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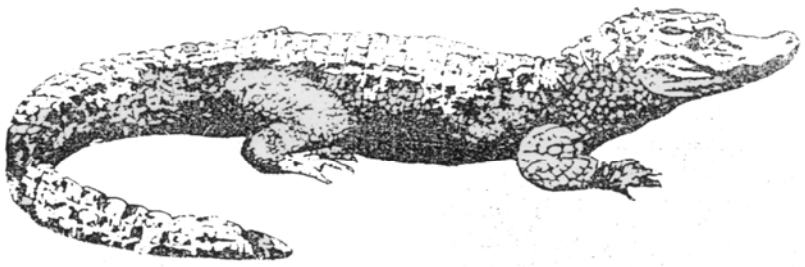

The Amphibian Community at Batu Apoi, A Lowland Dipterocarp Forest in Brunei Darussalam, Northwestern Borneo

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Long-term field work at Batu Apoi, a lowland dipterocarp forest in Temburong district, Brunei Darussalam, was initiated in January, 1992, to examine the herpetological community structure. This paper is a preliminary analysis of the diversity and structure of the amphibian community.

Two assemblages are readily differentiated, with little overlap in terms of species composition. Indeed, the assemblages are spatially separated along an topographical gradient: the riverine assemblage, that comprises 13 medium to large anurans, including four bufonids and eight ranids, plus a caecilian; and a more diverse (22 species) but smaller in mean body size leaf-litter - stream-dwelling assemblage, consitituted of six pelobatids, three bufonids, four microhylids, six ranids and at least one caecilian. A third spatially-separated assemblage that could not be sampled as effectively is the canopy-dwelling and other arboreal forms, comprising at least six rhacophorids and one microhylid.

Juveniles of species which are common enough to be sampled adequately were found to have wider diel temporal niches, relative to the adults, being active during the day, as well as night, possibly because of the need to feed and grow out of the more vulnerable smaller size classes. As with previous studies in South America and India, the litter anurans can be differentiated into a sit-and-wait group that are cryptic in colouration, with relatively wider trophic niches, and a widely-foraging group, whose members are brightly coloured food

specialists.

At least one otherwise riverine species, *Rana blythi*, travel upstream to breed upriver. This species exhibits high parental investment, exceptional for a frog, in constructing "nests" of stones in shallow streams and rock pools. Rhacophorids ascend to or directly above, streams to lay eggs on overhanging leaves, with tadpoles dropping into the water below. Microhabitats of adult frogs, however, overlap less than those of their larvae. Future research is expected to show the degree, if any, of temporal partitioning of larval microhabitats.