The interior of the Namib is quite unlike that of the CAZ. Much consists of extensive gravel plains, dominated by grasses that appear after rare rainfall events. The largely calcrete plains support conspicuous granitic/limestone inselbergs and are dissected in places by dry river beds that cut through deep rocky gorges. These seaward-bound channels carry occasional runoff from the high escarpment at the Namib's eastern edge. Such water courses are usually lined by thin strips of acacia-dominated vegetation with understories of subtrees, shrubs and grasses. The overstory of this riparian community differs markedly from that of the CAZ, where more extensive woodlands of native and introduced trees border short rivers that run from the Andes to the Pacific. River and stream beds in both deserts, however, support shrub communities of remarkably similar architecture.

THE DETRITIVORES COMPARED

In light of the broad climatic similarities, as well as the probable great evolutionary differences and the obvious physiographic differences between the CAZ and the Namib, we now compare the detritivore faunas of the two deserts. In doing so, we confine our comments to taxa broadly acknowledged to play significant roles in decomposition. Groups that are primarily necrovores or coprovores are for the most part omitted from consideration.

Oligochaete Annelids

Earthworms and their relatives are seldom mentioned in the desert invertebrate literature. There is good reason for this: terrestrial annelids have a poor capacity to resist desiccation. In the Sahara Desert, however, a distinct earthworm fauna occupies both the fringes and habitats of the interior such as oases and higher elevations (El-Kifl & Ghabbour 1984). Species originating in regions to the south are considered endemic; others apparently arrived via several migration routes from Europe or were introduced by humans. In Egypt, several species are known to prefer clay soils but can be abundant in sandy soils when these are irrigated (Ghabbour 1977).

Earthworms are also abundant in the southernmost portions of the CAZ. We have observed their surface castings over kilometer-wide areas on hillsides and plains. Whether the species are introduced or native is unclear. We suggest two reason why they survive and fluorish in a region with less than 200 mm of annual rainfall. First, the irregular coastal fogs appear to maintain levels of soil moisture adequate for their survival, although this hypothesis should be tested. Second, the soils inhabited by the earthworms are silty and have relatively high moisture-holding capacities. Soils in the Namib coastal region are sandy and contain insufficient organic matter to support earthworms.

Microarthropods

Microarthropods directly or indirectly associated with the decomposer food web are not well known from the Namib. Oribatid and other mites as well as psocopteran insects have been extracted from leaf litter in the Kuiseb riparian gallery forest (Coineanu & Seely 1983, JA Wallwork personal communication 1992).

Species of hypogastrurid isotomid and neanurid collembolans are known to occupy the aerial interstitial medium of fine sand in the Namib (Thibaud & Massoud 1988).

Much more is known about similar microarthropods in the CAZ, where most studies have been done in north-central Chile (26°-32°S), a transitional belt between the hyperarid desert and semiarid central Chile. The microarthropod fauna there is dominated by mites and psocopterans (Covarrubias *et al.* 1964, Di Castri & Vitali-Di Castri 1971, Cepeda-Pizarro *et al.* 1993). Among the mites, prostigmatids and oribatids are the most common taxa, with the former ranking first. Changes in topography as well as canopy and litter quality play an important role in determining the density and diversity of soil mesofauna (Covarrubias *et al.* 1964, Covarrubias 1987, Cepeda *et al.* 1992). In mesic soils (e.g., relict habitats such as bottoms of small canyons or patches of mediterranean matorral) the fauna becomes enriched with collembolans and other minor groups (Saiz 1963, Di Castri & Vitali-Di Castri 1981).

In general, the mean density of species of CAZ soil and litter microarthropods is cor-