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ROBBER CRAB (BIRGUS LATRO). By Dr. C. W. ANDREWS, F.R.S., F.Z.S.

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ZOOLOGY Crustacea





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Dr. C. W. Andrews, F.R.S., F.Z.S., exhibited an enlarged photograph (Pl. LXXXIII.) of the Robber Crab (*Birgus latro*) on Christmas Island, and communicated the following account of its habits:—

It is somewhat remarkable that although the Robber or Coconut Crab (Birgus latro) has been known for some centuries and

its habits described by numerous observers, there is still considerable doubt and difference of opinion concerning it. uncertainty probably arises from two causes—first, that the habits of this animal do actually differ considerably in different localities, and, second, that the unreliable reports of natives have often been accepted as authentic. The chief point on which observers differ is whether this Crustacean can or cannot climb trees: thus Chun (Aus den Tiefen des Weltmeeres (1900), p. 414) states that the natives of Diego Garcia say they never have seen it do so, but since on the same authority, it is stated that these crabs carry coconut shells of sea-water with them into the woods, it does not seem necessary to attach much importance to their tales. On the other hand, most observers agree that Birgus can and does climb palm trees, and that this statement is correct is proved by the photograph taken by me in Christmas Island, showing two crabs actually on the trunk of the native Sago-palm (Arenga listeri): the upper one is ascending and the lower descending. Numerous other individuals are seen round the foot of the tree, taking advantage of the fruit dropped by their more enterprising companions which have ascended in search of it.

In climbing, the large claws are scarcely used at all, the animal clinging to the tree trunk by the sharp points of the walking legs; by the same means nearly vertical faces of rock, where there is apparently little foothold, can be ascended and descended.

Although there is no doubt that these crabs can and do feed on coconuts when they can get them, these are by no means their only food as would seem to be implied by some accounts. In Christmas Island during my first visit (1897-8) there were no bearing coconut palms so far as I was aware, and though there may have been a few on one small beach on the east coast, these could only have supplied food for a few individuals. The ordinary food included fruits of various kinds, particularly those of the Sago-palm (Arenga listeri) and of the Screw-pines (Pandanus), and carrion of all sorts, even the bodies of their own relations. Their discrimination is not very keen, for they will drag away almost anything that has been handled, such as cooking utensils, bottles, geological hammers, and clothes. In one case I had a geological hammer practically ruined by having its handle splintered in the powerful claws of one of these creatures.

It is usually stated that *Birgus* is nocturnal in its habits, and probably this is usually the case, but in Christmas Island they move about the forest and feed even in the brightest daylight (as is shown by the photograph). Formerly, when the native rats swarmed in the forest after dark, the crabs moved about comparatively little at night, and might often be seen clinging to the trunk of a tree two or three feet from the ground. Now, the rats having become extinct, the crabs wander about at night and are a great nuisance, dragging from the camp anything they can get hold of that seems edible. On one occasion I saw a large individual carrying off a coconut from which the husk had been

removed; it held the nut under its body with some of its walking legs while it walked off raised high on the tips of the others.

These animals are easily frightened and scuttle off backwards, propelling themselves with their long anterior legs in a series of ungainly jerks. They seem quite conscious of the comparative defencelessness of the abdomen, which they endeavour to thrust under logs or into holes among the roots of trees. carry any protective covering on the abdominal region, although in the Cambridge Natural History (vol. iv. p. 174), it is stated that they may sometimes employ an empty coconut shell for this purpose. No authority is given for this statement, nor does there appear to be any reference to it in previously published accounts, and from what I have seen I should think that the thing is an impossibility. A species of Canobita, a closely allied genus, has been described as using a coconut shell for this purpose, and a figure of it carrying one is given in Prof. J. S. Gardiner's 'Fauna and Geography of the Maldive and Laccadive Archipelagoes,' vol. i. p. 69; probably this has been confused with Birgus.

The photograph now reproduced (Pl. LXXXIII.) has been exhibited in the Natural History Museum (South Kensington) for some time, but as there still seems to be some doubt as to the climbing habits of these crabs, it has been thought desirable to

publish it.



C. W. Andrews, photo.

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