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## RICHARD ALEXIS ZANN

Richard Zann is known to most of us for his distinguished work on Zebra Finches which has been his main research activity for the past 25 years. Richard graduated with honours in Zoology from the University of New England and went on to earn his PhD at the University of Queensland in 1972 with a study on the evolution of behaviour and vocalisations in estrildine grassfinches. Since then he has held positions on the academic staff of Latrobe University, where his interest in Zebra Finches developed. He is currently a Reader in the Department of Zoology.

The Zebra Finch as an experimental species has been studied in captivity throughout the world and important contributions have been made in the areas of ontogeny of behaviour, sperm competition, imprinting, sexual selection, sensory physiology, water and temperature stress, breeding periodicity, social organisation, vocalisation and brain functions in general. As the species is native to Australia, the evolutionary and ecological significance of laboratory studies carried out in North American and European institutions must be interpreted in terms of the Australian environment in which the species has evolved. Richard initiated a long-term study of field populations and has put theoretical questions into ethological and ecological perspectives for a species adapted to the Australian environment. His work has enabled meaningful interpretations of laboratory findings, on the one hand, and provided further relevant questions for laboratory studies to answer, on the other.

Two papers deserve special mention. One on song development (*Animal Behaviour* 40, 811-828, 1990) demonstrated that young males learned the song from their father during an early stage of song development in the field. This has generated further hypotheses in learning and kin recognition in international ethological literature. The other paper was on the proximate causes of breeding (*Emu* 95, 209-222, 1995); he and his co-workers from CSIRO and the University of California were able to establish the truly opportunistic nature of breeding by Zebra Finches in central Australia. This confirmation has important implications in manipulative studies and is having an impact on overseas breeding cycle experiments and laboratory work on endocrinology.

Richard has now produced a comprehensive frame-



work of the biology of the Zebra Finch in a monograph of 335 pages, integrating work published over the past 40 years and his own long-term studies. This book, published by Oxford University Press, will be a constant source of reference for both theoretical and experimental workers using these birds as a model.

Besides his work on Zebra Finches, Richard was leader of the ornithological team in a series of expeditions to Krakatau headed by Professor Ian Thornton. As acknowledged in the book *Krakatau: the Destruction and Reassembly of an Island Ecosystem* (Thornton, 1996; Harvard University Press), Richard had a major role to play in collecting and assembling the vertebrate dispersal data.

The island of Krakatau near Java erupted on 27 August 1883 with a force nearly 10 000 times that of the atom bomb dropped on Hiroshima, obliterating all plant and animal life. A tropical forest ecosystem has re-assembled over the past century and this process of colonisation and survival was subject to detailed study by the expeditions. Richard made significant contributions in obtaining the species turnover rate on Anak Krakatau, which emerged from the sea in 1930 and was self-sterilised in 1952. Since 1988, he has co-authored 12 papers on this topic, three of them as the senior author. These studies have placed Krakatau alongside the Galapagos Islands in the annals of island biogeography.

Richard Zann's work has been characterised by a long-term outlook, careful planning and a devotion to a central theme — the ecology of wild birds. This and his exemplary record of publishing make Richard a worthy recipient of the 1998 D.L. Serventy Medal.