

public attention has focussed on these tropical rainforests, and on others endangered by human activity in the south-east and in Tasmania.

The wet coastal rainforests are indisputably of global importance. They are also scenic, which has attracted public interest. Photographs of Cape Tribulation ("where the rain forest meets the reef") are on almost every item of promotional material concerning Far North Queensland. Fan palms and cassowaries are now Queensland icons.

To the west of these lush jungles are more rainforests, but these are not so well known. Patches of dry rainforest-vine thickets and bottle tree scrub-occur sporadically on the inland slopes of the Great Dividing Range. These semi-evergreen and deciduous rainforests are found mainly in rocky areas where they are protected from frequent bush fires in the surrounding savannah woodlands. The fauna of vine thickets is diverse and represents a mixture of rainforest and woodland species.

Previous studies of vine thicket flora and fauna indicate that plant, bird, mammal and butterfly species are widespread with no species endemic to particular forest patches. However, at least two species of lizard may be restricted to the vine thickets at the south-west edge of the Wet Tropics, and preliminary investigations of litter-dwelling arachnids suggest that species may be endemic to particular patches of thicket. Little is known of the composition or distribution of the snail fauna in these areas, but opportunistic collecting at Chillagoe-Mungana Caves National Park, where the vine thickets grow on karst limestone, and at Undara National Park, where they grow at the mouths of lava tubes, has shown that not only is the snail fauna of vine thickets considerably more diverse than that of the surrounding countryside, it also has a high level of endemism.

Vine thickets at both Chillagoe and Undara are protected by the Queensland Department of Environment and Heritage, which controls all National Parks. Other areas of vine thickets are not as secure. Many land-owners burn-off to clear nuisance vegetation (the term "bastard scrub" is still in common usage), damaging the edges of the thickets, allowing grasses, eucalypts and introduced weeds to take over. Feral pigs are also a great problem, uprooting plants and eating everything from snails and earthworms to ground-nesting birds. There is a real danger that species may become extinct before they are known to science.

A survey of the snail fauna of vine thickets in the Townsville area will begin with the first heavy rains of the 1995 wet season and continue to the end of the 1996 wet season. Areas to be examined include those that are protected (e.g., Great Basalt Wall, Forty Mile Scrub) and those that are not (e.g., Sellheim, Barrabas and Rishton Scrubs). The results of this survey will provide

information on the diversity and conservation status of snails in these precarious habitats.

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SURVEYING THE COSTA RICAN MALACOFUNA

by Zaidett Barrientos

Costa Rica is a neotropical country with a very rich fauna and flora. Its biodiversity, when corrected for area, has been considered the richest in the world. This is probably because of the interaction of many factors: its mountainous geography and resulting habitat heterogeneity, the oceanic influence on its weather, having both Atlantic and Pacific coasts, and its situation near the equator with an influence of both the South and North American floras and faunas.

All this has been widely publicised in an effort to promote ecotourism, conservation and reforestation. But despite all the efforts of the government and of national and international conservation organisations, Costa Rica's deforestation rate is still one of the highest in the world. Five years ago, Costa Rica's National Biodiversity Institute (INBio) began a race against time to build a biodiversity inventory of the whole country. The goal is to update the taxonomy of the species that occur in Costa Rica, to find out where they occur and whether any populations are in protected areas, and to identify any sustainable use for them (mainly biochemical). INBio began by surveying insects and plants, but a year ago initiated a malacological survey. In an effort to show the rural inhabitants that protected areas can also be a source of income, INBio has employed and trained people that live near these areas. These rural workers are in charge of collecting the specimens. The Malacology Department employs nine of these workers in sorting and counting the specimens.

Land and freshwater molluscs are being collected all over the country, but marine specimens are at present being collected only on the Pacific coast, because of economic limitations. All the data are computerised and currently there are over 2000 entries, with about 35% of these representing wet preserved material.

Although INBio is a private institution its collections are open to the public and INBio encourages any person interested in neotropical molluscs (terrestrial, fresh water and marine) to contact INBio's curators.