CRITICAL ECOSYSTEM PARTNERSHIP FUND

CEPF Final Project Completion Report

Organization Legal Name:	BirdLife International
Project Title:	Beck's Petrel: Discovering Colonies as the Key to its Conservation
Grant Number:	65753
CEPF Region:	East Melanesian Islands
Strategic Direction:	3 Safeguard priority globally threatened species by addressing major threats and information gaps
Grant Amount:	$113,720.00
Project Dates:	February 01, 2016 - December 31, 2017
Date of Report:	April 13, 2018

Implementation Partners

List each partner and explain how they were involved in the project

BirdLife International - Overall project coordination and management. financial managment, tendering and contracting, partner and media communications, fundraising, planning and technical support.
Papua New Guinea Conservation and Environment Protection Authority (CEPA) - Lead national partner, information sharing, permits, media communications and approval for work in PNG.
New Ireland Provincial Government - Government local lead, information sharing, media communications, local contacts and activity approvals for New Ireland.
New Ireland Alian Awareness - local national Partner, lead contact for community engagement, knowledge sharing local logistics and resources
Wildlife Conservation Society - local advice including staff contracted to the project (July Kuri and Bernard Maul) supporting the 2017 & 18 field expeditions.
Auckland War Memorial Museum - Dr Matt Rayner, lead scientist seabird and catching expertise and led the satellite tracking information management.
Northern NZ Seabird Trust - Chris Gaskin, consultant, seabird and specifically catching expertise. Team leader for the 2017 & 18 field expeditions and the project technical report.
Jez Bird - consultant ornithologist technical support to the planning, logistics and 2017 & 18 field expeditions

Conservation Impacts

Summarize the overall impact of your project, describing how your project has contributed to the implementation of the CEPF ecosystem profile

The projects primary result was the successful capture and first ever remote tracking of Becks Petrel. Tracking data has revealed valuable new insights into the marine habitat use by this species and most importantly highlighted locations suggestive of Becks Petrel breeding colony(s). This evidence based approach has reduced a potential search area from hundreds of thousands of square kilometres to one that can be investigated by fine scale ground search techniques and with high confidence of finding a breeding colony(s). The engagement of multiple government, NGO, local buisness and community entities in the project has developed a broad knowledge of the conservation needs for this species which, at the projects outset started from a very low base. This has also, triggered a conservation planning interest by the national environment agency (CEPA) to guide competing land (and marine) use priorities and recognising biologically significant areas in need of protection such as those of southern New Ireland. Across it's parts the project has advanced scientific knowledge of this species relevant to conservation protection interests key among which is the specific guidance on where these birds breed the location of which is an essential first step toward realising the protection and recovery of Critically Endangered Becks Petrel. The engagement of natonal, local and international partners has also provided a knowledge and support base necessary to achieving long term protection.

Planned Long-term Impacts - 3+ years (as stated in the approved proposal)

Impact Description	Impact Summary
1. The safeguarding of Becks Petrel is improved as a result of research addressing critical knowledge gaps	The projects primary purpose was Investment Priority 3.1 'Research on globally threatened species for which there is a need for improved information on their status and distribution'. By remotely tracking Becks Petrel a probable breeding area for the species has been identified for the upper catchment of the Mimias River in the central Hans Meyer Range New Ireland. Tracking over a 6 month period (26th April to 4 November 2017) confirmed the Petrel present in the area on two occasions each exceeding 30 hours (before returning to sea). Although, limited to a single (likely) non-breeding bird correlations with the behaviours of other petrels and the tracking data are strongly suggestive of the presence of Becks Petrels in the area. This being an essential first step to locating a breeding colony which finer scale ground based techniques will now be able to build on in finding breeding birds with high probability. Identifying where these Petrels breed, is an essential first step to informing a more detailed understanding of the species status, threats extinction risk and management needs.
2. The capacity for protecting Becks Petrel is improved locally, nationally and globally	Local people have an increased knowledge of Becks Petrel a bird previously unknown or not recognised as distinctive for New Ireland. The project engaged 3

	people from local conservation organisations (WCS and Alian Awareness) who learned the survey methods, the research purpose and conservation needs of Becks Petrel and seabirds generally as well as many other people from New Ireland that were supporting the boat based survey. This information was also shared with schools (in Silur Bay) during the survey and through radio interviews. Meetings with government agency personnel (NIPG and CEPA) also shared information about the project including tracking results and media stories and presentation made to the Port Moresby University. CEPA has expressed interest in conducting a protected area management planning process for southern New Ireland. The project results have engendered interest from the conservation community including BirdLife and WCS, donors and project partners in building on the project's success and locating breeding colony(s) and securing sustainable land management options for the forests of Southern New Ireland. A project report provides a technical reference and a paper (from this report) is expected to be published in 2018.

Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal)

Impact Description	Impact Summary
1 Concentrations of Becks Petrel will be identified for New Ireland in 2016 and 2017 on land and at sea through local consultation and search efforts	The field expeditions, confirmed significant Becks petrel concentrations in the area of Silur Bay (largest single count of 350 birds) on the East of New Ireland and to a lesser extent in the waters off Cape St George. Occasional birds were sighted off the west coast although search capability was limited. Consultation with communities of Silur Bay, the New Ireland Provincial Govt, Conservation and Environment Protection Authority, Fisheries and other stakeholders provided no information on Becks Petrel locations. Ornithologist accounts provided additional at sea sightings to the north of Bouganville and Papua. The first ever satellite tracking data of Becks Petrel (in 2017) gave the most comprehensive insight into areas used by Becks Petrel with activity recorded for the islands to the east of New Ireland, Nissan and Ambitle Islands and also Supiori Island, 1500 kms to the west of New Ireland in Indonesia. While the tracking sample was a single non-breeding bird it nonetheless signaled areas over the central Hans Meyer range of New Ireland, suggestive of Becks Petrel breeding activity.
2 Capture techniques for Becks Petrel will be tested in 2016 and 2017 at sea. Caught	The novel marine based capture technique for Becks Petrel was developed, tested and ultimately successful

individuals will inform the breeding cycle and allow deployment of satellite tags	in 2017. A number of lessons have been learned from this technique and shared informally through communications to stakeholders and with other similar projects, for e.g. the conservation of the Fiji Petrel. A video has been produced illustrating the capture process, remote tracking and Project more widely providing information for future conservation work on Becks and other similar projects elsewhere. Although, not categorical the evidence collected on the timing of breeding (from this study and that of others) indicates Becks Petrel likely breed between March and September, again a critical piece of information to future conservation work on Becks including ground searches for nesting birds.
3 The location of Becks Petrel breeding colonies are informed through Satellite tracking data	For the first time a Becks Petrel was successfully tracked using satellite technology over a 6 month period (26th April to 4th of November) in 2017. Tracking data noted the bird's presence over land on multiple occasions for the central southern Hans Meyer range New Ireland. These activity concentrations were greatest for the upper catchment of the Mimias River where the Petrel was present on two occasions each exceeding 30 hours (before returning to sea). Although, the tracking data is limited to a single (likely) non-breeding bird this activity together with the behaviour of other Becks petrels in Silur Bay is indicative of the presence of (breeding) Becks Petrels in the area. The evidence is considered sufficient to now mount a ground based search between March and July which will have a high probability of locating a breeding colony in the Mimias catchment.
4 Local communities, government, environmental NGOs and donors have the knowledge to act on Becks Petrel conservation needs at EOP	Outside of the 'Science community' there was little local knowledge of Becks Petrel prior to this project. Face to face meetings, public presentations, media articles and reports shared with the Government agencies (CEPA and NIPG) Silur Bay communities, local NGOs and commercial organisations have increased awareness and local understanding for Becks Petrel (and of birds seen out at sea generally), their habitat requirements, the typical threats they face including invasive species and forest loss and the future conservation management needs. CEPA are now interested in developing a conservation management plan to protect the forests of southern New Ireland, a welcome first step for the conservation of the Becks Petrel. While national partners will likely need external support in finding a breeding colony in the Mimias catchment, the information and partnerships formed

	through this project have provided the foundation for this next phase.
5 Strengthened cooperation among stakeholders via a Beck's Petrel task force will provide a foundation for continuing conservation efforts	The project established partnerships between national agencies (CEPA and NIPG), NGOs (WCS, Alian Awareness) and a number of (other) technical experts (Auckland Museum of NZ, and seabird ecologists in the UK, NZ and Hawaii) all committed to advancing the conservation of Becks Petrel. Coordinated by BirdLife, this collaboration enabled the first ever successful remote tracking of Becks Petrel and identified probable breeding colony(s) on New Ireland. The group has through the project technical reports, identified future priorities for the confirmation of a breeding colony and remains committed to pursuing this and other complementary conservation actions, including the development of a conservation management plan for the high biodiversity areas of New Ireland. Partners on this working group anticipate making further investment in 2018 including integrating a terrestrial Becks Petrel focus with the marine conservation areas being developed by WCS, in the area (securing 'ridge to reef' protection).

Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives

The projects long-term aims of
a) safeguarding Becks Petrel by addressing critical knowledge gaps (through research) and
b) improving capacity for protecting Becks Petrel
were both fulfilled through the accomplishment of short term aims;
- identifying concentrations of Becks Petrel through local consultation and search efforts
- Trialing of capture techniques for Becks Petrel and informing the breeding cycle
- Informing the location of Becks Petrel breeding colonies through Satellite tracking
- Local communities, government, environmental NGOs and donors have the knowledge to act on Becks Petrel conservation needs at EOP and
- Strengthened cooperation and collaboration in supporting future Becks Petrel conservation needs
The projects success in remotely tracking a Becks Petrel over a six month period has for the first time provided information on the presence of potential breeding colony(s) within the central Hans Meyer Range of New Ireland and particulary the upper catchment of the Mimias river. While this work has not confirmed a breeding colony it has narrowed the search area from all of New Ireland, New Britian, Bouganville and islands between. There's still much to be done in finding an individual burrow(s) withn the Mimias catchment, but locating these breeding areas is now achievable with ground search techniques a scale at which satellite tracking can not verify. The remote tracking has also highlighted important foraging areas for Becks Petrel particulary, to the East of New Ireland but also concentrated activity around Palau Biak in the Schouten Islands of Papua, Indonesia. Seabird data is often poorly represented in marine spatial planning (including Protected Areas) and while a limited reference nonetheless a useful consideration in safeguarding habitat needs for this Critically Endangered species.

The advancement of capacity for protecting Becks Petrel is also supported by this scientific data and the identification of marine and terrestrial areas for Becks Petrel informing conservation planning. The national environment agency (CEPA), now recognise a conservation need for Beck's Petrel and have expressed interest in conducting management planning for Southern New Ireland (terrestrial and marine environments). The knowledge from this project has been compiled in a detailed technical report which will be shared with all project Partners in supporting future conservation efforts. Awareness about Becks Petrel's, their status, threats and conservation needs was shared with local communities during the 2016 and 17 field expeditions. Presentations made to schools and discussions with leaders and people in the community identified no knowledge of these birds, but it's presence in local waters and potentially upland forests is now recognised and has strengthened a local resolve in denying access for Palm oil plantations to the forests of southern New Ireland. Knowledge of Becks Petrel was also shared among other stakeholders on New Ireland, the Provincial Government, local fisheries, buisnesses and the the tourism industry few if any also, had knowledge of Becks Petrel in the waters of New Ireland and none on the island. Local project staff from Alian Awareness also, July Kuri and Bernard Maul have an indepth knowledge of the field work and conservation needs for Becks Petrel and are able to share this knowledge as part of the New Ireland community and through their roles as conservation advocates (July and Bernard also support the Wildlife Conservation Society). Regionally (and internationally) a core group has established in supporting Becks Petrel conservation which includes all Partners to the Project. BirdLife remains committed to supporting a future conservation effort both on the ground and through spatial planning and protection for areas of conservation priority. WCS (among others) are advancing marine planning in the area and have expressed interest in supporitng a 'ridge to reef' approach protecting biological areas. As noted CEPA have identified interest in a management planning process for the area (and sought interest in supporting this). Other Partners (Auckland Museum, NZ Seabird Trust and consultants) also remain committed to supporting the technical and ground search needs for locating a breeding colony and informing future conservation priorities. Local personnel involved in the project are also engaged and provide a foundation from which community ties can be further strengthened in advancing specific Becks Petrel, but also broader conservation and related social priorities.

Were there any unexpected impacts (positive or negative)?

None of significance

Project Components and Products/Deliverables

Describe the results from each product/deliverable:

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
1	Establishing a broad-based partnership and sharing knowledge that underpins Beck's Petrel conservation needs through	1.1	Records of consultation meetings with customary landowners in the project area, recording their support for the project's objectives	The remote location of the project area limited engagement with local communities however, presentations were made to the Silur Bay communities (schools, public meetings and one on one interviews) during the 2016 and 2017 field expeditions. while these discussions highlighted little knowledge of Becks Petrel, people were interested and supportive of the project. Concerns over forest conversion for palm oil were highlighted and wishes that th eforest (and potential Petrel habitat) be protected from these activities. Unfortunately, it's very difficult to get information back to these communities however, the results of the tracking will be shared with them through New Ireland partners including NIPG and WCS.
1	Establishing a broad-based partnership and sharing knowledge that underpins Beck's Petrel conservation needs through	1.2	Membership list and agreed set of principles for a Beck's Petrel task force comprising individuals from international and local NGOs, government agencies and other local stakeholders and regional experts	The Becks Petrel Taskforce has representation from eleven local, national, regional/global organisations and experts, these include; - Local; Alian Awareness (New Ireland NGO), New Ireland Provincial Government, Wildlife Conservation Society (New Ireland office) - National; Conservation Environment Protection Authority - Regional/International; BirdLife International, Wildlife Conservation Society - Seabird experts; Auckland Museum of NZ (Matt Rayner), Northern Seabird Trust (Chris Gaskin), NZ Forest & Bird Society (Karen Baird), Kaua'i Endangered Seabird Recovery Coordinator (Andre Raine) and Jeremy Bird (Ornithologist). Other ornithologists/conservationists contributed to particular interests/issues and the network is primarily supported through email, conference calls, coordinated by BirdLife (Steve Cranwell). Agreements were established with most partners. The group remains engaged (at a much reduced level) and is supportive of implementing the next steps in the conservation of Becks Petrel.
1	Establishing a broad-based partnership and	1.3	Project results and achievements	A final technical report presents an analysis of the marine and terrestrial searches for Becks, the marine capture trial and subsequent remote tracking supported by the

	sharing knowledge that underpins Beck's Petrel conservation needs through		disseminated in a final report and an anticipated, one (or more) peer-reviewed journal articles	project. Lessons and recommendations inform future conservation priorities. The technical report will be shared with project partners and made widely available in April/May. A science paper based on the tracking results will be presented at the Society of Conservation Biology Conference in New Zealand, in June 2018 (subject to acceptance) prior to which results have been shared through a number of fora including presentations at the university of Papua New Guinea in Port Moresby, the IUCN Conference in Hawaii and the NZ Ornithological Conference in June 2017.
2	Field research informing the location of Becks Petrel conducted	2.1	Maps and underpinning data tables from Bird (2012) and Bird et al. (2013) updated showing new records and coastal aggregations	The marine survey and tracking results have confirmed concentrations of Becks Petrel for Silur Bay and the Cape of Saint George New Ireland, tracking data shows extensive marine activity (by one tracked bird) to the east and south of New Ireland and an extended period on the northern coast of New Britain and Papua. This information is mapped (relative to previous records) presented and analysed in the Project Technical Report.
2	Field research informing the location of Becks Petrel conducted	2.2	Bird capture trailled in the field with a preferred approach identified and results reported	The use of at sea techniques for netting Becks Petrel were trialed in 2016 and based on the results adaptations were made to attractants and approach methods to rafted Becks for the 2017 expedition. while the technique was ultimately successful it's application is limited (with current technology) for wary, fast moving and evasive species like becks Petrel. Further investment in developing and trialing net guns, attractants and approach techniques would be warranted to increase the confidence and rate of captures. The methods, results and recommendations of the trial and capture technique are discussed in the technical report.
2	Field research informing the location of Becks Petrel conducted	2.3	Timing of the species's breeding cycle reported	No captures were made of Becks exhibiting breeding condition so, no direct correlation of a breeding period is possible. The activity of the tracked Petrel was typical of a non-paired or pre-breeding adult (also signaled by morphology assessments) and the detection (by tracking data) of infrequent, but repeat and extended visits over New Ireland was indicative of a (pre-breeding) petrel visiting nesting colony(s). The rafting of Becks Petrel in

				Silur Bay (adjacent the Hans Meyer Range where breeding is now believed to occur) is also 'typical' of non-paired petrels during a breeding period. This information suggests breeding has commenced by April (and probably March) continuing until October/November - a six to eight month period also, coincides with the breeding interval for related species. Further information is provided in the Technical report.
2	Field research informing the location of Becks Petrel conducted	2.4	Data received and analysed from satellite tracking devices reported	A satellite transmitter was successfully fitted to a Becks petrel on the 26th of April and tracked until the 4th of December 2017 at which time no further transmissions were received. The seven months of tracking provided the first ever data on the movements of Becks Petrel informing marine spatial use, land interactions and probable breeding location(s). Analysis and interpretation of this tracking information is provided for in the Technical Report evidencing future conservation priorities including a land based search effort in the upper catchment of the Mimas river of the Hans Meyer Range New Ireland to locate the first breeding colony of Becks Petrel.
2	Field research informing the location of Becks Petrel conducted	2.5	At end of project, results and achievements disseminated in an open access journal article	The results of the Becks Petrel project and specifically those stemming from the field expeditions have been widely communicated over the project term (digital news stories, meetings and conferences) and have been compiled alongside lessons and recommendations in the Project Technical report which (in it's final form) will be disseminated to all stakeholders and made freely available. A documentary video about the project has been produced and will be widely released and accessible through online platforms. An 'end of project' communication will announce the video. The project has been accepted for the Society of Conservation Biology Conference, where it will be presented in New Zealand in June 2018 and a manuscript is in preparation for an open access science publication (based on the the Technical report).
3	Social Safeguards	3.1	Report to CEPF demonstrating compliance with CEPF Social Safeguard Policies	Both national (CEPA) and provincial (NIPG) governments were briefed and consulted in the projects development and implementation through face to face meetings (by the project team), email and the sharing of documentation. Local community meetings were supported by two 'community facilitators' with a background in nature conservation and from New Ireland (one of whom had links to Silur Bay, the location of the

				community principally engaged). Meetings were held with '14 villages' in the area of the Tandang River mouth (the location of the landbased effort in Silur bay) where community facilitators (in local language) explained the project to leaders providing opportunity for input and discussion. Wider community presentations and particularly among schools were also provided and surveys conducted in gaining knowledge about Becks and for which free and informed consent was gained. Community engagement is further detailed in the Technical report

Please describe and submit any tools, products, or methodologies that resulted from this project or contributed to the results.

While not a purpose of the project, it has nonetheless advanced marine based catching techniques for gadfly petrels and specifically Becks Petrel. A variety of Becks Petrel attraction and approach techniques were trialled at sea in lead up to catching a Becks Petrel, these methods, results and reccommendations for future application are discussed in the project technical report.

Lessons Learned

Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building.

Consider lessons that would inform:

- Project Design Process *(aspects of the project design that contributed to its success/shortcomings)*
- Project Implementation *(aspects of the project execution that contributed to its success/shortcomings)*
- Describe any other lessons learned relevant to the conservation community

There were a number of project implementation 'lessons' previously identifed here, but these were not saved by the system please, refer to the attached Technical reports for these
Observations and considerations necessary to fulfilling field research aims (within a restricted timeframe) and sustaining the conservation results/outcomes;

- **An experienced, cohesive and adequately resourced team (time, expenses and support) with clear roles and responsibilities**
- **The importance of engaging local people, and those locally respected in the implementation (and introduction) of a project in gaining the support of landowners and local stakeholders**
- **training is a readily achievable short term result capacity building (with sustainable outcomes) requires a longer term, sustained investment**

- **The technological, infrastructural and capacity limitations of remote islands (and developing countries) present logistical, communication and technical challenges to project implementation which result in high complexity, costs and time committments (for projects and personnel)**
- **Institutional support for the project aims and the wider relevance (to the organisation) is important as the full impact/sustainability is rarely achievable within a single project cycle and the (full) financial cost may exceed the 'project funded' committment (depending on the level of achievement/impact sought and the complexity of implementation)**

Sustainability / Replication

Summarize the success or challenges in ensuring the project will be sustained or replicated, including any unplanned activities that are likely to result in increased sustainability or replicability.

This is a summary of the analysis previously described (but not saved by this system)
the project achieved its primary results of identifying the breeding locality of Becks Petrel and developing a local national and regional/global constituency of seabird experts, non-government and government agency supporters in the conservation of Becks Petrel. This has built local and national awareness of the significance of this species and it's conservation needs, strengthening landower commitments to retaining their forests in (likely) protecting Becks Petrel breeding colonies. Central government has also identified the need to develop a conservation management plan for Southern New Ireland forests. A number of donors and in-kind contributors have engaged in the implementation of this project and the individuals and organisations engaged in the project remain committed to the next priorities in the conservation of Becks Petrel - physically locating a breeding colony and building capacity for the ongoing management of the species and it's habitat including through supporting national policies.

Safeguards

If not listed as a separate Project Component and described above, summarize the implementation of any required action related to social, environmental, or pest management safeguards

Environmental safeguards
Attempts to capture Becks Petrel and the subsequent handling of a captured bird and fitting of a satellite transmitter followed best practise. Using trained and experienced personnel the satellite transmitter was less than 5% of the petrels body mass and attached in a manner consistent with remote tracking studies internationally. No birds (or other wildlife) were harmed and all authorisations including a research permit (AMNH No.: 235376) were obtained from the Papua New Guinea government.
Social safeguards
the project was developed in consultation with CEPA , the New Ireland Provincial Government and other local stakeholders (Alian Awareness, WCS and PNGSurfaris) in ensuring national and local interests were adhered too (data and information sharing, permits, authorisations, capacity building

opportunities, appropriate contacts and cultral protocols). Experienced local people were recruited to facilitate dialogue with communities and while very little of the project was implemented on land efforts were made to share information and discuss the project with local communities particularly within the area of Silur Bay. Permissions were obtained from village leaders in conducting coastal surveys for Becks Petrel and prior free and informed consent obtained in questioning local people of their seabird knowledge. The projects 'community facilitators' were fully briefed on the project, supported by technical staff and discussions and consultation were held in the local language in maximising understanding and engagement.

Additional Comments/Recommendations

Use this space to provide any further comments or recommendations in relation to your project or CEPF

Physically verifying the presence of a Becks Petrel breeding colony is achieveable based on the knowledge now attained, the relationships developed (locally, nationally and regionally/globally) and the expertise available to follow through on a ground based search effort, the development of conservation management policies protecting the area and the capacity of (local) people in sustaining the execution of these conservation measures.
This reporting format is frankly infuriating. Text written fails to be saved by the system and i have neither the time let alone the patience to repeatedly re-write information!

Additional Funding

Provide details of any additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of CEPF investment

Total additional funding (US$)
$62,275.00

Type of funding
Please provide a breakdown of additional funding (counterpart funding and in-kind) by source, categorizing each contribution into one of the following categories:

A Project Co-Financing (other donors or your organization contribute to the direct costs of this project)
B Grantee and Partner Leveraging (other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF funded project)
*C Regional/Portfolio Leveraging (other donors make large investments in a region because of CEPF investm*ent or successes related to this project)

Project Co-financing
Mohamed bin Zayed Species Conservation Fund US$ 12,275

Pacific Development Conservation Trust	**NZ$ 20,000**
BirdLife International	**US$ 30,000**

Information Sharing and CEPF Policy

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, www.cepf.net, and publicized in our newsletter and other communications.

1. Please include your full contact details (Name, Organization, Mailing address, Telephone number, E-mail address) below

Steve Cranwell BirdLife International GPO Box 18332, Suva, Fiji. +679 3313492/+679 9754570
steve.cranwell@birdlife.org