Sparrow, 1, Double-crested Cormorant, +, Great Blue Heron, +; Great Egret, +; White-tailed Kite, +; Am. Kestrel, +; Ring-necked Pheasant, +; Sora, +; Com. Gallınule, +; Com. Snipe, +; Long-billed Marsh Wren, +, Orange-crowned Warbler, +; Brazilian Cardinal, +; Green-tailed Towhee, +. Average Total: 425 birds (1313/km², 531/100 acres). — BRIAN DANIELS, (California State Univ.), 3471 Lama, Long Beach, CA 90808.

72. SUBURBAN PARK. — Location: California; NW corner of El Dorado Park, Area II, Long Beach, Los Angeles Co. Continuity: New. Size: 8.0 ha = 19.8 acres (rectangular, 200 x 480 yds, measured with rope). Description of Area: Picnic grounds, all trees and grass planted by Parks Dept. Groundcover is Com. Bermuda Grass (Cynodon dactylon). Tree-cover is approximately 7% with large open areas. Average tree height is 25 ft. with a DBH of 8 in. Tree species include: Canary Island Pine (Pinus canariensis), 21%; Evergreen Ash (Fraxinus uhdei), 14%; California Sycamore (Platanus racemosa), 11%, Allepo Pine (Pinus halepensis), 10%; Jacaranda (Jacaranda acutifolia), 9%; Italian Stone Pine (Pinus pinea), 8%; California Pepper Tree (Schinus molle), 6%; Coast Live Oak (Quercus agrifolia), 5%; Red Ironbark Eucalyptus (Eucalyptus sideroxylon), 4%; Bailey Acacia (Acacia baileyana), 3%; Tulip Tree (Liriodendron tulipifera), 3%; S. Live Oak (Quercus virginiana), 2%; Silk Tree (Albizia julibrissin), 1%. Topography: Flat, elevation 25 ft. Edge: The study area is bounded by at least 100 yds of similar parkland in all directions. Water:

## A note of explanation

NAN ARTICLE on page 18, Frances C. James provides the interested reader with the keys to understanding of the vegetative analysis section of the Winter Bird-Population Studies and Breeding Bird Censuses. In the paragraphs below we append an explanation of the various numbers that are a part of the Census section of these reports With these two explanations, there should be a sharp reduction in baffled readers, and an increased appreciation of the great value of these studies

The number immediately following the species name is the number of territorial males (or females, in the case of the Brown-headed Cowbird) actually found within the study plot. It is determined by repeated coverage of the study plot, noting on each visit on the plot maps the "registrations" or encounters, either visual or aural, with singing males. Comparison of the visit maps will indicate fairly accurately where, and how many, singing males of what species have territories on the plot.

Immediately following this number, within parentheses, are two numbers. The first is the number of pairs that theoretically would be found in this, or an identical plot, of 100 hectares, and the second is the same figure for 100 acres. The purpose is obviously to give a uniform standard of density for comparison with other species and other studies. The hectare, being 2.471 times as large as an acre, provides a figure for the first numeral inside the parentheses which is 2 471

There is no water within the study area but there are two man-made lakes connected by a small stream about 100 yds E, and there is a flood-control channel 100 yds W that carries some water during the winter and spring Weather: During the 25-day study period the temperature remained above freezing, ranging from 37° to 85° (temperatures from local newspaper). There were 6 days of rain, with rainfall totaling less than 1 in. Winds were mild, with the exception of a Santa Ana condition that lasted two days. Coverage: Jan. 4, 6 (2), 18-19, 22, 23, 28. Total, 10 trips. Trips between 0900 and 1600 hours, averaging 70 min. Count: Starling, 39 (487, 197), Yellow-rumped Warbler, 11 (137, 56); W. Meadowlark, 5 (62, 25); Am. Coot, 4 (50, 20); Marbled Godwit, 4; Com Crow, 3 (37, 15); Loggerhead Shrike, 3; Mourning Dove, 2 (25, 10); Anna's Hummingbird, 2; Com. Flicker, 2, Long-billed Curlew, +; Mockingbird, +; Brazilian Cardinal, +; Lesser Goldfinch, +. Average Total: 75 birds (936/km<sup>2</sup>, 379/100 acres). Remarks: The warbler, shrike and hummingbird were noted on every trip, the flicker was noted on 7 trips, the meadowlark and dove on 5 trips. The Brazilian Cardinal has been observed for the last few years in the vicinity of the El Dorado Park Nature Center (see AB 76:732 (1974)), approximately ½ mi S of study plot. It is believed to be a solitary individual that has taken up residence within the area JEFFREY S. BOYD, 154 Roycroft Ave., Long Beach, CA 90803.

times as large as the second, rounded, of course, to whole or half numbers.

Thus, if the plot is 29 hectares (ha), and there is a figure of 13 territorial House Wrens, the figures in parentheses would translate to (45, 18).

The equation for hectares would simply be:  $\frac{100 \text{ ha}}{29 \text{ ha}} \times 13 = 44.85$ , or 45, and for acres it would be:

 $\frac{100}{72}$  acres × 13 = 18.2 or 18.

In the published census, this would appear as House Wren, 13 (45, 18);

SINCE THE NUMBER of territorial males on the plot are averages gained on a number of visits, the number "+" is used after a species name to indicate that on average there was less than one pair (or sometimes less than 0.5 pairs) on the plot For example, if six trips resulted in registrations of one territorial House Wren on only two trips, the average would be 0.3 pairs, or "+".

In the item headed **Total**, the first number is the total number of species and the second the total breeding pairs of all species within the plot, and the figures immediately following are this latter total raised to theoretical 100-hectare (km<sup>2</sup>) and 100-acre plots.

The species themselves are listed in descending order of numbers and ascending A.O.U. Checklist order. Thus Song Sparrow 20 would come before Blue Jay 18, but Blue Jay 10 would come before Song Sparrow 10.

—R A