## GENERAL NOTES

A House Sparrow roost in Lima, Peru.—Since its introduction in the parks of Lima in 1951, the House Sparrow (*Passer domesticus*) has become quite common and now greatly outnumbers the native Rufous-collared Sparrow (*Zonotrichia capensis*). The great numbers of the introduced bird are most obvious at roosts, and I made a census of one in Central Lima occupying four trees in a small plaza across from the Santo Domingo cathedral, at the busy intersection of Jiron Lima and Jiron Camana.

During the austral winter a continual cloud layer covers the city and sparrow roosting begins in the reduced light of late afternoon. On 15 August 1972 I recorded the total number of House Sparrows arriving at the roost for each 5-minute interval from 16:15 to 17:55. The rate of arrival varied from 84/5-minutes (16:15) to a maximum of 469/5-minutes (16:45). The data (Figure 1) show a rapid linear increase in arrival rates until the maximum, and then a somewhat slower and more irregular decrease through the end of counting. Throughout the sparrows kept up a constant loud chattering. This small roost contained about 200 birds when counting started; the 5,419 arrivals counted plus late-comers after censusing give a rough total of about 6,000 birds.

It is interesting that this introduced species has retained its temperate habit of roosting (Summers-Smith 1963, The House Sparrow, London, Collins) in a tropical city within 12 degrees of the equator. The data from this single roost also reflect a small part of the overall success of the sparrows in a very arid environment, as Lima has an average annual rainfall of less than 6 inches.—CHARLES F. LECK, Department of Zoology, Rutgers University, New Brunswick, New Jersey 08903. Accepted 30 Oct. 72.



Figure 1. Arrival rates of sparrows at the roost, shown as the number of birds per 5-minute period (15 August 1972).