A SCINCID REPTILE FEEDING PRIMARILY ON MARINE CRUSTACEA, WITH A NOTE ON ITS PARASITES

By

A.G. CANARIS & D.G. MURPHY

Thirty-nine skinks Ablepharus boutonii africanus (Sternfeld) a sub species which reaches a length of approximately 4¾ inches, were analysed for food items and parasites. The animals were collected during August 1963 and August 1964 from littoral rocks at Msambweni and between Mida Creek and Blue Lagoon in Kenya. They appear to inhabit rocky headlands. The greater number were observed on rocky faces on the seaward side but some were seen on top of rock cliffs. The skinks hunt their prey in crevices and holes in the rocks and in the beach strand line at the base of the cliffs. They were not observed to enter the water after prey but several which were placed in tide pools swam rapidly on the surface.

Thirty of the thirty-nine skinks contained identifiable food items in their stomachs or intestines. 90% of the items were marine crustacea. 63% were crab larvae of several species and all were in the megalopa stage or older. 27% were marine gammarids. Only 6.4% of the food items were insects. Table I summarizes the food item analysis.

Fifteen of the skinks were parasitized by the mite Schoengastia rubi rubi Vercammen-Grandjean. The mites were found in the axilla and ear.

Five skinks from the Msambweni site were infected with an undetermined species of liver fluke. Two species of flukes belonging to the family Microphallidae were recovered from the intestines of the skinks. The microphallids are poorly represented in reptiles, but members frequently parasitize shore birds. Both fluke species appeared to be well adapted to the skink because the frequency of infection for both was about 61% and most of the flukes were mature.

Crustaceans, in a marine environment, are the usual second intermediate hosts for microphallid flukes. Crustaceans were removed from the stomachs of skinks and dissected. One gammarid harboured three cysts of a microphallid fluke, but it was not possible to determine if it was one of the two microphallid species parasitizing the skinks. Twenty-five gammarids were collected from the skinks' habitat and examined for fluke cysts but none were infected. Gammarids and crabs probably act as second intermediate hosts for the two species of microphallids harboured by the skinks.

The close association of the skink with a marine environment is reflected in its diet, and, consequently, in its intestinal parasites.

TABLE I:

Food items from the Stomach and Intestines of

Ablepharus boutonii africanus (Scincidae)

	Gammarid	Crab	Diptera	Coleoptera larva	Hymenoptera
Skinks with item	17	21	4	3	2
Number of items	88	38	5	3	2
Percent items	62.41	26.94	3.55	2.13	1.42

	Collembola	Araneae	Mysid	Polychaeta	Snail
Skinks with item	1	1	1	1	1
Number of items	1	1	1	1	1
Percent items	0.71	0.71	0.71	0.71	0.71

(Received on 27th January, 1965)