

lower and thus competition was reduced among individuals of the same species. Higher natality and reduced competition resulted in a general lowering of the mortality, especially among quail and passerine species. More than one contributor commented upon the apparent reduction of the numbers of certain predators (hawks, owls, snakes, skunks and certain other mammals) prior to the onset of the breeding season. This may be a reflection of the lean year that preceded this one. In any event, if this were indeed the case, it would add to the survival ratio of the quail and passerines. Contributors to the Spring Migration report commented almost universally upon the general scarcity of both migrants and summer residents, although all expected species seemed to be reasonably represented.

The early part of the nesting season (mid-May) may have been set back somewhat by freezing rains and hail, which lasted for more than a week in some of the mountain areas. Reports indicated that Mountain Quail suffered heavily from this storm. In direct contrast, both Gambel's and California Quail experienced exceptionally good success much lower down the mountains, in the valleys and in the deserts. Small passerines, which commenced nesting activities at about the same time in the mountains, suffered a similar fate, and perhaps could not eventually overcome this original setback. This was the exception, however, as species nesting in other mountain areas, foothills, lowlands, valleys and in the deserts did very well.

Weather conditions during the nesting season were more favorable (to nesting success) than they have been in many years. Except for the deserts, which remained as usual—hot and dry—temperatures were several degrees below normal in most inland, valley, coastal and mountain areas. In addition, there was much coastal fog during August and the humidity remained above normal. Happily, also Santa Ana conditions prevailed on very few days during July and August—far fewer than for the last five years—and the fire danger was not high continually throughout the summer months. In fact, to this writing, there

SOUTHERN PACIFIC COAST REGION.-Following a winter season of better-than-normal precipi-tation, it was anticipated that the nesting season to follow would be very productive. This proved to be true. After several years of drought and near-drought, populations of many species of nesting birds were measurably below normal. While all expected species seemed to be represented, their individual populations were low. The wet winter provided a rich source of annuals, weeds, and seeds for the nesting season; insect populations similarly were up. The stage was set for high avian production. In addition, much more water was available throughout the nesting season as many intermittent streams continued to flow well into the summer. Population pressures were

were no major fires of consequence, aside from the two large blazes near the northern part of the San Fernando Valley in late August. These two fires consumed more than 25,000 acres of chaparral before they were contained, but the nesting season was completed by then for most species. Certain desert areas (Twenty-nine Palms) normally receive some summer rain in the form of thunderstorms generated by tropical air masses; these storms may produce more than one inch of rain. No measurable rainfall was reported at the Twenty-nine Palms weather station. Elsewhere in the Mojave and Colorado Deserts summer rainfall of any consequence did not materialize. This brought very large concentrations of some species (notably quail) to the existing water holes and oases.

Loons through Cormorants—No summering loons were reported along the coast, and very few Western Grebes were noted. However, a pair of Eared Grebes in nuptial plumage was present on Hemet Lake, July 10 (MJIV). Large flocks of darkbellied shearwaters were present near Morro Bay intermittently from July 4 to Aug. 18. C. F. Tolman estimated between 15,000 and 20,000 present on July 4. He later reported that "many dead Slender-billed Shearwaters were washed up on the beach, but only one Sooty Shearwater was found." South of Morro Bay seabirds were scarce and only a few Black-footed Albatrosses could be found near San Clemente Island, together with small numbers of white-bellied shearwaters and Leach's Petrels (MHE). No Black Petrels were located off our coast, although this species is common during the summer months. Cormorants of all species were scarce next to the coast during the summer. No information was received regarding their nesting success. Good numbers of Brown Pelicans were present all summer near San Diego (EP), but elsewhere along the coast they were scarce. More than 50 White Pelicans had assembled at Morro Bay by June 13 (GFT), but there was no evidence of their nesting anywhere in the Region, even at the Salton Sea (JN).

Herons and Ibises—Least Bitterns were found only at the Maxton Brown Sanctuary near Carlsbad. From the Salton Sea Nat'l Wildlife Refuge, Nowak reported production of Great White Herons. Common Egrets and Snowy Egrets was good. A single Reddish Egret (of the 2 that were present during the spring) was last seen near San Diego, June 27 (EP, RP). Another Reddish Egret was reported from Morro Bay, July 9 (fide CFT). Wood Ibis in the Imperial Valley reached a peak of about 300 birds in mid-July (JN); the peak population of White-faced Ibis there was about 1500 birds. By the end of August most had left the Imperial Valley and small numbers dispersed northward and were reported by other observers in coastal areas.

Waterfowl—A single Black Brant remained in the San Diego area until at least June 26 (EP); another single bird was found at the Santa Marguerita inlet, Aug. 25 (ED., et al.). Young Ruddy Ducks and Redheads (not more than a few days old) were seen at Maxton Brown Sanctuary, Aug. 25. More remarkable was the Pied-billed Grebe found to be incubating there on that date (ED., et al.)! In the Imperial

Valley, waterfowl populations were low with only Fulvous Tree Ducks, a few Pintail and Cinnamon Teal remaining through the summer. The first migrant waterfowl to arrive were 300 Pintails, Aug. 13. These had built up to 500 by the end of the month. In addition, 50 Mallards arrived, Aug. 20, and 400 Green-winged Teal arrived, Aug. 29 (JN). Fulvous Tree Ducks seemed to have done well this season in the Imperial Valley. A pair with a brood of 6 was first seen on June 29. Subsequently, 7 broods were noted on a single pond in the Salton Sea Nat'l Wildlife Refuge. Newly hatched broods were noted through the summer as late as Aug. 21. Nowak estimated that a peak population of 90 birds was reached by the end of July. Small flocks of mixed Surf and White-winged Scoters were seen throughout the summer on south San Diego Bay. Two Common Scoters were seen there from June 21 to July 24. when a single bird remained (EP. RP). The only Red-breasted Mergansers seen during the summer months were a small group on south San Diego Bay from May 29 through July 25 (EP. LG. JM. GH).

Birds of Prey—Golden Eagles were reported from numerous areas, including Pinto Basin, Joshua Tree Nat'l Monument (JRY); Hemet Lake (MJW); Cholame (EMcAI). No Bald Eagles were reported from this Region although there may be a few pairs nesting on some of the offshore islands. There are no reports of the nesting success of White-tailed Kites this year, and some observers commented on the general scarcity of hawks in their areas. A migrant Osprey flew over Upper Newport Bay, Aug. 17 (ED., MIIE). Another moved south along the shore of Silver Strand Bay, Aug. 30 (EP).

Quail—Nesting success among California and Gambel's Quail was excellent after several dry years with poor quail production. Tolman reported the California Quail population in Morro Bay State Park to be in excess of 2000 birds—almost double the yearly population there. Quail numbers build up fast in good years following the dwindling off after bad (dry) years (Bonnar Blong, California State Department of Fish & Game). Mr. Blong supplied the following sample data for an area on the desert slopes of the San Jacinto and Santa Rosa Mountains. Riverside County:

	Adult to Young			
	Adulis	Young	Ratio	Sampl
1962	175	8-17	1:4.8	1022
1961	411	3	1:0.0	-414
1960	137	298	1:2.0	430
1959	759	18	1:0.0	777
1958	229	882	1:3.8	1111

In the San Bernardino, Little San Bernardino, Santa Rosa and San Jacinto Mountains numbers of Mountain Quail were down. At Stubby Springs, Little San Bernardino Mountains of Joshua Tree Nat'l Monument, we noted several dozens of Gambel's Quail (compared with 100 Mountain Quail) coming to

drink at this spring. Aug. 28 (Ep., RB). In 1958 it was noted that many hundreds of Mountain Quail were coming to drink at this spring with Gambel's present. This year's reduction of Mountain Quail in the area (owing to the abnormal dryness there) created better conditions for the Gambel's Quail, where formerly Mountain Quail only were found. This high desert area, consisting of junipers, Piñon Pines and vuccas, does not seem suitable for Mountain Quail. During certain years they are highly successful here, while the Gambel's Quail remain at lower elevations.

Shorebirds-Summering shorebirds were present in good numbers from Morro Bay to south San Diego Bay and southbound birds began appearing at the end of July. A very late Surfbird was in Crown Cove, Silver Strand State Park, June 15 (EP) and 4 Ruddy Turnstones were on the bay side of Silver Strand all summer; by July 16, 8 were present and their numbers increased steadily during August (EP). By the third week in August returning Black Turnstones at Glorietta Bay numbered 15 (EP), and there were small numbers of these birds near Malibu at the same time (ED.). An early Wandering Tattler was at Santa Barbara, July 26-Aug. 2 (JK). Three Baird's Sandpipers were found there on July 26 (IK). Another Baird's Sandpiper was found at Silver Strand, July 16 (EP). Two Knots were found at Silver Strand, July 16, and 2 more near Imperial Beach, Aug. 2 (EP); 6 were found at Upper Newport Bay, Aug. 31 (FZ, et al.). Two Red Phalaropes were found at Silver Strand, July 16, but the fall flight of phalaropes was far below normal. Only a few hundred were at Maxton Brown Sanctuary, Aug. 25, when many hundreds could be expected (L.A.A.S.). It was the same story at Upper Newport Bay, Aug. 17 (ED., MHE), and other suitable areas produced no phalaropes at all. However, at the Salton Sea Nat'l Wildlife Refuge the population of Wilson's Phalaropes reached a peak of 500+ by mid-July (IN). Both Black-necked Stilts and Am. Avocets had an excellent breeding season in the Imperial Valley, where each species numbered 6000-8000 by the end of August (IN). Small numbers of Black-necked Stilts nested successfully at the Salt Works near south San Diego Bay (EP) and at Huntingon Beach.

Jaegers, Gulls and Terns-Jaegers were virtually absent from coastal waters throughout the summer months. A second year Glaucous Gull was found at the mouth of Coon Creek near Morro Bay, June 18 (CFT) and a single Glaucous-winged Gull was near Santa Barbara from July 5 to Aug. 23 (JK). Very few Bonaparte's Gulls were noted, even in late summer. There was a strong possibility that Forster's Terns nested successfully this summer at the Salt Works near south San Diego Bay. Previously there has been no bona fide record of nesting south of the now-dry Buena Vista Lake. Fred Gallup estimated the nesting colony of Caspian Terns to be about 500 pairs; he also counted 35 pairs of Elegant Terns at the Salt Works but again their nesting was not successful. Royal Terns did not nest at the Salt Works, and their numbers were very low all along the coast during the summer. Least Terns had a poor nesting

at the Salt Works (FG), and elsewhere as well, as many of their former nesting areas have now been "developed." Common Terns numbered about 175 at Silver Strand, July 4, and by the end of August had increased to more than 350 (EP): this same seasonal increase was reflected elsewhere as well. Gull-billed Terns may have nested this year at the new river delta at the south end of the Salton Sea (IN). Black Terns numbered in the hundreds at the Salton Sea Nat'l Wildlife Refuge during August (IN). Both this species and the Wilson's Phalaropes nest in the Great Basin and must swing south along the east side of the Sierra Nevada, and then westward to the Imperial Valley, where both are numerous in migration.

Doves through Hummingbirds-It was an excellent year for Mourning Doves with the population up 21 per cent over last year in the southern part of the Region. Inca Doves were seen on two occasions at the Salton Sea Nat'l Wildlife Refuge during the summer (JN). Ground Doves were seen as follows: 10 pairs near Corona—no known nesting (NHM); 1 at Sunland, July 31 (LW); and a pair at Twenty-nine Palms, July 31-Aug. 2 (fide JRY). A single Ringed Turtle Dove (possibly escaped) was at Corona, July (NHM). Occasional White-winged Doves were seen in the Imperial Valley (JN) and 2 were at Cottonwood Springs, Joshua Tree Nat'l Monument, Aug. 27 (ED., RB). A single male Broad-tailed Hummingbird was found in the Cottonwood Creek Basin of the White Mountains, July 14, and 2 females of this species were found in Wyman Creek Canyon of the White Mountains on this date (GMcC, PDeB). A male Costa's Hummingbird was found in the foothills of the White Mountains, July 14, which is about the northern limit for this species (GMcC, PDeB).

Passerine Birds-An Eastern Kingbird was found at Deep Springs, Inyo Co., July 15 (PDeB). Three Cassin's Kingbirds were found at Deep Springs, July 15, and one bird appeared to be defending nesting territory. This is a bit north of its known breeding range in eastern California, and only 7 miles from the Nevada border, from which state there is but one record for this species (PDeB). A singing Swainson's Thrush was found in Trabuco Canyon, July 14 (R & MW). Approximately 30 Starlings were found in Irvine Park, July 31 (MW). At least 2 pairs of Summer Tanagers nested in Morongo Valley. Another male was found at the junction of Deep Creek and Mojave River, June 9 (MJW). Lazuli Buntings were reported as very numerous in San Gabriel Canyon this summer (R & MW). Two Grav-headed Juncos were found in Wyman Creek Canvon of the White Mountains, July 14 (PDeB, GMcC). A Grasshopper Sparrow was collected near Cholane, July 7 (EMcM).

Contributors-(RP) Robert Paxton, (PDeB) Paul De Benedictis, (MHE) Martin H. Edwards, (FG) Frank Gallup, (LG) Leon Gardner, (GH) Grenville Hatch, (JK) John Kent, (L.A.A.S.) Los Angeles Audubon Society, (GMcC) Guy McCaskie, (EMcM) Eben McMillan, (JM) Jean Morley, (JN) John Nowak, (EP) Eleanor Pugh, (CFT) C. F. Tolman, (MJW) Merle J. Whitney, (JRY) James R. Youse, (FZ) Fern Zimmerman.—ARNOLD SMALL, 3028 Cavendish Drive, Los Angeles 64, Calif.