wildflowers in the deserts and the chaparral. A fairly good crop of herbs and seed-bearing plants provided sufficient plant and insect food for the foraging migrants. Severe coastal and montane weather during late April discouraged passage of migrants into interior valleys and foothills from their desert flyways. Many observers reported on the discouraging numbers of insectivorous species, notably warblers, during late April and the first week of May, and indeed there was a marked reduction in numbers of warblers following inland pathways throughout the migration period. Conversely, observers afield in desert areas during late spring commented on the abundance of warblers and other migratory songbirds moving through these seemingly inhospitable regions. It thus is suggested that north-bound migrants attempting the various mountain passes in late April or early May are diverted to the desert (eastern) slope of the mountain ranges, and proceed northward along this more favorable route. San Gorgonio Pass, a favored entrance from the Mojave and Colorado Deserts to the interior and coastal valleys of southern California, boasts some of the strongest winds recorded here. Especially on days of coastal and mountain storms, winds in this pass often exceed gale velocity (and may reach 70 m.p.h. in gusts). These winds invariably blow from west (coastwise) to east (desertwise). This would at first seem to be inconsistent with the general weather conditions since the low pressure areas to the west of the pass and the high pressure areas to the east (over the desert regions) would necessitate favorable winds for transdesert migrants. However, the opposite is almost always the case. Our most severe storms often occur in late spring at the height of the landbird migration, and small landbirds encountering these gales as they attempt to breast the passes certainly must be grounded or swept eastward from whence they came. This observer was present in San Gorgonio Pass on two occasions this spring (April 24 and May 14) when such gales were blowing. It is the topography of the pass which so diverts these winds, and coupled to high-altitude turbulence (these passes are from three to four thousand feet in elevation) reverses the direction of ground-level wind-flow by day. These trans-desert migrants cover considerable ground by day as well as at night, and can be seen feeding en route. On the two aforementioned visits to San Gorgonio Pass (and to other similar passes on other occasions), dozens of migrant landbirds were seen huddled behind bushes or confined to the ground in the teeth of the winds. Normally diurnal migrants such as swallows and swifts were seen trying to make westward progress against the gale, but were losing more ground than they gained. On numerous occasions birds such as these were seen being carried eastward (and desertward) and were assumed not to have been able to make the transit.

Our southern California migratory wave sweeps northward out of Mexico in a multi-pronged front. A segment of this stream follows the appealing path of the verdant Colorado River Valley. A westward arm follows coastal mountain ranges after crossing the inhospitable deserts of Baja California del Norte and Sonora. A large mass of the migratory wave sweeps into southern California from the deserts of northern Sonora and is channeled by the existing desert ranges to the Imperial Valley and thence northward into the Coachella Valley. Some migrants no doubt follow other narrow canyon routes through the mountains of southern San Diego County, but run into similar conditions there as they attempt the higher passes. The stream of migrants entering the Coachella Valley will suddenly flood through the oases, and depending upon meteorological conditions and food supply, may remain or push on. The topography permits two alternatives to the migrants-one, the most direct route to inland and mountain areas via San Gorgonio Pass, is capricious depending upon the weather; the other route offers more desert, but better weather. In the latter case, the migrants may cross the low Little San Bernardino Mountains or thread their way via watercourses to the east. Once across this slight barrier they may then swing westward via Antelope Valley (accounting for superb migratory flights encountered on the north slope of the San Bernardino Mountains and San Gabriel Mountains) and then into the heartland of the state via the Great Central Valley or intermontane valleys (running north and south) of the Coast Range. Many of the migrants pass directly northward from the oases of the Coachella Valley and follow the watercourses (and often move across the open desert) through Indian Wells Valley to the Owens Valley. It is doubtful that these birds make a trans-Sierra crossing in great numbers as the passes are high and usually snow-covered at this season. No doubt a good number are diverted westward through Walker Pass of the southern Sierras since water and food are plentiful and the pass is at comparatively low elevation. Once across this and into the Walker basin some of the birds may reverse direction and flood into some valleys and mountain areas of Kern and San

Luis Obispo County. Others follow the drainage of the Kern River and proceed to the interior of the Sierra Nevadas by this route. The migrants that followed the Owens Valley route may then follow northward along this favorable highway for some considerable distance, many eventually reaching the Great Basin. Those migrants not diverted by storms and winds and not able to make a crossing to the west may remain at these desert oases until favorable weather permits a passing. Such was the case this spring and explains why observers in San Diego and Los Angeles Counties reported a poor or late migration, while those observers in desert areas to the east as in China Lake, Invokern, Death Valley, and the Coachella Valley reported floods of migrants, good, steady flights, and no shortage of birds. In summary then: migration of most species of landbirds which normally occurs en masse in late April and early May (i.e., Western Tanagers, Western Wood Pewees, Olive-sided Flycatchers, Swainson's Thrushes, and most migrant warblers) was poor and late. whereas earlier arriving species (i.e., Vaux's Swifts, some swallows, hummingbirds, Turkey Vultures, orioles, and others) were recorded in normal numbers and were about normal in time of arrival. Some species such as the Swainson's Hawks did not seem to arrive at all, and most probably for this diurnal migrant of late April, the desert route was taken. Obviously then if one wishes to witness migration in progress and encounter great numbers of migrants within a small area, the places to visit in spring are the various oases of the Coachella Valley, for here the birds congregate regardless of which subsequent route they follow.

Loons through Pelicans.—The northward flight of loons was light and widely dispersed. The 2000+ Western Grebes at Point Sal, Santa Barbara Co., May 26, were late and some of these birds were performing nuptial courtship (Alma Stultz). Observations on pelagic species were almost entirely lacking for the spring migration. Two hundred White Pelicans were seen flying over the Alamo River delta in the Imperial Valley, March 1 (William R. Neuss) and 10 were still present on Upper Newport Bay, April 2 (Francis Raymond).

Herons and Ibis.—The Snowy and Common Egret colony together with the Black-crowned Night Herons had established a nesting colony of more than 400 birds near the south end of the Salton Sea, June 5 (WRN, *et al.*) and more than 250 White-faced Ibis had taken up territories in the drowned tamarisk trees nearby by that date. Small numbers of White-faced Ibis were at Furnace Creek Ranch in Death Valley from April 13 to May 1 (Roland H. Wauer) and were doubtless migrants to the sloughs and marshes of the Great Basin.

Waterfowl.—The mild weather of March and early April encouraged the waterfowl to move out of and through our Region rather suddenly as many observers reported the scarcity of waterfowl (especially ducks) from mid-April on. Thousands of northbound Black Brant were seen on Morro Bay in April although very few wintered there or on other coastal estuaries in southern California. These were no doubt migrants en route north from the coastal lagoons of Baja California del Norte (Philip V. Wells). A peak of 2025 Canada Geese was reached at the Salton Sea National Wildlife Refuge in January and represented the largest population recorded there since 1953 (WRN). A single pair of Wood Ducks was present at the Furnace Creek Ranch ponds through March and April (RHW) and a male was present near Santa Barbara from May 12 until May 24 (J. Kittredge). Buffleheads and Ruddy Ducks were reported as common at Furnace Creek Ranch from March 10 through April 10 (RHW) and a single Bufflehead was at Sweetwater Lake as late as May 30 (ED.). Most of the wintering scoters had departed by the end of March but 3 Common Scoters were recorded near Santa Barbara as late as April 20 (JK). A few Red-breasted Mergansers were found dead at Furnace Creek Ranch, April 4-7, and one was seen to be taken by a Prairie Falcon (RHW').

Hawks .- The spring migration of Turkey Vultures was somewhat early as most of the birds passed through during the first two weeks of March. Twentytwo California Condors were attracted to bait set out for them in the Sespe Refuge on April 24, and members of the Cooper Ornithological Society who attended this trip were rewarded by some spectacular sights. An encouraging number of immature birds was observed (ED.). Numbers of White-tailed Kites reported in the Region continue to be encouraging despite the urbanization of much acreage formerly frequented by kites. The spring flight of Swainson's Hawks was either entirely overlooked or the birds followed the alternate routes already described. A few lone Swainson's Hawks were noted early in April and 25 were seen near the Carrizo Plains, March 30 (Eben McMillan). A single Ferruginous Hawk was at Furnace Creek Ranch, April 28, but hawks in general were reported as scarce in Death Valley (RHW). The only Pigeon Hawk reported was a single bird near the south end of the Carrizo Plains, March 20 (EM). A small influx of Sparrow Hawks to Death Valley, March 31, was reported. By far the most interesting hawk observation in years was the Zonetailed Hawk, first seen at Finney Lake in the Imperial Valley, April 24 (Los Angeles Audubon Society members). What may have been the same individual was circling over Cottonwood Springs in Joshua Tree National Monument, May 14 (ED., Herbert and Olga Clarke). This oasis is about 100 miles north of Finney Lake. A bird answering its description was seen near Cottonwood Springs (fide James Bartel) the previous week. This constitutes the first record for southern California away from San Diego County and one of the very few records for the state.

*Quail.*—Gambel's Quail were reported as numerous in Morongo Valley and the Mountain Quail remained there until at least March 12 (Merle J. Whitney).

*Cranes through Shorebirds.*—Sandhill Cranes in very small numbers were still present on the Carrizo Plains as late as March 9 (EM). Five Black Oyster-catchers were on rocks south of Morro Bay, May 22 (AS). In general, numbers of migrant shorebirds were about normal for mcst species. A single Whimbrel was at Furnace Creek Ranch, April 20 (RHW)

and more than 500 Long-billed Curlews had gathered in a freshly irrigated field near Westmoreland, April 28 (WRN).

Gulls through Alcids .- What remained of the disappointing flight of Glaucous-winged Gulls had departed by mid-April. No Laughing Gulls were found on their former nesting island in the Salton Sea. June 5, and it seems certain that this bird must now be deleted from the list of species that normally nest in California (ED.). A few Bonaparte's Gulls were at the north end of the Salton Sea, May 14 (ED., HC, OC). One Black-legged Kittiwake remained at Malibu Lagoon until at least May 14 (Ernest J. Willoughby). No Sabine's Gulls were reported, but this was doubtless due to lack of pelagic observations this spring. This was most regrettable since southern California is noted for its pelagic birdlife, yet very few took advantage of this fact to make spring observations this year. Some 40 pairs of Gull-billed Terns had taken up residence on their nesting island in the Salton Sea, June 5 (ED.). Royal Terns nested for the second year at the Salt Works near south San Diego Bay and were joined by about 30 pairs of Elegant Terns. Very few Black Terns were reported during the spring, and although they normally occur at Ramer Lake in the Imperial Valley in large numbers, very few were noted. More than 100 Pigeon Guillemots were nesting on the cliffs south of Morro Bay, May 22 (AS).

Swifts, Hummingbirds, Woodpeckers.-The main flight of Vaux's Swifts passed through during April 22-28 and on those cloudy days, many hundreds could be seen flying quite low to the ground. An erratic Vaux's Swift was seen flying south over downtown Los Angeles, May 26 (ED.). No Black Swifts were reported. Allen's Hummingbirds were first reported in migration, Feb. 2, from Morro Bay (AS). The main flight of Rufous Hummingbirds came through in late March, but migrants were reported as early as March 5 from Loma Linda (MJW) and March 4 from Santa Barbara (JK). The other species of hummingbirds appeared about as usual. A Broad-tailed Hummingbird was seen near Scotty's Castle, Death Valley, April 23 (RHW). Both Nuttall's and Ladder-backed Woodpeckers occur in Morongo Valley (MJW).

*Passerine Landbirds (general).*—Migration of species that normally arrive prior to the end of April was early, owing perhaps to the mildness of the winter. Some other species that normally arrive toward the end of April were delayed in their movement through the Region or chose alternate routes.

Flycatchers, Swallows.—Ash-throated Flycatchers, Western Wood Pewees, Olive-sided Flycatchers, and certain Empidonax (sp.) were reduced in numbers and were late in arrival. Western Flycatchers, on the other hand, were early. Western Kingbirds arrived at about their normal times. Various species of Empidonax were cited as abundant in desert areas (as at Death Valley) and somewhat early there. An Olivesided Flycatcher was at Furnace Creek Ranch, May 8, and another at Dante's View, Death Valley National Monument, May 22. These birds constituted the ninth and tenth records for the Monument since 1891 (and all have occurred between May 8 and 23-RHW'). Three pairs of Vermilion Flycatchers were present at Covington Park in Morongo Valley from at least March 13 to May 15. In the San Diego area, at least 9 young Vermilion Flycatchers were successfully raised from a minimum of two pairs of birds at the San Diego Naval Hospital: more details will follow in the Nesting Season report (Leon L. Gardner). Another pair was reported to have nested near Cathedral City (Don Bleitz). Swallows were somewhat down in numbers, and were especially so in the San Bernardino Valley. More than 100 nests of Cliff Swallows were found on the trunk of a large eucalyptus tree in Corralillos Canyon, San Luis Obispo Co. (AS). Purple Martins were reported as more numerous this season.

Thrashers, Waxwings, Starlings.—A Crissal Thrasher was found just south of Joshua Tree, April 9 (MJW). Cedar Waxwings, which arrived somewhat late in the winter, lingered well into the spring season and large flocks were still present during the last week of May. Starlings were widely reported from the Imperial Valley, San Diego, San Gabriel Valley, and the Los Angeles area. The upward trend of their numbers as breeding birds in southern California continued as more and more nestings are reported each year. At first (just 7 years ago) their status here was that of a winter visitant, but after the first nest was discovered in southern California two years ago their status has changed to that of permanent resident.

Warblers, Orioles.—The warbler migration was entirely disappointing as numbers were low, the birds were late, and almost no interesting species were reported. A singing male **Parula Warbler** was found at Fallswale (elev. 6200 ft. in the San Bernardino Mountains), June 14 (John D. Goodman). A singing male MacGillivray's Warbler was found in Mill Creek Canyon, June 10, and 2 singing male Nashville Warblers were found in the same area on June 15 (JDG). These observations are most interesting as they may possibly indicate territoriality in the San Bernardino Mountains. Both Hooded and Bullock's Orioles were somewhat early in arrival, but the Scott's Orioles arrived about as usual.

Tanagers, Grosbeaks, Goldfinches, Sparrows.— Western Tanagers were very late and numbers of them could be found moving through desert areas during the third week of May (Frank Little). A flock of 15+ Evening Grosbeaks was found at 4200 ft. elevation in Mill Creek Canyon, May 10 (JDG). A Cardinal was reported from Whitewater Canyon, May 7 (VE, Unger, fide MJW); they are quite unusual away from the San Gabriel River and the Rio Hondo. Black-headed Grosbeaks were early and Lawrence's Goldfinches were reported as plentiful in the Morongo Valley (MJW). White-crowned and Golden-crowned Sparrows began to leave the Region during the first week of April and none were reported after April 29.—ARNOLD SMALL, 3028 Cavendish Drive, Los Angeles 64. Calif.