species. There are endemic subspecies of mammals and reptiles in the Keys (Auffenberg 1982), as well as the butterfly, *Papilio aristodemus ponceanus* Schaus. The mammals and reptiles, however, are even more strongly affected by barriers than the ants, and both reptiles and butterflies are likely to show rather conspicuous geographic distinctions in coloration caused by minimal genetic differences, which are eagerly seized upon by avid collectors. Only two species of ants seem possible endemics. One is the unidentified *Leptothorax* (*Dichothorax*), which is almost certainly derived from a more northern *Dichothorax*. This species has not been found anywhere on the mainland. The second species is the ambiguous *Trachymyrmex* sp., which seems to show at least subspecific differences from West Indian populations of *T. jamaicensis*. This form has also been found on the mainland in Dade County.

Unexpected Absences in the Fauna. There are a few additional species of south Florida ants that we expected to find in the Keys. These include the exotics *Strumigenys rogeri* Emery and *Trichoscapa membranifera* (Emery), which are widespread, but rather localized, south Florida exotics. A native species, *Leptogenys elongata manni* Wheeler should also occur in the Keys. Enclaves of sand-inhabiting ants might well occur in relatively well-drained sandy sites in the Keys. An apparently isolated population of *Trachymyrmex septentrionalis* has already been found on Long Key; other species with similar edaphic requirements are *Pheidole metallescens* Emery, *Monomorium viridum* Brown, *Solenopsis pergandei* Forel, and *Paratrechina arenivaga* (Wheeler). We had a general expectation of finding more previously unreported West Indian species, but succeeded in adding only two species to the fauna, *Monomorium ebeninum* and *Leptothorax torrei*.

General Comments on the Fauna. In a biogeographical sense, the Florida Peninsula resembles a mountain, whose peak is formed by the Keys. The apex of the mountain is 375 miles south of its origin and, like the peak of a mountain, projects into a climatic zone unsuitable for most of the inhabitants of its base. A peculiar biota results from the mingling of the more climatically adaptable of the species that have easy access from the base, with a selection of species preadapted to the climate and habitat, and somehow transported to the isolated, climatically appropriate zone. The young age of this isolated zone in the Keys precludes the presence of many endemic or relict species. The age, size, and isolation of the zone determines the establishment of species from other areas of similar climate and habitat. The Keys are relatively young, but they offer ample land masses for ant populations, and their isolation from other tropical areas is reduced by human commerce.

In his earlier survey Wilson (1964) was most likely to collect the more abundant species, which led to a view of the ant fauna as a depauperate Antillean fauna with a strong component of recent tropical exotics. Our work strongly supports this view of the dominant ants, so our ecological conception of the ants of the Keys has changed little. From a biogeographical standpoint, the Keys now appear somewhat different, as they clearly have an extensive fauna derived from the north.

The distribution of ant species among the Keys shows few, if any, effects of "equilibrium island biogeography." Most species apparently occur wherever their preferred habitat is available. Relationships between island size and species diversity have been applied to scarab beetles of the Florida Keys (Peck & Howden 1985), but in the case of ants the larger number of species on the larger islands is most easily attributed to a greater diversity of habitats on the larger islands. What evidence we have of species turnover resembles that of mainland south Florida, caused by habitat changes and recent invasions of exotics. Elliott Key, which is isolated, largely undeveloped, and free from spraying for mosquitos, appears to lack 2 dominating exotics, *Wasmannia auropunctata* and *Paratrechina guatemalensis*. *Trachymyrmex* sp. nr. *jamaicensis* is the only native ant that appears unusually abundant. Elliott Key, insulated as much by