



WCS Melanesia

A Wildlife Conservation Society Program

2018 ANNUAL REPORT

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HIGHLIGHTS FROM OUR DISCOVERY SCIENCE, CONSERVATION INITIATIVES, OUTREACH AND CAPACITY BUILDING PROGRAMS AND GROWING PARTNERSHIPS MEASURED AGAINST THE WCS MELANESIA 2020 STRATEGY

Providing evidence-based guidance that informs species conservation and ecosystem management

FOREST CONNECTIVITY IMPORTANT FOR CUSCUS

New research to assess home range sizes of Admiralty cuscus (*Spiloglossus kraemeri*) on Manus Island, led by PNG national researcher John Lamarinis, has shown that current customary management measures are insufficient to fully protect populations. In recent years, some clans have revived periodic no hunting areas (*tambu*), in recognition that overharvesting was reducing abundance of the much sought-after species. Data on movement patterns collected using radio-telemetry indicated that despite potentially high growth rates and short dispersal distances, individual *tambu* areas are unlikely to be self-sustaining given their small sizes. While increasing the sizes of *tambu* areas is likely not feasible given land tenure constraints and human population growth, it may be possible to conserve cuscus populations through networks of *tambu* areas within intact, contiguous forest habitat. To this end, WCS is working on developing land use plans with local communities and has renewed conservation agreements with local clans on Manus to maintain forest corridors.

Funded by the Australian Government Department of Foreign Affairs and Trade

Full citations: BLamarinis J, Whitmore N (2018) Forest connectivity is important for sustaining Admiralty cuscus (*Spiloglossus kraemeri*) in traditional terrestrial no-take areas on Manus Island, Papua New Guinea. *Pacific Conservation Biology* 24:55-62

SOLOMONS BOASTS HIGH NUMBERS OF REEF SHARKS

Estimates of reef shark abundances from 8 species in Western Province, Solomon Islands, using baited remote underwater video, have indicated relatively healthy populations, with above average values for Pacific sites surveyed. Location was the most important factor associated with reef shark abundance and biomass. More remote sites had 43% greater biomass than in areas closer to larger population centres. Over the coming years, WCS will be working to incorporate measures for shark conservation into local fisheries management plans and national marine spatial planning efforts.

Funded by the John D. and Catherine T. MacArthur Foundation, U.S. National Science Foundation, and Paul G. Allen Philanthropies (through the Global FinPrint project)

Full citation: Goetze JS, Langlois TJ, McCarter J, Simpfendorfer C, Hughes A, Leve JT, Jupiter SD (2018) Drivers of reef shark abundance and biomass in Solomon Islands. *PLoS ONE* 13:e0200960. <https://doi.org/10.1371/journal.pone.0200960>



IMPACTS TO WOMEN FISHERS FOLLOWING CYCLONE

Understanding how people are affected by disturbance is critical for designing appropriate mitigation and adaptation strategies. In Fiji, WCS undertook an evaluation of the impact of Tropical Cyclone Winston on women mud crab fishers. The study found that 53% of interviewed fishers stopped harvesting crabs following the cyclone in order to focus on rebuilding. Those who continued to fish reported less frequent collection, smaller crabs, and selling more of their catch in order to raise income for household repairs. The information gathered has been important for supporting implementation of local fisheries management plans and the development of a national mud crab management plan for Fiji.

Funded by the David and Lucile Packard Foundation and the Flora Family Foundation

Full citations: Thomas AS, Mangubhai S, Vandervord C, Fox M, Nand Y (2018) Impact of Tropical Cyclone Winston on mud crab fishers in Fiji. *Climate and Development* <https://doi.org/10.1080/17565529.17562018.11547677>



Protecting important land and seascapes across Melanesia

KWIOP COMMUNITY PLEDGES TO SAFEGUARD FOREST

The people of Kwiop, nestled in a remote valley of Jiwaka Province, Papua New Guinea, pledge to create a protected area over 4,200 hectares of primary forest. The protected area will contribute to the conservation of the Bismarck Range Forest, a contiguous intact forest corridor in the central highlands, one of the world's top seven regions for the highest plant diversity and an area supporting the highest mammal and amphibian species richness and endemism in the country. In November 2018, the Kwiop community organized a traditional ceremony to formally start the protected area creation process, and to celebrate the launch of the Kuakam Landowners Foundation, a new community-based organisation.

Funded by the Australian Government Department of Foreign Affairs and Trade, European Union, and the Darwin Initiative supported by the U.K.'s Department for Environment, Food & Rural Affairs



FISHERIES PLAN ENDORSED FOR VURANA COMMUNITIES

An ecosystem-approach to fisheries management plan was finalized by communities of Vurana in June 2018. It covers local rules around resource use, particularly for important shellfish, within lagoonal areas along the northwest portion of Parara Island in Western Province, Solomon Islands. The plan was then endorsed by members of the Aqo-Simaema tribe in July. Local rangers were trained to conduct periodic monitoring of key indicator species, such as clams. Adjacent communities have already expressed interest in developing comparable plans.

Funded by the U.S. National Fish and Wildlife Foundation



GOVERNMENT OF PNG COMMITTS TO DECLARING NEW MPA'S

From July to October 2018, WCS worked with the Papua New Guinea Conservation and Environment Protection Authority to gain political support from the Government for the designation of new marine protected areas (MPAs). This culminated in two announcements made by the Government at the 5th Our Ocean Conference in Bali, Indonesia in October. In the first announcement, the Papua New Guinea Government declared that it will establish 7,500 square kilometres of MPAs in the Bismarck Sea by 2021, thereby tripling MPA coverage nationally. Through the second announcement, the Government reaffirmed its commitments to designate national marine sanctuaries in 10% of its offshore waters by 2025, and to establish a variety of MPAs in 10% of its territorial waters and the coastline by 2025.

Funded by Oceans 5 and the WCS MPA Fund



PROTECT

Moving people to take action through stories and examples



FIJI DIRECTOR NAMED 2018 PEW MARINE FELLOW

Sangeeta Mangubhai, WCS Fiji Program Director, received a prestigious Pew Marine Fellowship in 2018. Sangeeta will use the three-year award to develop practical guidelines, tools and policy recommendations to assist Melanesian countries to mainstream gender and human rights-based approaches into coastal fisheries management and development for improved food security and livelihoods of local communities. In addition to working in Fiji to strengthen WCS's Women in Fisheries program and partnerships with Women in Fisheries Network – Fiji and UN Women, Sangeeta is also extending her work to Solomon Islands and Vanuatu.

Funded by the Pew Charitable Trusts

MARINE AND CLIMATE SCIENCE EDUCATION IN MANUS COMMUNITIES

In 2018, WCS wrapped up a multi-year project with ten coastal communities around Manus Province, Papua New Guinea, to develop site-based fisheries management plans addressing overharvesting and climate impacts. A key part of the work involved education and awareness presentations and training workshops, which featured topics on marine ecology, fisheries, climate threats, and coastal management options, and which aimed to build capacity at the local level to empower communities in managing their marine customary areas. Since the successful completion of the project in May 2018, communities integrating their marine conservation areas into the ward level development plans (e.g., at Mbuke) and establishing fisheries permanent and rotational no-take zones (e.g., at Pam and Andra).

Funded by the Asian Development Bank



LOSS OF A CONSERVATION CHAMPION IN FIJI

The WCS Fiji team mourned the loss of Taitusi Karalo, who passed away in May 2018. Taitusi was the secretary for the Mataqali Nadicake (Nadicake clan) and was instrumental in the dialogue to secure the conservation lease for the Kilaka Forest Conservation Area, which will be part of his legacy to the people of Kilaka and Kubulau District, Fiji.

INSPIRE



Expanding conservation efforts across Melanesia and strengthening our programs



Yatu Molisa

MARINE SPATIAL PLANNING IN VANUATU

In September, WCS signed an agreement to work alongside IUCN, Live and Learn Vanuatu and the Vanuatu Government to collaboratively develop a marine spatial plan for Malo Pass off Espiritu Santo. The work will complement ongoing national efforts to develop a national marine spatial plan for Vanuatu to deliver on the Government's National Ocean Policy. WCS is mentoring a Pilot Site Project Officer from Live and Learn Vanuatu to facilitate dialogue across the multiple sectors who use the ocean space in and around Malo Pass.

Funded by Oceans 5

SUPPORTING TRANSITIONAL PHASE AT SICCP

Since 2015, WCS has been working alongside the Solomon Islands Community Conservation Partnership (SICCP), a local Solomon Islands-based NGO dedicated to supporting local communities to better manage their natural resources. In August 2018, SICCP underwent a major transition with the departure of senior staff and Board members. WCS assisted SICCP to manage finances and grant obligations during the interim period during which new staff and Board members were appointed, and we continue to play an advisory role in helping SICCP build their staff capacity and define new strategic directions.

STRENGTHENING FINANCIAL MANAGEMENT ACROSS MELANESIA

WCS welcomes to the region several new hires who are important parts of our efforts to build regional financial management systems. Ming Ling Lim, based in Malaysia, began work with WCS in November 2018, supporting the Melanesia and Southeast Asia Archipelago regions as Regional Business Manager. Monica Ilala, based in Honiara, Solomon Islands, joined WCS in December 2018 as our WCS Solomon Islands Finance and Administration Officer. Also in December 2018, Ming Ling and Monica met up with our senior finance management staff from Fiji and Papua New Guinea in Suva, Fiji, to review systems operations and develop plans for strengthening financial management of our growing program in Solomon Islands.



Stacy Jupiter

BUILD



Stacy Jupiter



Creating partnerships to extend our impact



FISHERIES SURVEY WORK BEING USED TO ADAPT SIZE LIMITS

Through 2018, WCS worked with the Fiji Ministry of Fisheries and WWF to collect data on fish size at maturity to review and improve the existing fish size limits under the Fisheries Act. Results of the analyses suggest that without management, >57% of the potential reef fish yield and 38 of the 74 species in the modelled assemblage will be lost in Fiji, but that adjusted size limits could protect ~93% of the yield and prevent extinctions. As next steps, WCS and partners will submit a policy brief to the Minister for Fisheries highlighting the urgent need for management and will continue to support a "Set Size" campaign, led by the Ministry and cChange, to build awareness and compliance with size limits for fish and invertebrate species.

Funded by the David and Lucile Packard Foundation

Full citation: Prince et al. (2018) Developing a system of sustainable minimum size limits for Fiji. SPC Fisheries Newsletter 155:51-60

SUPPORTING IMPLEMENTATION OF REDD+ POLICY IN PNG

In partnership with the Papua New Guinea Climate Change and Development Authority, FORCERT and the Research and Conservation Foundation, WCS undertook an evaluation of stakeholders at the provincial level in East New Britain, West New Britain and Madang province to help guide the implementation of national policy related to "reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD+)". The objectives of the work were to identify capacity needs for future training in order to prepare provinces for implementation of the policy, as well as to identify concerns of rural landowners regarding their potential roles in decision-making, land-use planning, livelihoods and environmental protection.

Funded by the Forest Conservation Partnership Facility through UNDP

Full citation: WCS (2018) Stakeholder engagement mapping and report: Development of REDD+ Stakeholder Engagement Plans in East New Britain, West New Britain and Madang Provinces of Papua New Guinea. Wildlife Conservation Society, Goroka

LEVERAGE



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