

Protecting Fiji's Lau Group

Written by Katy Miller | Director of the Vatuvara Foundation

If I could paint a picture of the paradise islands of the Lau Group, the canvas would be sprayed with azure waters every shade of blue, turquoise and jade glimmering in the sunlight, with shallow lagoon mirage-like limestone karsts and sandbanks floating in the distance.

The Lau Group comprises of 60 islands and islets scattered over 114,000 km² of pristine ocean. The Lau Group has been identified as an area of national significance and high priority for marine protection. However, predicted sea levels rising, warming waters, extreme climate events and overfishing are likely



to exceed the coping capacity of diminishing coral reefs and local livelihoods they support.

Vatuvara Foundation has embarked on a journey to protect and revive the ocean through marine conservation and the empowerment of local communities as stewards of their natural resources. Determined to assess the health of these remote islands in Lau and surrounding coral reefs, our team initiated marine and terrestrial expeditions to preserve the rich biodiversity of the islands and safeguard their vital ecosystems.

In May 2017, a team of made up of fish and coral experts from Vatuvara Foundation and Wildlife Conservation Society (WCS) set off for the untouched waters and lush limestone islands of the Northern Lau Group. The dive team collected baseline data



on the abundance and diversity of corals and fish species, as well as key invertebrates such as sea cucumbers that are an important source of livelihood for local communities. During this expedition, the team identified several important conservation sites for protection based on the health of coral and fish communities. These recommendations along with awareness conducted by Vatuvara Foundation, WCS and Ministry of Fisheries were presented to the traditional iqoliqoli owners. The biological data collected establishes a baseline understanding of the marine environment of the remote islands surveyed and will be used as reference for the long-term monitoring of these marine environments to detect potential impacts.

A ridge to reef conservation assessment will encompass scientific research to further protect our natural environment. Partnering with BirdLife International Pacific, NatureFiji-iMareqetiViti and the US Geological Survey, the Vatuvara Foundation

conducted pioneering terrestrial surveys of the pristine, privately owned Vatuvara Island, which is now under the care of Vatuvara Private Islands and Resort. The island is protected as a natural reserve, supporting healthy populations of several globally threatened species, and remains inaccessible to ensure this lush wildlife haven is safeguarded.

A large, unique, prehistoric looking, endangered land crab rules the island. Coconut crabs (*Birgus latro*) or ugavule in Fijian, is a very visible part of the islands fauna in Northern Lau. This creature is active throughout the day, but at night the island jungle comes alive, as the world's largest arthropods (weighing up to 4kg and a metre from leg to leg) are found roaming and searching for dropped coconuts, which they crack open with their powerful pincers to feed upon.

Coconut crabs were once plentiful throughout much of the tropical Indo-Pacific region, but over-harvesting has resulted in their diminishing stocks.





These long lived terrestrial crabs, can survive for 40-60 years, are now under threat. Coconut crabs are considered a local delicacy, causing populations to be increasingly confined to isolated islands or protected areas. Their slow growth rate makes them susceptible to even low levels of continued exploitation. Few islands in the Lau archipelago host these remaining populations and priority of this important natural resource is critical in these remote regions.

Although small in populations, the species is listed as Data Deficient on the IUCN Red List, with no regulations for a protected breeding season or harvesting size. The coconut crab has been identified by the CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora), as an endangered species, and is listed under Fiji's Endangered and Protected Species Act (Amendment) Act 2017. It is illegal to export, import, or introduce the species without a permit. Any violations result in hefty fines or imprisonment.

There is a general lack of awareness regarding the protection of coconut crabs. By improving

local knowledge about the endangered species, including its contribution to biodiversity and the importance of protecting their habitat will ensure that the public is more aware of their own responsibilities for better managing their natural resources. Our recent terrestrial survey findings will help to better understand the state of coconut crab stocks and to ensure measures are in place to protect this unique species.

Vatuvara Private Islands and Vatuvara Foundation are working with communities in Northern Lau on awareness of threatened species, marine management, and poaching surveillance within their traditional fishing grounds. We are making long term commitments to self-sustain and protect surrounding islands with corridors of protection. ■

The Vatuvara Foundation is a Fijian non-profit organisation committed to protecting Fiji's ocean, empowering local communities and inspiring young ocean advocates. For more information, please visit www.vatuvara.org



George Bennett was born in California, USA and spent the last 15 years of his life in Fiji, mainly on Taveuni. He developed a deep interest in Fijian wildlife and produced wonderful watercolour paintings of Fiji's diverse fauna & flora. George left a lasting legacy on Fijian currency notes. During his last decade he provided the artwork for many stamps issued by Post Fiji.

Post Fiji released a set of four stamps on August 2006 featuring Fiji's Extinct Megafauna illustrated by George Bennett.

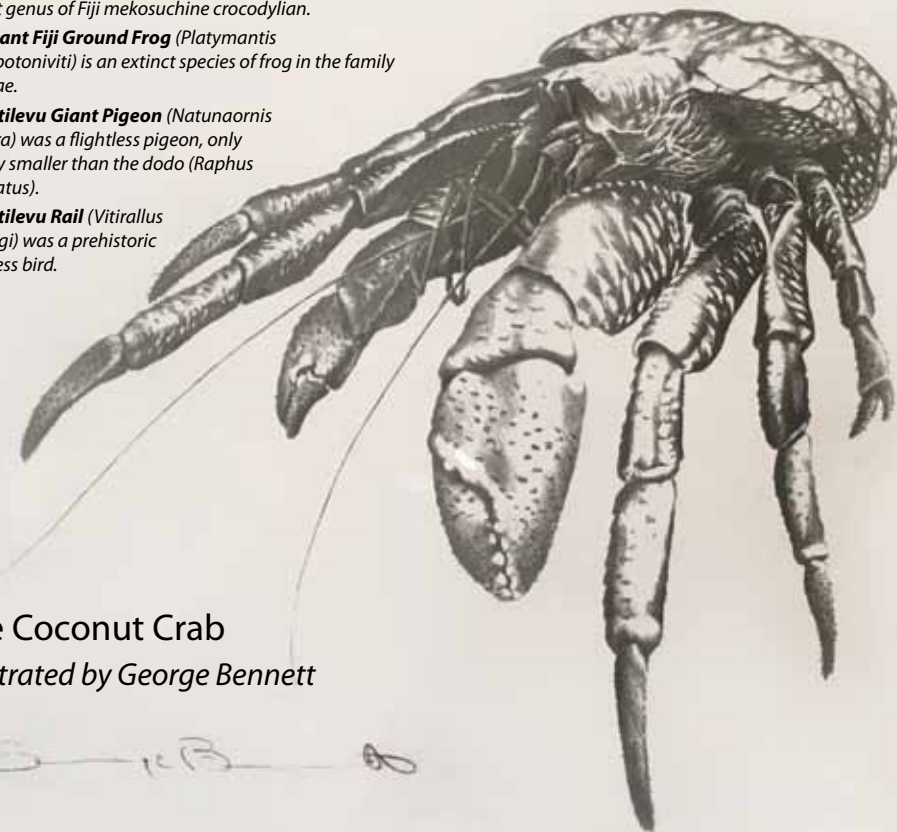
CLOCKWISE FROM TOP LEFT:

The **Fiji Crocodile** (*Volia athollandersoni*) was an extinct genus of Fiji mekosuchine crocodylian.

The **Giant Fiji Ground Frog** (*Platymantis megabotoniviti*) is an extinct species of frog in the family Ranidae.

The **Vitilevu Giant Pigeon** (*Natunaornis gigoura*) was a flightless pigeon, only slightly smaller than the dodo (*Raphus cucullatus*).

The **Vitilevu Rail** (*Vitirallus watlingi*) was a prehistoric flightless bird.



The Coconut Crab
illustrated by George Bennett

Fiji's Extinct Megafauna