

bird was in dark shadow under a Douglas fir. On November 2 I heard one singing in this same area. There are few records for this bird in the State.

Thryomanes bewickii eremophilus. Baird Wren. Two were seen and one was taken two miles below Sedona post office on October 29. As observations increase, this wren is found to have a wider range in Arizona than formerly was supposed.

Hyllocichla guttata sequoiensis. Sierra Hermit Thrush. On October 29 hermit thrushes were common two miles below Sedona in a cañon leading into Oak Creek from the west. Five taken, including four males and one female, all belong to this race.—ALEXANDER WETMORE, *U. S. National Museum, Washington, D. C., March 8, 1933.*

Nocturnal Singing of the Western Meadowlark.—A search through what ornithological literature I have available fails to disclose any published reference to night singing of the Western Meadowlark (*Sturnella neglecta*). My observations concerning the nocturnal singing habits of this bird in extreme northwestern Montana may therefore be of interest.

In this locality, songs of the Western Meadowlark can be heard at night regularly from about the middle of April until the middle of June. (Usual daytime songs are heard daily from the date of spring arrival of the birds, early in March, until the time of their departure in October.) Singing is not continued for any length of time during the night; instead, it seems to be done at occasional awakenings, which occur at all hours of the night, but most frequently between dark and midnight. Although generally only one song is given by a bird during one awakening, frequently two to as many as twelve songs are uttered, at intervals ranging from a few seconds to a minute or longer. Often a song by one bird is followed at once by songs from one to four other birds within hearing range of the first.

The songs given by the birds at night are usually their typical territory songs. Sometimes a song will be broken off abruptly after the first two or three notes have been given. All singing is done with fully as great vigor as during daylight hours.—WINTON WEYDEMEYER, *Fortine, Montana, April 29, 1933.*

White-crowned Sparrow Records from Southern California.—Because of recently published records of the White-crowned Sparrow (*Zonotrichia leucophrys leucophrys*) in the coast district of southern California, it seems worth while to place on record the only occurrence, known to me, of this form at Buena Park, California. On the afternoon of May 1, 1929, an adult bird appeared at my banding station and was at once recognized as being different from the Gambel Sparrows (*Zonotrichia leucophrys gambelii*), the last of which had come to my traps on April 21. I set several traps, and in about an hour, captured this bird. It was photographed by Mr. James A. Calder, given band no. A116619, and released.

The occurrence of the White-crowned Sparrow in the Imperial Valley in the winter does not seem to have been recorded. On February 22, 1930, in the vicinity of the North Holtville Friends Church, about five miles north of the town of Holtville, I observed several White-crowned Sparrows in a flock of Gambel Sparrows along a roadside. November 27 and 28, 1930, Gambel Sparrows were common in the same location, but I failed to find any White-crowns among them. At the same place, February 19 and 20, 1933, two White-crowns were seen with a large flock of Gambel, and on February 21, an adult male was collected and is now no. 117 of my collection.—JOHN MCB. ROBERTSON, *Buena Park, California, March 21, 1933.*

The Vulture's Fair-way.—In the latter part of July, 1932, I traversed the seaward roads down the northwest coast of California from Humboldt Bay to Bodega Bay, keeping just as close to the ocean as the presence of any through road permitted. The 17th of July found me at Mendocino Light, on Cape Mendocino, Humboldt County. Offshore were many surf-beaten rocks upon which could be seen groups of Steller sea-lions. Along a beach against the sea cliff below me I could see dark objects, which I presently learned were carcasses of sea-lions. As I was told by Mr. M. M. Palmer, the affable officer on duty at the light station, some men whose camp he pointed out had been killing sea-lions on the rocks, solely for the whiskers and certain other parts of

the bulls which could be sold at a profit in the Chinese market. About seventy-eight of the animals had thus been killed the current season, some of the bodies washing ashore, there to putrefy.

A strong westerly breeze was blowing up the slope from the sea, and notable features of the scene were Turkey Buzzards. Here and there was a buzzard in flight close along the slopes above me. Across a ravine from the lighthouse, twenty-one of

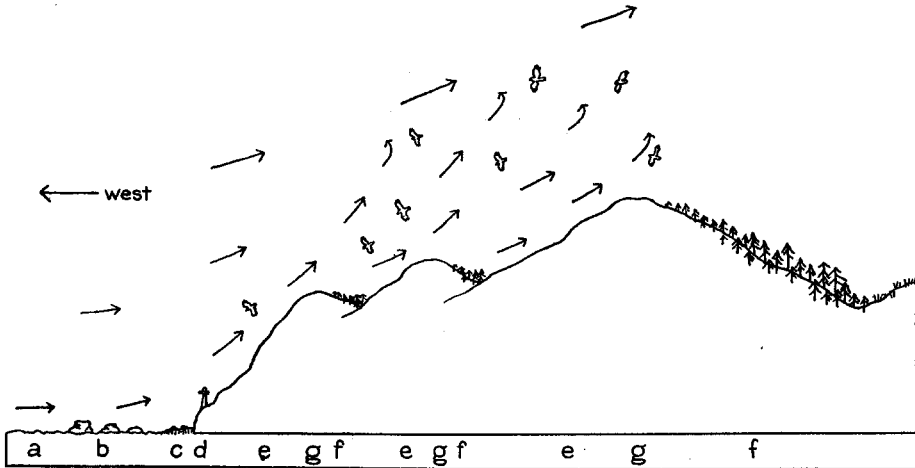


Fig. 33. EXPLAINING RELATIONSHIPS OF TURKEY BUZZARDS IN NORTHERN COAST DISTRICT OF CALIFORNIA TO TERRAIN, EASTWARD-MOVING AIR STREAM, AND UP-WELLING AIR CURRENTS. *a*, PACIFIC OCEAN; *b*, OFFSHORE ROCKS; *c*, BEACH AT BASE OF SEA-CLIFF WHERE DEAD SEA-LIONS ARE STRANDED; *d*, MENDOCINO LIGHTHOUSE; *e*, OPEN WEST-FACING SLOPES WHERE UNGULATE MAMMALS GRAZE; *f*, TIMBER ON WIND-SHELTERED EAST-FACING SLOPES; *g*, RIDGE TOPS, ABOVE WHICH THE UP-WELLING AIR-CURRENTS ARE SOARABLE FOR THE BUZZARDS AND BRING ODORS FROM DOWN-CURRENT SOURCES.

the birds were roosting near together on the ground, up-wind from the carcasses. Whence this congregation? As I now think back over the above scene at Cape Mendocino, plus what I saw last summer of buzzards elsewhere down along the sea coast to Bodega, plus what I have seen from time to time through the years along the sea-parallel mountain chains of California, a picture builds itself in my mind, of the following composition.

During the long summer season, in that portion of each day when the sea breeze blows, the buzzards are commonly seen, in soaring flight, mainly facing to the west or repeatedly wheeling up into the wind, but drifting in general courses mostly parallel to the axial trends of the long northwest to southeast ridges. In west-east position these soaring birds keep just above the westward brinks of the ridges, where they ride aloft on the up-welling air currents, with no need of a wing beat, even in minutes of time.

Not only do these habitually used fly-ways extending along the northwest-southeast trending ridges afford conditions for effortless flight, but also the courses of those fly-ways are such that each bird traversing them may constantly receive nasal notice of odors borne by the air currents sweeping up the long slopes from the west. With its presumably acute sense of smell a buzzard is likely at once to be apprized of the existence of any animal body which has reached a certain stage of decomposition more or less far down those slopes. Further exercise of the sense of smell, supplemented by keen eyesight and scouting flight, may then serve to guide the bird down the odor-bearing air currents to the source. (For a recent discussion of the sense of smell in buzzards, see F. M. Chapman in "My Tropical Air Castle," Appleton, 1929, chapter VI, pp. 147-166.)

A conspicuous feature of our coast range landscapes is the prevalence of extensive, relatively bare areas on most if not all the seaward slopes—great tracts of grass-

land extending up to the tops of the ridges—while the whole eastern slopes of the ridges and the bottoms of the ravines sheltered from the prevailing winds are timbered, or at least clothed heavily with chaparral. These sloping grasslands formerly teemed with wild ruminant animals—elk, deer (at the edges of the chaparral), antelope (toward the south), with large carnivores as well as other fatal factors to account for a continuing supply of carrion from these vegetarian sources. And now the same slopes are grazing grounds of cattle, horses and sheep; while the seashore at the farthest bottom frequently, now as always, yields the bodies of seals, whales and the like.

In summary, if my inferences be tenable all through, the Turkey Vultures, *Cathartes aura*, [and formerly the California Condors (*Gymnogyps californianus*) which we know to have occurred regularly north near the sea at least as far as the "prairies" of Humboldt] gain an easier than ordinary livelihood in our coast range territory by taking advantage of certain favorable circumstances—those circumstances of (1) east-moving air currents, sweeping up wide expanses of open grassy slope (2), which afford (3) odor-producing food. The birds seek this food by (4) riding the up-welling air currents near the crests of the ridges, which currents bring olfactory notice (5) of the food then to be sought for through the vultures' scouting flight (6), and lastly to be seen (7) by keen eyes because of the open nature of the ground surface on those western slopes.—J. GRINNELL, *Museum of Vertebrate Zoology, University of California, Berkeley, January 22, 1933.*

Phainopepla Observed on Barley Flats, San Gabriel Mountains, California.—On December 30, 1932, while engaged in a botanical survey of the Barley Flats area, north of Mount Wilson in the Angeles National Forest, Los Angeles County, my attention was called to a single female Phainopepla (*Phainopepla nitens*).

The elevation of Barley Flats at the place of observation is 5500 feet. At the time of observation, snow covered the entire region to a depth of about a foot.

The bird was observed first at 11 a. m. and again at 2 p. m. and lastly at 3:30 p. m. This would seem to indicate no desire on the part of the bird to leave this location. It seems strange that the Phainopepla, ordinarily so closely associated with a warm environment, should visit so cold a one when the Mohave Desert is no great distance away.—L. E. HOFFMAN, *University of Southern California, Los Angeles, California, March 22, 1933.*

Black Phoebe Nesting in a Tree.—In looking over some old notebooks recently, I came across the record of a tree nest of the Black Phoebe (*Sayornis nigricans nigricans*). The usual nesting site of the Black Phoebe is under a bridge, or about buildings, and one that I found in 1926 was on a timber, about four feet below the ground, in an open well. I know of no case, other than the one here noted, of the nest being placed in a tree. On May 15, 1910, I found this nest while exploring a very thick growth of willows along an old flood channel of the San Gabriel River, about two miles southwest of Artesia, California. The flood channel had about two feet of stagnant water in it, and the willow trees on either bank leaned out over the water. One tree, about eight inches in diameter, had a dead limb on its lower side extending downward at a sharp angle, and on the end of this was a typical mud nest of the Black Phoebe, containing two young birds about a week old. The parent birds were nearby. Shreds of willow bark had been used with the mud and fringed the outside of the nest; the lining was of bark and hair. The nearly horizontal trunk of the tree formed a shelter about six inches above the nest which was about three feet from the water. The nearest building was about a quarter of a mile from this nest.—JOHN MCB. ROBERTSON, *Buena Park, California, March 21, 1933.*

Tracing Fall Wandering by an Albino.—In the CONDOR for July, 1932 (page 194), Mrs. Catherine E. Bower records the presence of a nearly completely albino Blue-fronted Jay (*Cyanocitta stelleri frontalis*) at Big Creek, Fresno County, California, from September 16, 1931, until November when it was observed down cañon at Power House (Number 2), a distance (by road) of ten miles.

I believe this is the same albino jay observed by myself and others that same fall at Huntington Lake, above Big Creek, from August 15 to about August 30, at which time we left the region. This would give the bird sixteen days to drift along the