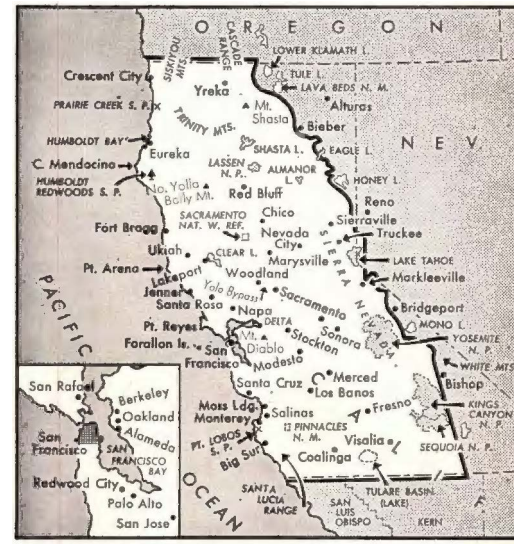
MIDDLE PACIFIC COAST REGION.—It is dif-ficult to determine whether this spring migration was actually less eventful than most or only seemed so because of fewer observers and less activity by



them. However, the striking observations of Richard Stallcup in the Point Reyes area on June 6, compared with the uneventful observations earlier by Paul DeBenedictis, support the idea that, with less variation in weather than in the East and Mid-west and less dependence of migration upon it, 'eventful' days even at the best localities for observation of migration are few and far between. Outside of the strictly coastal zone, and in particular in the Sierra Nevada, we have hardly enough observations to draw any conclusions whatsoever, except as to the movements of waterfowl.

Albatrosses, Shearwaters, Petrels, Pelicans—Black-footed Albatrosses were reported from boat trips. Also one was seen from shore at Point Lobos State Park, May 8 (*TCk & JK*). At this same time and place shearwaters (90% Sooty, 10% Pink-footed) were passing at a rate of 88 per minute; farther north, at Pigeon Point in San Mateo County, the rate was nearly as great, and the proportion had increased to 50-66% Pink-footed (*TCk & JK*). The first numbers of Sooty Shearwaters in the Monterey area were not observed until April 29, a month later than usual (*RLB*). However some were seen off Bodega Bay, Sonoma Co., April 24 (*R.R.A.S., GLB, BDP,* EDS). Fred Zeillemaker continued banding petrels at night on a rock off Trinidad harbor, Humboldt Co.; on April 3 he banded 431 Leach's and 8 Fork-tailed and caught 15 returns from February; on May 1 he banded 366 Leach's and 7 Fork-tailed and caught 40 returns from April, making a total of 1071 Leach's and 25 Fork-tailed; the low rate of returns suggests that the actual population is far higher. One Fork-tailed was found on an egg, April 27 (Tim Osborne, *fide FZ*). An Ashy Petrel was observed in Monterey harbor, May 8 (*TCk & JK*)–one of very few spring inshore records. Some 15 White Pelicans flying north over Chico, May 27 (Janet Turner, *fide EH*) indicate that the migration of this species, which starts at the beginning of March, continues at least this late; however, 12 at the San Mateo Bridge, southern San Francisco Bay, May 29 (*TCk & JK*) were probably non-breeding summerers. The Brown Pelicans at Point Lobos State Park seem to be still declining, as only about a dozen birds were present, and no nesting was seen, though some birds were carrying nesting materials (*RLB*).

Geese, Ducks—As usual, geese began to move northward from the Central Valley in early March, and were gone (except for a few non-breeding stragglers) by the end of April; 200 White-fronted Geese over southern Sacramento, April 25 (ERP), were perhaps slightly later than usual, probably because of the Easter rains which made the valley wetter than usual at this season; at least one observer commented that ducks stayed late for this reason (*MP*). Blue-winged Teal were characterized as "uncommon residents" in the Los Banos area (*ROW*) and, judging from 12 records of at least 16 birds (including females) they seem to be at least this common in suitable habitat throughout the Region. At least four pairs of Wood Ducks on a pond in Hunter-Liggett Military Reservation, southern Monterey Co., May 11 (*RLB*) included 2 females with broods of 7 and 8 young—a notable southern breeding record.

Vultures, Kites, Hawks, Partridges—At least 4 California Condors (a total of 10 in 4 observations, maximum in one observation 4) were sighted in eastern Tulare County, March 26-27 (*MEM*); if sighting of 10% of the supposed population in a fringe area of distribution means anything, the species is at the moment holding its own, as this compares well with observations in the area in recent years (max. 11 in one observation, but more usually 1 or 2). Reports of White-tailed Kites, including the first Monterey Peninsula nesting in many years (*RLB*), indicate that they have consolidated their gains of last fall and winter. 8-10 reports of Ospreys from Santa Clara, Marin and Humboldt Counties (*T & ZCk, GM, FZ*) suggest that the species is holding its own in these areas. Several recent reports of Chukars from the eastern San Benito County–western Fresno County area (*PO, TC*) indicate this to be a metropolis of a rather little known (geographically) introduced species; it may be expanding, as evinced by a record from Merced Refuge, March 21 (*RPH*).

Shorebirds—Eight Ruddy Turnstones at San Luis Wasteway Waterfowl Management Area, Merced Co., May 5 (*ROW,* J. Cawthers, D. Selleck) are extremely uncommon as inland migrants. Another notable inland record (the fifth of the species in this Region) was of 4 Knots along Highway 12 between Fairfield and Rio Vista, Solano Co., April 24 (*ER,* Enid Austin), furthering the point that any shorebird, except probably the Black Oystercatcher, can occur in the Central Valley. In the Point Reyes Nat'l Seashore, shorebird migration peaked in late April, with a big departure on May 8-10. Virtually all shorebirds, except Northern Phalaropes, were gone by May 16 (*PDeB*); in San Francisco Bay (Richmond to Emeryville) this primarily described the movement of Western Sandpipers and Sanderlings, with Black-bellied Plovers, dowitchers and Dunlin decreasing after April 4 (*AW*). Although the Long-billed Dowitcher winters in the Point Reyes area, the first Short-billed were observed there only on March 19 (*PDeB*). The Am. Avocet, which winters north to Humboldt Bay along the coast, withdraws in April and May (last at Arcata, May 20 [*FZ*]) to its breeding grounds southward and inland. Large-scale migration of Northern Phalaropes was observed at least from April 29 (5000 at South Spit, Humboldt Bay [*FZ*]) through May 21-23 ("constant stream over ocean," Mendocino [*GLB, et al.*]); on May 8 a "solid band" along the coast from Point Lobos to Pigeon Point, at least 100 birds per 50 yards and often denser, was estimated to contain a total of at least 350,000 birds (*TCk & JK*).

Gulls, Terns, Alcids—An adult *Franklin's Gull* observed over a rice field one-half mile east of South Dos Palos, Fresno Co., May 23 (*TCk & JK*) is the fourth recorded for the Region. Observations of Arthur Wang along the Richmond–Emeryville shore confirm the belief that adult Bonaparte's Gulls (seen in numbers only April 4, 170) migrate north before immatures. Adults were seen on April 24, off Bodega Bay, 300+ (*R.R.A.S., GLB, BDP,* EDS.) and May 8, Point Reyes, "big migration" (*PDeB*); immatures on

May 2, 110, May 16, 80 (*AW*). The migration of gulls in general and Black-legged Kittiwakes in particular was termed "not so spectacular as last year" (*FZ, RLB*). Common Murres arrived on their breeding rocks at Point Reyes on March 3 and thereafter, and Pigeon Guillemots on March 17, *et seq.* (*PDeB*). Seven species of alcids were migrating "in good numbers" along with shearwaters and phalaropes, Point Lobos to Pigeon Point, May 8 (*TCk & JK*), emphasizing that all these pelagic species migrate close to shore in the same, as yet undefined weather conditions.

Hummingbirds, Flycatchers—A male Costa's Hummingbird at Bolinas Point, Marin Co., on the same day as a number of vagrants, June 6, was 100 miles northwest of its nearest area of regular summer occurrence in the interior foothills (*RS*). A pair of Cassin's Kingbirds was similarly north of its normal interior foothills range in Arroyo Mocho, near Livermore, Alameda Co., on May 2 (*T & ZCk, G.G.A.S.*). An Ash-throated Flycatcher and an Olive-sided Flycatcher on Point Reyes, June 6, with an unusual accumulation of vagrants (see Warblers) were greatly retarded in migration (*RS*).

Paridae, Mimic Thrushes—The status of Chestnut-backed Chickadees in the Sierra Nevada, across the Central Valley from their normal coastal range, continues to arouse interest. A pair on June 1 at Potato Patch Camp, Deer Creek Canyon, Tehama Co., at an elevation of 3500′, for the second spring in a row, provides another element of continuity to the Sierra records which have been accumulating since 1958, mostly in late summer and fall (*EH*). At least two Sage Thrashers, far west of their normal breeding range, were present between March 19 and April 6 at Point Reyes, where there have now been six records (*PDeB*).

Warblers—The duration of warbler migration along the Pacific Coast is suggested by reports this spring for the abundant Audubon's Warbler. An apparent migration movement was already under way at Point Reyes from March 8, when 200 Audubon's and 800 Myrtle Warblers were feeding in 75 acres of chaparral, through April 26, when 17 were at the point (*PDeB*), to the unusually late date of June 6, when a single bird (as well as a Myrtle Warbler) was near the Point with a number of vagrants and late migrants (*RS*). At the peak of Audubon's Warbler migration at Chico, Butte Co., on April 17, birds in bright breeding plumage appeared to predominate in some flocks, dull birds in others (*EH*). An adult male Am. Redstart at Carmel on April 25 (*RLB*), in the location where females have been reported before, was the sole vagrant warbler reported outside the Marin County coastal promontories.

After a relatively uneventful spring migration at Point Reyes, closely observed this year as the new Point Reyes Bird Observatory began its first year of operation, an astonishing accumulation of vagrant warblers (along with hummingbirds, flycatchers, grosbeaks) was discovered on June 6 on the series of points along coastal Marin County north of the Golden Gate: Point Bonita, Bolinas Point, and Point Reyes (*RS*). One singing male Black-and-white Warbler, 4 Tennessees, 2 dull Parulas, a singing male Magnolia, a Northern Waterthrush, and 2 female Am. Redstarts made up an imposing total of extralimital species. Along with them was at least one of every California warbler species. Particularly notable were a Nashville Warbler, which migrates in the Sierra, and a Yellow-breasted Chat. The late date of Townsend's, Hermit, and Black-throated Gray Warblers was also remarkable.

These reports accorded well with a number of extralimital passerines collected by a San Francisco State College expedition on the Farallon Islands during the preceding week, on which full details are not yet available. The concentration of vagrants on coastal promontories at the end of migration periods has long fascinated West Coast observers. This year this phenomenon followed an unusual high-altitude southwesterly windstream over Idaho and eastern Oregon in the early days of June; correlation of this kind of weather pattern with the drift of disoriented vagrants to the coast is perhaps one of the questions to which the Point Reyes Observatory can help contribute an answer.

Grosbeaks, Finches, Sparrows—Rose-breasted Grosbeaks were prominent in the early June vagrant flood in Marin County; 2 were at Point Reyes on June 6 (*RS*) and 2 others on the Farallons a few days earlier. Blue Grosbeaks, sparse but regular in the Central Valley, were unusually common at Gray Lodge State Waterfowl Management Area where 7 birds were found on June 2 (Janet Turner, *fide EH*).

The thinly and irregularly distributed Grasshopper Sparrow was commoner than heretofore recorded on Point Reyes, where at least 6 birds arrived between May 9 and 26 (*PDeB*); another pair was reported from San Gregorio, San Mateo Co. (*T & ZCk*). In addition to several White-throated Sparrows which had wintered in the Region and which departed in late April and early May, a single bird at Point Reyes Lighthouse on May 19 was unusually late (*PDeB*). A Swamp Sparrow was at Conn Lake on March 7 (*RS*).

General Passerine Migration—One of the notable features of spring migration in the Middle Pacific Coast Region is the diminishing density of passerine migrants as one nears the coast. In contrast to the fall migration, passerine movement is apparently far denser in the Central Valley and in the interior foothills than along the coast. No doubt the prevailing northwest winds of spring are a hindrance, but a look at the map will also suggest that the westward-bowed Pacific shoreline is not in the path of any direct migration route from southern California or Latin America toward the northwest. This year unusually careful coverage of two areas helped cast light on that differential: the daily studies of resident biologist Paul DeBenedictis at the Point Reyes Bird Observatory, and the breeding-bird census conducted on Mount Diablo, in the inner Coast Range. Regrettably, our coverage of most other areas of the state does not yet go beyond rather inconclusive "first dates," which showed no sharp divergences from past averages.

In terms of general densities on Point Reyes, DeBenedictis found no migrant passerine species in greater numbers than 15 "in any one place" except Tree Swallows, among spring arrivers, and Audubon/Myrtle Warblers and *Zonotrichia* among winterers. After mid-April apparent migrants were found as scattered individuals. On Mount Diablo, by contrast, Miss Mans found that her normal breeding-bird densities of about 450 birds per 100 acres in mature chaparral were greatly increased by migrants. In the period between April 18 and May 21 migrants reached densities of 600 to 1700 birds per 100 acres in mature chaparral, 40 to 4000 birds per 100 acres in oaks (based on samples of 15 and 10 acres respectively). Censuses taken outside that period revealed only fewer than 10 migrants per 100 acres. High densities were found only above 2000 feet; below 1500 feet, even on peak days at higher elevations, there were only a few migrants. Above 2000 feet on one peak day, May 15, there were "19 migrants of 8 species in one acre of chaparral."

In terms of individual species, Western Tanagers and Bullock's Orioles are two species which show the declining migration densities toward the coast very well. These abundant interior migrants were recorded only sporadically on Point Reyes: 3 tanagers, and 2 Bullock's Orioles, which are near their northwestern coastal extremity there.

The most abundant passerine transients on Point Reyes were Oregon Juncos and Audubon's and Myrtle Warblers. On Mount Diablo the most abundant passerine migrants were Orange-crowned Warbler, which peaked in late April, Wilson's Warbler, at their crest in early May, Townsend's Warbler, at maximum counts in mid-May, and Swainson's Thrush which peaked in late May.

Neither observer could make close correlations of ground densities with weather conditions. "I don't think weather has any appreciable influence. Most of the weather theories—fog, wind—which I have held at one time or another do not hold in the field" (*MM*). At Point Reyes "the almost constant northwest winds of the spring allowed little correlation between migration and weather and may have been, in part, responsible for the paucity of migrants" (*PDeB*). The first half of April was rainy, however, and other observers thought that even when first arrivals were not affected the bulk of migration was retarded. The question remains open.

Observers—Gordon L. Bolander, Ronald L. Branson, Ted and Zoe Chandik (*T & ZCk*), Margaret S. Chandlee, Rachel Coy, Paul DeBenedictis, Golden Gate Audubon Society, Emilie Hodnette, Raymond R. Hoem (for Merced Nat'l Wildlife Refuge personnel), Joe Kennedy, Marie Mans, Bob Miller, Grace Miller, Mabel E. Mires, Paul Opler, Benjamin D. Parmeter, Michael Perrone, Jr., Edwin R. Pickett, Redwood Regional Audubon Society, Robert J. Richardson, Elsie Roemer, Richard Stallcup, Viola Washburn, Arthur Wang, Roger O. Wilbur, Sanford R. Wilbur, Fred Zeillemaker.—THEODORE CHASE JR., *1915½ Addison St., apt. 103, Berkeley, Calif. 94704,* and ROBERT O. PAXTON, *51 Canyon Rd., Berkeley, Calif. 94704.*