An account is given of an investigation of the animal reservoir of cutaneous leishmaniasis [caused by Leishmania tropica] on Mt. Elgon, Kenya [cf. RAE/B 59, 1883], where the infection is transmitted by Phlebotomus pedifer Lewis, Mutinga & Ashford [61, 1010]. The incidence of the disease is too low for continuity to be maintained by a man-vector-man cycle alone. The vector is confined to caves, and investigations on the animal reservoir were accordingly restricted to the inside of caves harbouring the sandflies and the area within a quarter of a mile of them. The largest wild animals noted were porcupines. The animals trapped included rats, mice, mongooses, hyraxes, lizards, gerbils and bats. Three hyraxes (Dendrohyrax arboreus and Procavia johnstoni) of 37 examined and one giant rat (Cricetomys) of 83 were found to have dermal lesions containing leishmania parasites. A strain isolated from hyrax caused only cutaneous lesions in baboons, guineapigs and hamsters. Of 785 fed adults of P. pedifer collected for analysis of blood-meals, 663 had fed on cattle, 65 on hyrax, 26 on unidentified Bovids, 4 on unidentified mammals and 1 on sheep or goat. No apparent lesions were seen on the cows that frequented the caves. Permission to take biopsy samples from the cows was not granted. It is assumed that giant rats are bitten by the sandflies only accidentally and would not be important as reservoirs of infection because of their habits. The hyraxes bask in the sun or lie in shallow burrows and are easily accessible to the sandflies, and it is suggested that they are the main reservoirs. The ectoparasites collected from the trapped animals, data on which are tabulated, seemed to be without importance in the epidemiology of cutaneous leishmaniasis.