

2019 ANNUAL REPORT



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



DISCOVER

PROTECTING DEAD PARROTS TO CONSERVE THE LIVING

Pesquet's parrot (*Psitttrichas fulgidus*) is found only on the island of New Guinea and is classified as Vulnerable on the IUCN Red-List of threatened species. Its striking crimson feathers make the birds in high demand for use in traditional headdresses and costumes, known locally as bilas. A new study by WCS found that there are now more Pesquet's parrots present in ceremonial headdresses than there are remaining in the wild. The authors estimated approximately 8% of the entire remaining population is required annually just to meet the demand from a single highlands district. The research suggests prolonging the lifespan of existing headdresses as an important conservation strategy, one that WCS has been promoting successfully in rural communities and at cultural festivals in Papua New Guinea through the distribution of over 1,000 bilas protection kits.

Funded by The Pacific Development Conservation Trust, The Christensen Fund, the Darwin Initiative through the United Kingdom's Department for Environment, Food & Rural Affairs and the European Union's Sustainable Wildlife Management programme

Full citation: Nugi G, Whitmore N (2019) More dead than alive: harvest for ceremonial headdresses threatens Pesquet's Parrot in Papua New Guinea. Emu - Austral Ornithology <https://doi.org/10.1080/01584197.01582019.0167616276162>

IDENTIFYING IMPACTS FROM PROPOSED INFRASTRUCTURE DEVELOPMENT

WCS is undertaking a partnership with James Cook University to provide recommendations for reducing the impact of large-scale infrastructure development and road building on biodiversity in Papua New Guinea. A joint paper was released in 2019 focusing on the potential biodiversity impacts of the proposed 'Missing Links' road projects - an ambitious plan from the government of Papua New Guinea to nearly double the size of the national road network. Dr Mason Campbell, one of the leading researchers on the project noted, "The current plans would result in significant forest loss, dissection of critical biodiversity habitats, and loss of forest connectivity across large expanses of the country." Through this project, WCS is also working with the Conservation and Environment Protection Authority and The Biodiversity Consultancy to provide improved environmental impact assessment guidelines for road developments.

Funded by an Anonymous donor

Full citation: Alamgir M, Sloan S, Campbell MJ, Engert J, Kiele R, Porolak G, Mutton T, Brenier A, Ibisch PL, Laurance WF (2019) Infrastructure expansion challenges sustainable development in Papua New Guinea. PLoS ONE 14:e0219408. <https://doi.org/0219410.0211371/journal.pone.0219408>



IDENTIFYING LEGAL OPTIONS FOR FORMALISING CONSERVATION AREAS

In the context of the ongoing multi-year delay to endorse the draft Protected Areas Bill by Papua New Guinea Government, WCS contracted a legal expert, Grace Dom, to investigate other legal pathways to develop community conservation areas and marine protected areas. Through this legal investigation it was established that conservation deeds would allow clans to establish legally recognised conservation areas to protect and sustainably manage their forest and marine resources. It was also identified that the implementation of Local Level Government (LLG) marine management laws could be used for the designation of marine protected areas across large areas. Based on these findings, WCS is currently supporting the development of 14 conservation deeds and 2 LG marine management laws in 3 provinces.

Funded by the Australian Government Department of Foreign Affairs and Trade, Oceans 5 and the WCS MPA Fund



Protecting important land and seascapes across Papua New Guinea

MAJOR STEPPING STONES TOWARDS THE ESTABLISHMENT OF TWO NEW MARINE PROTECTED AREAS

In 2018, at the 5th Our Ocean Conference in Bali, the Papua New Guinea Government declared that it will establish two new marine protected areas (MPAs) in New Ireland Province by 2021. A legal mechanism to enable this became available in July 2019 when the Lovongai Rural Local-Level Government (LLG) Marine Environment Management Law—that WCS helped to draft—came into force. The law provides the mandate to establish a Marine Environment Management and Conservation Committee, declare a Lovongai Marine Conservation Area, and give penalties and fines to offenders. In September 2019, members of the New Ireland Marine Technical Working Group, comprised of representatives from Government, the private sector and local NGO's agreed to use this new legislation to develop an MPA in Lovongai LLG and develop a parallel LLG law for Murat LLG to establish an MPA there. WCS is now carrying out consultations with about 100 communities within Lovongai and Murat LLGs to develop management rules for the new MPAs.

Funded by Oceans 5, WCS MPA Fund and Blue Action Fund



STRIVING TO PROTECT CRITICALLY ENDANGERED SAWFISH AND RHINO RAYS IN NEW IRELAND PROVINCE

Once widespread across tropical shallow seas, the sawfish and their relatives – wedgefish and guitarfish, collectively known as rhino rays – are considered the most threatened of all backboned animals. The only major sawfish strongholds are around Florida, northern Australia and New Guinea. As little is known about their distributions in New Ireland Province, WCS conducted sawfish and rhino ray scoping surveys in Kavieng District. This included key informant surveys and the ongoing deployment of baited remote underwater video systems (BRUVS) in coastal communities. The outcomes from this study will allow for rhino ray management to be incorporated in the design of two marine protected areas currently being established in Kavieng District.

Funded by The John D. and Catherine T. MacArthur Foundation



EXPANSION OF THE COMMUNITY NURSERY PROGRAM IN THE HIGHLANDS

The WCS community nursery program has been propagating traditional hardwood timbers and growing them in community woodlots. In 2019, WCS established a new community nursery in the remote village of Kwiop in Jiwaka Province. In total, over the last two years, more than 30,000 community-grown Highlands timber and tree crops seedlings have been produced in four partner's communities. These have been planted over 42 hectares, which is approximately equal to the total calculated area deforested in these communities between 2001–2013.

Funded by the Australian Government Department of Foreign Affairs and Trade, the Darwin Initiative through the United Kingdom's Department for Environment, Food & Rural Affairs and the European Union's Sustainable Wildlife Management programme



Elodie Van Lierde

Elodie Van Lierde

Moving people to take action through stories and examples

PARALEGAL TRAINING WORKSHOP

In May 2019, WCS facilitated a week-long paralegal training workshop by the Centre for Environment Law and Community Rights (CELCOR) in Manus Province. Over 100 customary landowners from central Manus, village court magistrates and local and provincial government officers attended the training. The CELCOR facilitators introduced relevant laws related to natural resources and the environment and discussed landowner rights and responsibilities regarding development on customary lands. At the conclusion of the workshop it was agreed that there was a need for a follow up training on specific topics such as the process of obtaining a Forest Clearance Authority in communities that are affected by a new large-scale logging operation on the south coast of Manus.

Funded by the Australian Government Department of Foreign Affairs and Trade



COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT

In partnership with Kuakam Landowners Foundation, a local community-based organisation, WCS has worked with the Kwiop community in remote Jimi District, Jiwaka Province, to develop community-based natural resource management rules. These rules were developed through extensive consultation with community leaders and each of the clans in Kwiop. From these consultations, a list of rules to limit unsustainable hunting and deforestation and a linked land-use plan were developed. These community rules have associated penalties which are enforceable by Kwiop's village court. In 2020, the rules will be formalised through a conservation deed, which will provide legal protection to the community's conservation efforts.

Funded by the Australian Government Department of Foreign Affairs and Trade and the European Union's Sustainable Wildlife Management programme

INSPIRE



Elodie Van Lierde

HELPING FARMERS TO DEAL WITH IMPACTS OF CLIMATE CHANGE

As part of an integrated conservation and development project, WCS and the National Agricultural Research Institute (NARI) collaborated to enhance the resilience of smallholder farming communities in Chimbu and Eastern Highlands Provinces. A key component of the project was the establishment of climate-smart gardens. The gardens featured improved crop varieties that have the potential to enhance food security and can be disseminated after drought events to re-establish food production. The climate-smart gardens were also used to facilitate on-farm training demonstrations of best cropping practices. These trainings captured techniques relating to soil moisture and fertility management processes, pest and disease control measures, and improved planting methods for all the introduced varieties.

Funded by the Darwin Initiative through the United Kingdom's Department for Environment, Food & Rural Affairs



Elodie Van Lierde

Expanding conservation efforts across Papua New Guinea and strengthening our programs



BUILDING CAPACITIES OF THE WCS TEAM

In 2019, several WCS Papua New Guinea staff benefitted from professional development opportunities overseas, including: John Kuange, Assistant Director, who completed the Graduate Certificate in Climate Change Policy & Action at The University of Queensland, Brisbane; Tory Kuria, Forest Ecologist, who participated in the US Forest Service International Seminar on Forest Landscape Restoration in Oregon, USA; and Sylvia Noble, Manus Program Manager, who took part in the Behrns Environmental Leadership Program at the University of California in Berkeley, USA. In addition, Jacob Kimagl and Michael Kigl attended the New Guinea Binatang Research Center International Tropical Ecology Course in Madang, Papua New Guinea. WCS is also supporting two former staff, Grace Nugi and John Lamaris, to undertake Master's degrees at the University of Queensland, Australia.

CREATING MARKETS FOR CONSERVATION COMPATIBLE CROPS

WCS worked with an agricultural expert to undertake a feasibility assessment of potential cash crops to that could be sustainably developed with conservation-committed communities in central Manus. Vanilla farming was identified as the most viable option. In late 2019, WCS established suppliers, identified potential local, national and international buyers, developed a multiplication plot near our office in Lorengau, and refined our vanilla project plan to support at least

5 households in each clan that has given their consent to establish community conservation areas to protect the forest within their tenure boundaries. The vanilla business will move into full operation in 2020.

BUILD

Funded by the Australian Government Department of Foreign Affairs and Trade and Critical Ecosystem Partnership Fund



BUILDING CAPACITIES FOR REDD+ POLICY IMPLEMENTATION IN PAPUA NEW GUINEA

In partnership with the Papua New Guinea Climate Change and Development Authority, FORCERT and the Research and Conservation Foundation, WCS undertook a capacity development program to improve stakeholder coordination around REDD+ in three provinces, East New Britain, West New Britain, and Madang. WCS first mapped and analysed existing provincial information and engagement networks and REDD+ preparedness, and then developed a training program to improve stakeholder understanding and coordination. Accompanying this program was a suite of communication and participation tools, including brochures, posters, a guide for facilitators and a training workbook for participants.

Funded by the Forest Conservation Partnership Facility through United Nations Development Programme



Creating partnerships to extend our impact

STRENGTHENING PARTNERSHIPS WITH THE NEW IRELAND PROVINCIAL GOVERNMENT

In May 2019, the New Ireland Provincial Administration and WCS signed a 5 year Memorandum of Understanding, as both organizations recognise the importance of establishing a formal collaborative framework. In particular, WCS and the New Ireland Provincial Administration agreed to strengthen their collaboration in activities relating to: improving coastal fisheries management; improving the conservation status of threatened marine species and ecosystems; and establishing 750,000 hectares of marine protected areas in New Ireland Province by 2021.

USAID LUKAUTIM GRAUN PNG BIODIVERSITY PROJECT AND WOMEN'S GLOBAL DEVELOPMENT AND PROSPERITY INITIATIVE



WCS is a key member of the consortium of partners, led by Cardno International Development, and working together to implement PNG Lukautim Graun biodiversity conservation project and linked Women's Global Development and Prosperity Initiative. The other consortium partners include Care International, the Center for International Private Enterprise, the Papua New Guinea Tree Kangaroo Conservation Program, Real Social Impact, and The Nature Conservancy. The consortium works to lessen threats to wildlife and promote the economic development of women in Papua New Guinea whose livelihoods and wellbeing depends on wise management and sustainable use of natural resources. As part of these two projects, WCS works with four communities and their provincial governments in the Bismarck Forest Corridor, a ~200,000 ha corridor of intact forest along the Bismarck Range in Eastern Highlands, Chimbu, Jiwaka and Madang provinces.

Funded by the United States Agency for International Development

LEVERAGE



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