CSIRO PUBLISHING

Pacific Conservation Biology, 2018, **24**, 1–2
https://doi.org/10.1071/PCv24n1_ED

Editorial

Notes from the field: the value of observational data and natural history

Andrew Chin

James Cook University, Townsville, Qld Australia. Email: andrew.chin@jcu.edu.au

The Pacific is vast and holds incredible biological, geological, social and cultural diversity. While its sheer size, diversity, and the remoteness of some areas mean that unique species and phenomena still await scientific discovery, these same traits mean that these species or phenomena may be incredibly difficult to observe. The Pacific is also dynamic with fast paced social, economic and environmental change, and we all recognise that some changes are placing the region's biodiversity under increasing pressure. The cryptic nature of some species and the rapid pace of change also mean that some conservation issues may remain hidden, and documentation may lag behind impact. For example, up to 74% of New Zealand's freshwater fish fauna is at risk, however their plight is largely unrecognised (Weeks *et al.* 2016). At the same time, new discoveries are still being made. In 2016, six new stingray species were described (Last *et al.* 2016*a*, 2016*b*) and just last year, a new species of giant rat, *Uromys vika*, was described from the Solomon Islands (Lavery and Judge 2017). The fact that this species grows to half a metre long and has remained undescribed until now, and that a specimen only became available after being killed during logging, emphasises both the unique and cryptic nature of the Pacific's biodiversity, as well as the conservation challenges facing the region. Additionally, publication of research commonly lags far behind the initial discovery or occurrence of impacts affecting species and ecosystems (Lawler *et al.* 2006), and may certainly lag far behind local knowledge of these systems.

In contrast, the amount of digital information collected on the Pacific's biodiversity is rapidly growing. Some areas of the Pacific are becoming more accessible as transport routes improve, and technology is changing how we collect, store and share information. An obvious example is the mobile phone, with at least 60% of Pacific Islanders now having access to this technology (Cave 2012). Mobile phones and other information and communication technologies (ICT) developments have revolutionised communication and data sharing in the region (Cave 2012). A mobile phone's tiny 64 GB SD card contains over 60 000 times more memory than that of a first generation 5 1/4 inch floppy disc. Images are now available in near real time across social media platforms. At the same time, cameras are smaller, more powerful, and ubiquitous. The increased availability of low cost, 'ruggardised' digital cameras and 'action cameras' also mean that gigabytes of high definition digital information are being captured in remote locations, underwater, and increasingly from the air with the availability of drones. More imagery of the natural world is available than ever before, and at increasing resolution and from ever more diverse perspectives.

Recognising the cryptic and dynamic nature of the Pacific and its biodiversity, the threats it faces, and the potential value of the natural history information contained in digital imagery, *Pacific Conservation Biology* (PCB) is introducing 'Field Notes', a new type of article for the journal. Field Notes will also harken back to the pioneering era of natural history research where a biologist's field journal was an invaluable compendium of knowledge contained in sketches, notes and drawings. Field journals still exist of course, it's just that they are supplemented by cameras and other imaging technology. A Field Notes submission will revolve around a single high quality image of a species, observation, phenomena, or event that is of scientific interest and falls within the journal's scope. Examples could include records of invasive species, range extensions, potential new species, interactions between humans and nature that illustrate a conservation issue, a rarely observed ecological process or event, or interesting behavioural observations. Each Field Note will be accompanied by explanatory text that describes the event captured in the image and its significance to conservation science in the Pacific. Field Notes will be no more than 450 words (including the title, citations, acknowledgements, and references), and there will be no more than two Field Notes per journal issue. More information is available in the updated Author Instructions on the PCB website http://www.publish.csiro.au/pc/forauthors/AuthorInstructions.

Pacific Conservation Biology is not unique in introducing these types of submissions, as other journals have published articles in similar formats for many years. Similar to these journals, Field Notes are not intended to be research articles. Instead, Field Notes provide an avenue for researchers, managers and conservation practitioners to document observations or events that while not being sufficient for a full length article, are nevertheless significant. They may also help raise awareness about topical conservation issues, or noteworthy discoveries. As with all PCB articles, ensuring scientific quality and rigour is paramount. All Field Notes will be subject to peer review, especially with regards to the scientific significance of the submission, and scientific value will take precedence over the photographic quality or aesthetics of the photograph. Images will also be scrutinised for digital authenticity. The editors will also specifically consider potential social, cultural and

conservation implications of Field Notes submissions to avoid potential negative impacts of publishing this information (e.g. Lindenmayer and Scheele 2017).

The Editorial Board are keenly interested to see what future Field Notes submissions might contain, and we welcome long time contributors and new contributors alike to consider submissions to this new category.

References

Cave, D. (2012) Digital islands: How the Pacific's ICT revolution is transforming the region. *Lowy Institute for International Policy*. Available at: https://www.lowyinstitute.org/publications/digital-islands-how-pacifics-ict-revolution-transforming-region [accessed 13 February 2018].

Last, P. R., White, W. T., and Naylor, G. (2016*a*). Three new stingrays (Myliobatiformes: Dasyatidae) from the Indo-West Pacific. *Zootaxa* **4147**, 377–402. doi:10.11646/ZOOTAXA.4147.4.2

Last, P. R., White, W. T., and Seret, B. (2016*b*). Taxonomic status of maskrays of the *Neotrygon kuhlii* species complex (Myliobatoidei: Dasyatidae) with the description of three new species from the Indo-West Pacific. *Zootaxa* **4083**, 533–561. doi:10.11646/ZOOTAXA.4083.4.5

Lavery, T. H., and Judge, H. (2017). A new species of giant rat (Muridae, *Uromys*) from Vangunu, Solomon Islands. *Journal of Mammalogy* **98**, 1518–1530. doi:10.1093/JMAMMAL/GYX116

Lawler, J. J., Aukema, J. E., Grant, J. B., Halpern, B. S., Kareiva, P., Nelson, C. R., Ohleth, K., Olden, J. D., Schlaepfer, M. A., Silliman, B. R., and Zaradic, P. (2006). Conservation science: a 20-year report card. *Frontiers in Ecology and the Environment* **4**, 473–480. doi:10.1890/1540-9295(2006)4[473:CSAYRC]2.0.CO;2

Lindenmayer, D., and Scheele, B. (2017). Do not publish. *Science* **356**, 800–801. doi:10.1126/SCIENCE.AAN1362

Weeks, E. S., Death, R. G., Foote, K., Anderson-Lederer, R., Joy, M. K., and Boyce, P. (2016). Conservation Science Statement. The demise of New Zealand's freshwater flora and fauna: a forgotten treasure. *Pacific Conservation Biology* **22**, 110–115. doi:10.1071/PC15038