

weaker or a prey species is not uncommon, indicating that about nests there is sometimes a change in interspecific intolerance. Bent (1938. *U. S. Natl. Mus. Bull.*, 170:22) quotes Decker and Bowles as reporting Ravens (*Corvus corax*) and Prairie Falcons (*Falco mexicanus*) nesting on the same cliff without discord. Murphy (1936. "Oceanic Birds of South America, Vol. 2, p. 933) notes that boobies (*Sula*) and man-o-war-birds (*Fregata*) nesting a meter or two apart pay less attention to each other than either does to members of its own species. The change in behavior when the boobies are returning to the nesting grounds well laden with fish is most extraordinary, for then apparently the man-o-war-birds rob the boobies. Barnacle Geese (*Branta leucopsis*) have been recorded nesting undisturbed close to a Gyrfalcon's (*Falco rusticolus*) nest (Bent, *op. cit.*:4).

Nests of English Sparrows, Starlings (*Sturnus vulgaris*), or grackles are commonly built in convenient niches among the sticks of Osprey's (*Pandion haliaetus*) bulky nests, and even House Wrens (*Troglodytes aëdon*) and the possibly competing Black-crowned Night Herons (*Nycticorax nycticorax*) have been admitted by Ospreys as "basement tenants" (Bent, 1937. *U. S. Natl. Mus. Bull.*, 167:370-371).

Other examples of a less aggressive species nesting near a more aggressive species, in India, have been given by Major General Hutson (1947. *Ibis*, 89:569-576). Durango (1949. *Ibis*, 91:140-143) has reviewed at some length the nesting associations of birds of different species with many additional examples, especially from Europe. In his opinion several factors which often reinforce one another may be involved as follows: (1) Similar or identical habitat preferences; (2) The nest of one species is a suitable nesting site for another; (3) Food available in nests or territories of certain species encourages other specialized feeders to nest there; (4) Sociability; (5) Protection afforded by the more aggressive species. Factor 2 seems to have been the important one in the grackle-sparrow instance. Durango also points out that some birds of prey appear to avoid disturbances in the vicinity of their own nest, a point that Brewster (1937. "Concord River," p. 177) after noting a Blue Jay (*Cyanocitta cristata*), Robin (*Turdus migratorius*), and Red-eyed Vireo (*Vireo olivaceus*) in fairly close proximity, wrote as follows: "I begin to believe that there is some truth in the statement (made originally by I know not whom) that predaceous animals seek their victims at some distance from their own homes."—A. L. AND R. M. RAND, *Chicago Natural History Museum, February 17, 1950.*

**Songs of the Western Meadowlark.**—To those fortunate folk who have lived in almost daily association with the Western Meadowlark (*Sturnella neglecta*) there are several matters regarding its song that become pretty well established. In addition to its incomparable joyousness one will soon recognize a certain format to each performance, *i.e.*, it is a form song. Unlike the song of many birds, the Meadowlark's station song (but not its soaring song) is one that is commonly repeated as exactly as though it were a phonographic recording (unhappy simile). To be sure there may be quite an album of discs and I have closely watched a single performer change to a new disc without clatter or prolonged delay, still each recording seems to be pretty sharply cut upon the wax of his psychic complex. Individual birds certainly have their favorite "arias" which are rendered often enough to characterize the singer and his territorial stage setting. Furthermore, I have not actually traced more than three discs to a single performer though color banding might extend this number appreciably. Within the combined territories of a number of individuals, however, the variety becomes quite extensive.

Another fact that soon becomes evident to the "bird listener" is the impossibility of

transcribing the song in the clumsy medium of musical notation. Like a violin virtuoso, he does things that set the five line staff completely at a loss. Nor is it necessary that he conform to a man-made sequence of whole and half tones which our system of musical notation is designed to express (not all peoples' do). Still, there may be recognized in some of the bird's performances a sequence of intervals that do fairly closely conform. With a degree of compression and resultant distortion, the fundamental structure of the song may be noted on the musical staff. The result is a mere "black and white still" of a rainbow-colored fountain of sound that defies capture and imprisonment, but the record does aid the memory and perhaps it will extend our appreciation of its variety.



One spring my class in biology had a goodly sprinkling of music majors among its members. The project of notation of Meadowlark songs was therefore undertaken as a scheme for "correlation of subjects" in the curriculum. One of my colleagues has strongly urged that some of the results of this effort be made public. Hence the following notes are offered. Observations were made during the spring semester and were restricted to an area of approximately forty acres in a newly annexed district of level land within the city of Los Angeles. Open fields and native vegetation were but slightly modified—just enough to supply ideal "singing posts" for an abundant Meadowlark population. Nine distinct "melodies" were noted (see figure).

On two occasions during my own contacts with the species I have heard perfect melodic sequences that suffered no distortion when spread upon the musical staff. In both cases there was extreme simplification through reduction of grace notes and glides. They are recorded in Nos. 10 and 11 of the figure. Both were delivered at the height of the breeding season and were therefore presumably birds of at least one year's age. One of the records is the simplest Meadowlark song that has come into my experience.—LOYE MILLER, *University of California, Berkeley, May 13, 1951.*

**The song of the Alder Flycatcher.**—I have known the Alder Flycatcher (*Empidonax traillii traillii*) for many years—since 1885, when I called it Traill's Flycatcher, to be exact—and I have heard its song as recently as this summer of 1951. I was much interested in Mr. McCabe's description of its flight song in *The Wilson Bulletin* (1951,