



Green-crested lizard (Bronchocela cristatellus).

## VERTEBRATE ANIMALS OF THE FOREST

The vertebrates are much larger than most invertebrates. Because their diversity is less and overall numbers smaller, they are more easily known. Worldwide, it is estimated that few mammals or birds remain to be discovered (See Table on p. 76). Reptiles and amphibians attract less popular attention and, as a result, there are probably more undescribed forms to be found. The faunas of Brunei Darussalam, however, are reasonably well documented, although there remains much to be discovered about the distribution and biology of species.

Of the recognised forest formations (See Chapter 6), mangal supports a few specialised vertebrates, but their distributions do not correspond to the mangrove tree zonation. Within terrestrial forest types, the distribution of vertebrate animal communities does not closely match the forester's formations. Forest faunas of all land vertebrates are, however, altitudinally zoned, the richest communities being those of the lowlands and valley bottoms. Typically, diversity is reduced by the progressive loss of species with increasing elevation (sometimes by replacement with a midaltitude equivalent) up to a transition line around 900 m, above which a montane community appears. The highest peaks may be home to additional summit specialists.

## **AMPHIBIANS**

In the course of evolution, amphibians (Class Amphibia) were the earliest vertebrates to emerge from water to colonise the land. They still remain associated with freshwater, or at least with damp environments. None live in totally arid deserts, in the sea or in the polar regions. Today over 3,000 species of amphibians are known, divided into three very distinct Orders of which two, the Apoda and Anura, are represented in Brunei Darussalam.

## **CAECILIANS**

Occurring in South America, tropical Africa and Asia, the caecilians (Order Apoda) have long, worm-like bodies with short tails and no limbs or limb-girdles.

The skin is externally segmented, giving the animal the appearance of a dark earthworm, sometimes with a pale lateral stripe. The eyes are covered with skin, an adaptation to a burrowing mode of life. The left half of the lungs is degenerate (as in snakes). Caecilians