



FIGURE 1.—Variation in numbers of rabbit parasites from 1950 to 1957.

accepting this as an explanation for the results shown in Fig. 1. To obtain samples of sufficient size, the rabbits examined for parasites were all drawn from local populations which had not fully experienced the decline characteristic of the rabbit population as a whole. Indeed, some of the more recent samples of rabbits, with a very low incidence of parasites, were obtained in restricted areas where rabbits remained quite numerous. A further difficulty is that parasitism actually *increased* during 1950–52 when the rabbit population was already declining.

Host resistance is known to be important in regulating the size of *T. retortaeformis* infesta-

tions in wild rabbits (Bull, 1955), and this factor is probably of significance in the other parasites also. It is therefore of interest to consider how the strength of host resistance might change. Recent work on vole (field-mouse) cycles in Europe (Chitty, 1952) has indicated that animals in crowded populations are subject to stresses which ultimately lead to physiological derangements and the birth of individuals with reduced viability. If this phenomenon occurs in rabbits, one might expect that reduced resistance to parasites would result from a period of crowding such as that experienced by rabbits at Gwavas prior to 1950. The local populations of medium density which provided samples of rabbits in 1955 and 1956 had developed from recent successful breeding, and any crowding that existed was of such recent origin that a decline in resistance to parasites was not to be expected.

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Ecology of the Sea-floor off Southern California

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This paper dealt with work in the offshore region of Los Angeles by the Allan Hancock Foundation, University of Southern California. A combined geological, biological, microbiological, and hydrological study is being carried out on a unique area of continental shelf of partially connected deep basins of varying degree of flushing and stagnation (Cf. Emery, 1954).

The biological work has revealed a mosaic of animal associations—over 60 distinct associations being recognized. The results were discussed with relation to hydrological conditions and nutritional richness and impoverishment.

In basins where oxygen level is low, the fauna is particularly impoverished; where there is enrichment from sewage pollution the fauna is correspondingly rich. Molluscs are generally scarce and polychaetes make up the major portion of the biomass (Cf. Hartman, 1955).

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