Species from the Pacific added to IUCN Red List

Title

New information for Pacific Island freshwater fishes, land snails and reptiles is part of the latest update of the IUCN Red List of Threatened Species™ has been released. These data indicate that 32% of these species are threatened with extinction. This is an important milestone for understanding the challenges of managing plant and animal life in the Pacific Islands. IUCN Oceania, in partnership with the IUCN Red List Unit and other regional partners, is currently expanding the assessment of Pacific Island species for the IUCN Red List. “The Pacific Islands of Melanesia, Micronesia and Polynesia are home to an astonishingly diverse range of terrestrial species, many of which are found nowhere else on earth,” says Helen Pippard, Species Programme Officer for IUCN’s Oceania Regional Office in Suva Fiji. “But in order to conserve the species that are so vital for the health, culture and livelihoods of Pacific Islanders, we must improve our knowledge of these species”.

In the most comprehensive assessment of its kind in the Pacific, an expert team evaluated 167 freshwater fishes, 166 species of land snail and 157 reptiles for inclusion in the Red List. This two-year project is the first step in a process that aims to systematically address different Pacific Island species groups over the next 10 years.

Although these species may not be seen as “charismatic”, they are extremely important in maintaining general ecosystem health: land snails play a vital role in nutrient-cycling, especially of calcium; reptiles can take on the role of predator or prey and often act as seed dispersers; and in the freshwater realm, fishes recycle nutrients, purify water and provide an important food source for many Pacific Islanders. Land snails are found to be the most highly threatened group, with 70% of the assessed species threatened: half of all threatened species are listed as Critically Endangered, and many, including *Aaadonta angaurana* from Angaur island in Palau and *Lauopa mbalavuana* from Vanua Balavu in Fiji, also qualify for Possibly Extinct, as no live or dead shells have been found in recent times. Land snails also have the highest number of species found nowhere else, with 86% of species recorded from a single country. In Fiji, three quarters of all assessed species are endemic, and in Palau, over 90% of species are unique to the archipelago. These restricted range species are especially vulnerable to the presence of invasive species such as the giant African snail, Rosy wolf snail and predatory mammals like rats and mongooses, which are decimating these snail populations. Habitat destruction for logging, agriculture and development has also been identified as a major threat. #

The threatened freshwater fishes are confined to single or few river systems and are severely impacted by the existence of dams (e.g. Futuna’s emperor, *Akihito futuna* (CR) from the island of Futuna) and by pollution from deforestation, agriculture and mining effluents - for example, *Stiphodon discotorquatus* (CR) from the Tubuai Islands in French Polynesia is affected by land clearance, pesticides and the construction of dams, and *Sicyopterus eudentatus* (EN) from the Federated States of Micronesia is threatened by agricultural run-off devastating its habitat. Whilst many fish species are not listed as threatened (due to their larger range and ability to occupy a variety of freshwater, estuarine and marine habitats), a large number (40%) are listed as Data Deficient. We urgently need information on these species in order to evaluate their conservation status, protect them and ensure that people’s livelihoods are safeguarded.

Almost one fifth of reptiles have been assessed as threatened, and are impacted by invasive mammals and plants, and by habitat degradation (e.g. the Pohnpei Forest skink, *Emoia ponapea* (EN) and the Fijian banded iguana, *Brachylophus bulabula* (EN). Some species are affected by hunting and trade (e.g. the widespread Pacific Boa, *Candoia bibroni* (LC) and the endemic Fijian Crested Iguana, *Brachylophus vitiensis* (CR). Future impacts from climate change may affect the thermo-regulation of some reptiles such as the Polynesian slender treeskink, *Emoia tongana* (LC). *Tachygyia microlepis*, previously recorded from Tonga, has been driven to extinction as a result of habitat loss, human colonization and invasive predators such as dogs, pigs and rats. Conservation efforts are therefore needed to protect the identified threatened species and prevent further extinctions. This study highlights the enormous strain on our natural environments.

The results are particularly important for guiding decision-making and conservation activities of Pacific Island governments, NGOs and the private sector and enabling direct action on the

ground. “Until now we have not had the information we need about species and the threats they face”, says Bernard O’Callaghan, IUCN Oceania’s Regional Programme Coordinator. “But these IUCN Red List assessments can now help decision-makers develop suitable policies and plans, to manage these threatened species and protect and value Pacific Island biodiversity.” The findings of this assessment are being published in a regional report, and summary documents are now available from the IUCN Oceania website. The Red Listing Project to carry out assessments on land snails, freshwater fishes and reptiles in the Pacific region is supported by funding from the Critical Ecosystem Partnership Fund and the Fonds Pacifique. The Critical Ecosystem Partnership Fund is a joint initiative of l’Agence Française de Développement, Conservation International, the Global Environment Facility, the Government of Japan, the John D. and Catherine T. MacArthur Foundation, and the World Bank.