

## Species conservation in the Pacific Islands: taking effective steps forward

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Pacific species face heightened levels of threat due to the relatively small size, fragility and rapid environmental changes from human development and invasive species in many Pacific Island Countries and Territories (Veitch *et al.* 2011; Connell 2013; Sodhi *et al.* 2013). The geographic isolation of many islands is also a major barrier to the spread of scientific and traditional knowledge on threatened species, and facilitation of supportive networks for strengthening collaboration on species conservation. An additional block is the lack of consolidated approaches to many species conservation issues within the Pacific Island Countries and Territories, particularly for non-charismatic species that are often overlooked or are low on the agenda. Furthermore, the capacity and availability of resources for conservation – including both people and available scientific information – are known to be heavily biased towards developed countries in Oceania (Kingsford *et al.* 2009). The combined impacts of these gaps and blocks are clearly evident in several related public outputs including: national and regional species inventories, National Biodiversity and Strategic Action Plans, and progress on undertaking and implementing IUCN Red-List species assessments for the Pacific Islands.

To address some of these needs, this special issue of *Pacific Conservation Biology* focuses on the species conservation and management of macrofauna in the developing Melanesian Pacific Islands, and spans marine, freshwater and terrestrial habitats. It includes new information related to known species as well as collations on species groups that are not well documented but are highly threatened. Such efforts are significant as the recovery of endangered species via conservation has been shown, in some countries at least, to be directly related to project funding, the number of years listed as endangered and the number of years in which a recovery plan has been in place (Gibbs and Currie 2012).

The current volume arose from a species conservation symposium held during a Society for Conservation Biology (Oceania) conference hosted at the University of the South Pacific's Suva campus in July 2014. The symposium was convened by members of the Species Working Group of the Pacific Islands Roundtable for Nature Conservation (PIRT 2014) in order to highlight species conservation priorities and promote a strengthening of collaboration across people working in species conservation in Pacific Island Countries

and Territories. Participants were requested to incorporate the conservation status and specific management applications for their target species within presentations. In doing this the symposium endeavoured to push thinking towards connecting species conservation research and national policy frameworks. This deliberate emphasis was to encourage discussion on future priority actions and conservation effectiveness. In turn, the need for national endangered species policy documents to be well informed and updated using the latest scientific and cultural knowledge was strongly highlighted. This focused action fundamentally included baseline information on species status, occurrence, distribution and threat levels, to which the current volume now contributes significant data.

Underpinning this focus of strengthening regional species conservation efforts was the sincere desire to encourage and promote Pacific Island postgraduate student research and its publication. The peer-reviewed publication of species-conservation focused research efforts by Pacific Islanders is a fundamentally vital output, as well as being an important source of scarce scientific data for the region. In addition, this special issue facilitated the longer-term process of scientific writing development via those papers in which postgraduate students and early career researchers were authors and this built substantially on a targeted writing-workshop run by the Wildlife Conservation Society (Fiji Program) in 2014. We believe that incorporating this valuable capacity-building component within the delivery of this special issue is a major success and one we actively encourage through similar collaborative initiatives.

One of the immediate uses of this special volume will be within the Species Program of the International Union for the Conservation of Nature (IUCN). This program is particularly vital in key high biodiversity areas as such as Oceania and even more important for independent, developing Pacific Island nations such as the Solomon Islands, Vanuatu and Fiji, with comparatively limited scientific resources per land area compared with their neighbours in Australia and New Zealand. In making species conservation a priority, via its flagship IUCN Red List for Threatened Species, the IUCN sees protecting species and the economic contributions of species as a fundamental base. Since species are nature's building blocks a focus on species conservation, and support for projects with lasting



**Fig. 1.** Johnson Seeto. Image used with permission from Johnson Seeto's family.

impacts, by default address and resolve wider conservation issues including habitat conservation and incorporation of the vital needs of communities, who may either directly or indirectly depend on those species for survival.

Species richness and taxonomic species also form the basis of conservation assessments which are in turn often used for selection of conservation areas, and later evaluation of their effective management (Margules and Pressey 2000). Hence a focus on species conservation is fundamentally necessary, if not

totally adequate, for the execution of wider conservation policy and practice (Mace 2004). Species conservation approaches are therefore, quite rightly, considered by the IUCN and others to often have multiple additional benefits such as; generating alternative livelihood solutions, enhancing protection for specific areas, reducing wildlife related crimes and unsustainable demand, reversing habitat degradation, and inspiring a new generation of scientists.

This special issue is dedicated to the late Johnson Seeto, long standing University of the South Pacific staff member, respected colleague, dear friend and a truly outstanding student mentor (Fig. 1).

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