THE NATURAL CONNECTIONS OF REPTILE AND MAMMALS OF THE KIMBERLEY WITH ADJACENT ISLANDS OF INDONESIA

Ric How of the Western Australian Museum of Natural Science was the speaker on 6 October 1999. He presented an outline of the Museum's research on the fauna of the islands of the south eastern Indonesian archipelagos and its relationship with that of the nearby Kimberley.

The Museum researchers spent nearly seven years recording the fauna on some 28 islands to the north of Australia with the aims of determining the limits of distribution of Australian species and examining the relationship between Asian and Australian faunas. This region of overlap between the vertebrate faunas of two of the world's great biogeographic realms, the Asian and the Australasian, is known as Wallacea after the famous English naturalist of the mid 19th Century, Alfred Russell Wallace.

Ric's talk focussed on a mixture of the logistics of faunal survey work in remote areas in Third World countries, the historical connections between southeast Indonesia and the Kimberley, as well as the biological discoveries emanating from this extensive survey. It was fascinating to learn that nearly 20 new types of mammals have been described as a result of the Museum's work as well as a few new birds and reptiles. Several of the mammal groups examined have species that are shared between Indonesia and the Kimberley, a fact that was expected given that the distance between the two areas was only 80 km when sea levels were at their lowest during the last major Pleistocene glacial maxima. The importance of fluctuating sea levels during the Pleistocene glaciations appears to have had a major influence in the evolution of new forms of mammals in the islands of southeastern Indonesia. Ric also highlighted the need to consider that many species have populations that span the two countries and, particularly for the marine turtles, the conservation measures implemented in one country need to complement those of the neighbouring one.