CEPF Final Completion and Impact Report

Organization's Legal Name:	Vanuatu Environmental Science Society
Project Title:	Conservation of the Endemic Flying Foxes of Torba and Temotu in Vanuatu and the Solomon Islands
Grant Number:	66428
Hotspot:	East Melanesian Islands
Strategic Direction:	3 Safeguard priority globally threatened species by addressing major threats and information gaps
Grant Amount:	$135,935.80
Project Dates:	June 01, 2017 - December 31, 2021
Date of Report:	May 04, 2022

IMPLEMENTATION PARTNERS

The Vanuatu Environmental Science Society was the project lead and implemented most of the activities under this project. Christina Shaw managed the project and VESS employed Ni-Vanuatu recent science graduates to work on the project. Tyrone Lavery was contracted to design and lead the initial expedition, write and deliver the training for biodiversity assessments and capacity build the Ni-Vanautu scientist to enable us to conduct bat studies in the future. Corzziarah Posala, on recommendation by Tyrone Lavery, was engaged as a consultant to work with the Solomon Island communities and as as a role model for Ni-Vanautu recent science graduates. Diane Fisher was an advisor.

CONSERVATION IMPACTS

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

Impact Description	Impact Summary
1. The chance of global survival of Banks flying-fox , Nendo flying-fox and Temotu flying-fox will be increased.	Knowledge about all three species has been increased under this project. The communities on the islands where these bats live have engaged in awareness raising activities to demonstrate their value in the ecosystem. In the Banks Islands communities have put in measures to conserve the Banks Flying Fox such as placing a tabu on the hunting of the endemic species and commencing monitoring activities.

Impact Description	Impact Summary
2. VESS will have the capacity to assess threatened species and design and implement species recovery plans.	The capacity of the VESS scientist has been built under this project and we now have experience in assessing some of the threatened species in our region.

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

Impact Description	Impact Summary
1. Data regarding the distribution, ecology and threats to the Banks flying-fox, Nendo flying-fox and Temotu flying-fox will be gathered and baseline information shared with communities and government.	Data has been collected on the three species of flying fox via questionnaire surveys and scientific studies. Reports have ben written and given to central government, local government and the local communities and are published on the VESS website. Results of some of the studies have also been published in a scientific paper and and datasets have been published to GBIF.
2. Three Species Recovery and Action Plans will be developed, one each for the Banks flying-fox, Nendo flying-fox and Temotu flying-fox. They will be shared with the Vanuatu and Solomon Islands governments in the hope of being approved.	Data has been collected for the plans but they have not yet been written. Work will continue on the plan for the Banks Flying Fox
3. Subject to approval by the government and communities the implementation of these Species Recovery and Action Plans will have begun.	Although the plans have not been completed, in Vanautu communities have already begun to take measures to conserve the Banks flying Fox. Several chiefs have placed a tabu on the hunting of the endemic flying foxes including all the chiefs on Mota island which is the only island where we have definitely confirmed the Banks Flying Fox. A group of bat monitors has been set up and they have received training in basic monitoring techniques and been given the tools to start a monitoring programme.
4. Ten Vanuatu scientists will be trained in mammal survey techniques.	Fourteen Ni-Vanautu scientist attended a short course on biodiversity assessments.
5. At least 2 communities in each of the six main islands of the Banks Island groups (Mota, Vanua Lava, Mota Lava, Uraparapara, Gaua and Mere Lava) and in Vanikoro and Nendo (16 communities in total) will be aware of the significance of the flying foxes in their areas and the threats they face. At least two communities on each islands where the Banks flying-fox, Nendo flying-fox and Temotu flying-fox is found will be involved in their conservation.	Nineteen community workshops and two in schools were conducted by the VESS team during the project. The workshops delivered information on bat biology and ecology, threats bats are facing and what communities can do to conserve the bats. 939 people attended the workshops in total. 17 community members from 5 islands in the Banks Islands attended a bat monitoring workshop and learnt bat monitoring techniques. A group of bat monitors has been formed and VESS will continue to work with them to monitor the flying foxes in their islands.

Unexpected impacts (positive or negative)?
Because of the bat conservation work that we have been doing under our CEPF- funded projects we were invited to be part of a proposal to apply for SNAP funding, that was

untimely unsuccessful, but a new network of Pacific Bat conservationists and academics was formed out of the group - the Pacific Bat network or PacBat for short. PacBat now holds regular monthly meetings. Christina was on the organising committee of the Pacific Bat Forum which was hosted by PacBat in 2021. VESS hosting the Vanuatu virtual hub to allow Ni-Vanautu interested in bat conservation to participate, presented our work and contributed to the discussions. VESS will continue to be part of this network after the currently CEPF funding has ceased.

PROJECT RESULTS/DELIVERABLES

Overall results of the project:
This project aimed to improve the knowledge and conservation of three endemic and endangered species of flying fox in the remote islands of Vanuatu (Pteropus fundatus) and the Solomon Islands (Pteropus nitendiensis and Pteropus tuberculatus). This has been achieved and in doing so the capacity for local scientists to carry out scientific studies on these bats has been built. Awareness about these bats, their threatened status and the ecosystem services that they provide has been raised within the local community, the local government and the general public at large. In addition, the Vanuatu Environmental Science Society has improved governance, financial management and web presence.

Tyrone Lavery assisted with the project proposal and was engaged as the scientific lead to design and lead the scientific expedition to the Banks Islands in Vanuatu and to Nendo and Vanikoro in the Solomon Islands. The expedition was conducted off an expedition boat to allow access to these remote islands and facilitate the travel between them. On the transect surveys across three of our four study islands we encountered 62 bats from 3 species. Both the Vanikoro flying-fox and Temotu flying-fox were detected in good numbers and we estimated densities of approximately 146.7 and 66.7 individuals per km2 for P. nitendiensis and P. tuberculatus respectively. The Banks flying-fox was far less common, we did not detect this species at all during daytime searches. During the mist net surveys we captured 61 bats from 4 species. The most commonly recorded species was Fijian blossom bat (Notopteris macdonaldi), the least commonly encountered species was Banks flying-fox, of which only four individuals were captures on the island of Mota. We collected 45 tissue samples for subsequent DNA analyses. The camera traps did not yield any images for the target bat species although one image of a Pacific Flying fox was captured. A questionnaire was conducted, mainly focused on hunting, that indicated that the hunting pressure was highest in Nendo and in Vanikoro bats were traded for low value items. However, the focus of the hunting effort was mainly on the Pacific flying fox and not the endemic bats. The information has been included in a paper published in Pacific Conservation Biology entitled "Ecology and conservation of bats in Temotu Province, Solomon Islands and Torba Province, Vanuatu". A dataset of the occurrence data of flying foxes from the surveys has been uploaded to the GBIF portal.

After the initial expedition, our project was extended so we could revisit the Banks islands to gather more information on the flying foxes of the island group. We designed a questionnaire to capture local information on bats of all species and to gather information on threats including but not limited to hunting as well as perspectives on bats, information on each species, bats and culture, tourism involving bats and tabu areas. We visited 78 locations on 6 islands. 413 people were interviewed and a significant amount of information was gathered. The general consensus is that fruit bats are not in decline. The survey identified behaviours and ecological needs of bats that differ between the species. Threats to bats have been assessed; bats are hunted but it appears that the hunting pressure is not extremely high; tourism involving bats is relatively common, but it appears to be generally

low impact. But some practices were identified that may increase health risks, cause disturbance or impact animal welfare.

During the second scientific survey, we deployed mist nets over 9 nights in Gaua, Vanua Lava and Mota. We captured 4 bats (two P.toganus, one P.anetianus and one N.macdonaldi). Unfortunately, we did not capture the Banks Flying fox during this expedition. We did however confirm the continued presence of the Vanuatu Flying Fox on Mota Lava. We conducted 5 transect surveys totalling 5.16 km and encountered 73 bats (64 P. tonganus and 9 endemic flying foxes). During a spot-counts in the coconut plantations in Gaua 18 endemic flying foxes were counted. It is difficult to tell the difference between the Banks Flying Fox and the Vanuatu Flying fox and so we could not definitely identify which species these were. Setting up canopy nets to catch them was not possible in the coconut plantation where they were observed as the trees were too tall and the ropes tend to slip off coconut fronds.

During the 2018 expedition, we conducted six awareness workshops at least one in each of the survey sites. 380 people attended the workshops. At least 101 of the attendees were female. We distributed a booklet we wrote on the Bats of Vanuatu and fact sheets on the Vanikoro and Nendo flying foxes. We also created a bat awareness workbook which we used for the workshops and then left with the communities. The materials provided will allow communities to run their own awareness workshops to further spread the message of how important bats are to the ecosystem. We ran a quiz at the end of each workshop to assess the uptake of information.

When we re-visited the Banks Islands in 2020 to conduct the questionnaire survey, we conducted further awareness workshops over a wider area than during the first expedition. Thirteen workshops were conducted, with at least 2 on each island we visited. 330 people attended the workshops, 163 males and 167 females. We also conducted two workshops in schools on Gaua island where 219 children and 10 teachers attended.

An exhibition on the Bats of Vanuatu was held at the Espace Alliance Française in Port Vila between the 8th and 13th April 2019. Posters were displayed with general information about bats as well as the bats of Vanuatu, the ecosystem services they provide and the threats they face. There was a separate section on the 2018 expedition including the results. 4 life-sized models of the 4 flying foxes in Vanuatu were displayed. There were eight interactive activities to engage people and reinforce the messages which could be found in the displays. Interviews about the exhibition were given to Radio Vanuatu and to the Daily Post Newspaper. 253 people attended the exhibition 175 were male and 78 female.

Tyrone Lavery delivered a short course on biodiversity assessment from the 17th to 20th April 2018. Fourteen Vanuatu scientists attended the course. They were mostly new science graduates, seven were male and seven were female. The course consisted of theory and practical sessions, which were conducted in a small area of parkland in Port Vila. Tyrone produced some training notes, assisted by Christina Shaw. Christina created an assessment form given to the attendees before and after the training and the assessment showed that all attendees learnt skills and practiced techniques they had not performed before. A report was written by Christina Shaw.

Communities on Mota, Mota Lava, Vanua Lava and Gaua and Ra islands have all indicated they are willing and keen to play and active role in the conservation of the Banks Flying Fox. The communities have already put in place measures to reduce threats such as banning of hunting of the endemic flying foxes. Community members from all of these islands attended the bat conservation workshop that VESS held in Mota Lava in December 2021 and have

been given training on basic monitoring techniques for flying foxes. We have provided the monitors with notebooks, binoculars and clicker counters for monitoring and recoding the bats. A bat monitoring group has been established and VESS will continue to work with the group after this project to support them in conserving the native bats of Vanuatu.

The project has allow allowed for a review of VESS's governance and supported the financial management of the organisation and strengthened our web presence and security.

Reports on the expeditions and awareness raising activities are published on the VESS website.

Results for each deliverable:

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
2.0	Ni-Vanuatu scientists and students are trained in biodiversity assessment methodologies.	2.3	By April 2018 a report on the biodiversity of the training area will have been produced and disseminated to the public, government departments and the local community.	As the biodiversity training areas that was eventually used for the training was a small park in the city that did not have a significant amount of biodiversity, Tyrone did not produce a report on the biodiversity of the area for dissemination to the wider public.
3.0	Species recovery plan for three endemic species of fruit bat Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox) are submitted for approval to government.	3.7	By the end of the project the communities have begun to implement some of the activities of the action plans.	Although the action plans have not yet been completed, the communities have already begun implementing conservation actions to conserve the Banks Flying fox. The community members engaged in conservation actions in the islands of Gaua and Mota have used the awareness materials provided by VESS to conduct their own awareness campaign on the importance of bat conservation. On both these islands and in Mosina village in Vanua Lava, the chiefs have banned the hunting of the endemic flying foxes (Banks Flying Fox and the Vanuatu Flying Fox). Community members attended a workshop in Mota Lava to basic bat monitoring. VESS provided the communities with binoculars, clicker counters and notebooks and taught them learnt how to conduct timed spot counts, camp counts and transect counts. We have taught them that all occurrence data need some basic information – what they have seen, where they saw it and

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				when. Communities have begun to collect this data in their areas. A short report is attached.
3.0	Species recovery plan for three endemic species of fruit bat Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox) are submitted for approval to government.	3.8	By the end of the project five funding proposals will have been submitted to donors to fund the long-term implementation of the recovery plans.	Even though we thought this deliverable was not achievable and we did not want to write 5 project proposals as we do not believe we have the capacity within our organisation to implement project and write this many proposals at the same time, we put it into the project proposal as we were under pressure from the grant manager to show that the project would be sustainable and therefore agreed to her suggestion. We have submitted a proposal for continuation of bat activities to the Lion's Share but that was rejected. We have also been part of a proposal for a SNAPP collaboration for bat conservation network in the Pacific but again the was not accepted. We continue to work the Pac Bat network and were part of the organising committee for the Pacific Bat forum which did attract funding. We worked on a proposal for the Kiwa Initiative for a regional proposal for bat conservation across 3 to 5 countries in the Pacific but that fund, although the information about the fund indicates would fund biodiversity conservation, we were told the funders were really looking for benefits to people and climate change and a bat conservation project would be unlikely to be funded, therefore we did not complete the proposal and did not submit the application.

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
4.0	CEPF monitoring and project management	4.6	Photographs and a one paragraph description of the expedition will be submitted to the CEPF to be posted on Facebook or in other communications products.	
1.0	Increase knowledge about the distribution, ecology, genetics and threats to Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox).	1.1	By August 2017 communities and chiefs in Vanua Lava, Mota,Vanikoro and Nendo will have given consent for research on the flying foxes in their areas to be studied. Formal consent will be sent to the CEPF Secretariat prior to starting project activities.	Due to the delay in signing of the contract for the project, the expedition planned for November 2017 was delayed until 2018 and after the cyclone season. One of the VESS project scientists visited the islands of Vanua Lava and Mota in the Bank's Islands group from the 22nd to then 23rd February 2018 a to speak to the communities about the project. Prior informed consent in the form of a letter was given by the communities in Mota and Mesina village in Vanua lava. A report and prior informed consent letters were sent to the CEPF. Corzziarah Posala, on recommendation by Tyrone Lavery, was engaged as a consultant to work with the Solomon Island communities. aA letter of agreement detailed his tasks. He did not conduct the pre-expedition visit to Temotu province as he was contracted to do. He flew to Nendo 5 days prior to the expedition boat and team arriving and had not obtained permissions for the work. There were no suitable anchorages in places where the communities were willing to work and therefore the boat did not stay in Nendo. Corzzie stayed and obtained consent

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				from two communities. On arriving in Vanikoro consent was obtained from the chief. Our deck hand was known by the Vanikoro community as he had spent months there on a previous marine archaeology expedition.
1.0	Increase knowledge about the distribution, ecology, genetics and threats to Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox).	1.2	A report on the fieldwork in Vanua Lava and Mota in Vanuatu and Vanikoro and Nendo in the Solomon Islands which took place between September and November 2017	A report was written by Tyrone Lavery on the scientific information obtained on the expedition. It is attached to this report. The report details the results from the mist net survey, transects and field notes made during the survey. We achieved a total of 4,527 net-m2 h-1 across Mota, Vanikoro and Vanua Lava islands, and captured 61 bats from 4 species. The most commonly recorded species was Fijian blossom bat (Notopteris macdonaldi), the least commonly encountered species was Banks flying-fox (Pteropus fundatus). We collected 45 non-lethal tissue samples for subsequent DNA analyses. We walked a total of 9.46km of diurnal and 3.06km of nocturnal transects across three of our four study islands and encountered a total of 62 bats from 3 species. The information has been included in a paper published in Pacific Conservation Biology entitled "Ecology and conservation of bats in Temotu Province, Solomon Islands and Torba Province, Vanuatu" The paper can be found via this link: https://www.publish.csiro.au/pc/PC20035. A dataset of the occurrence data of flying foxes

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				from the surveys has been uploaded to the GBIF portal can be seen via this link: https://www.gbif.org/dataset/84cb41cc-5045-4f65-be0fb5500c5cf56a
1.0	Increase knowledge about the distribution, ecology, genetics and threats to Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox).	1.3	By the end of 2017 an awareness programme about flying foxes will have been delivered to the communities in the field work study sites and evidences by a report.	During the initial expeditions, we conducted awareness workshops in all the survey sites, 2 in each island we visited and six in total. Between 380 and 400 people attended the workshops in total. 98 people at the workshops signed the attendance sheets, 39 male and 59 female. In the larger awareness groups (of which there were three) a head count was taken and 284 people were counted. In one of the groups it was estimated that half were female so we can calculate that at least 101 of the attendees were female which is over 25%. But we believe the true gender split was closer to half and half male and female. A booklet VESS wrote on the bats of Vanuatu and fact sheets on the Vanikoro and Nendo flying foxes were given out to the attendees. We also created a bat awareness workbook which we used for the workshops and then left with the communities. The materials provided were useful in reinforcing the information presented and will allow communities to use the resources to spread the message of the importance of bat to the ecosystem further by running their own awareness workshops. We ran a quiz at the end of each workshop to assess the uptake of

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				information. A report on the awareness activities including these workshops is attached.
1.0	Increase knowledge about the distribution, ecology, genetics and threats to Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox).	1.4	By the end of 2018 a written report and visual presentations of the research will have been given to the communities in the field work study sites, government departments, the Vanuatu Cultural Centre and the public.	A written report was prepared by Tyrone Lavery on the research results. This has been given to the communities in Vanua Lava and Mota in the Banks Islands of Vanuatu as well as the Director general of Torba province and the Department of Environmental Protection and Conservation. They have also been given copies of the scientific paper which included the findings during the exhibition. On the opening night of the bat exhibition in Port Vila, Vanuatu, 8th April 2019, Christina Shaw gave a public talk on bats of Vanuatu and the findings of the expedition to the Bank and Temotu. Thirty people attended the talk (13 men, 14 women and 3 children). In July 2020, Martika gave a presentation on the findings of the expeditions to the community on Mota island when visiting for another project's inception scoping visit. Because of the remoteness of the islands in Temotu and the fact our Solomon Islands consultant, Corrzie had moved on to another job, it was difficult to travel to Redo and Vanikoro again to give the communities the results of the surveys. This was discussed with the grant managers at the time and agreed that this activity would not happen in the scope of this project.

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2.0	Ni-Vanuatu scientists and students are trained in biodiversity assessment methodologies.	2.1	By the end of 2017 a workshop on biodiversity assessment techniques will have been delivered by Tyrone Lavery on Efate as evidence of a repot and photos of the workshop.	Tyrone Lavery delivered a short course on biodiversity assessment from the 17th to 20th April 2018. Fourteen Vanuatu scientists attended the course. They were mostly new science graduates, seven were male and seven were female. The course consisted of theory, which was taught in the VESS office and practical sessions, which were conducted in a small area of parkland in Port Vila. Tyrone produced some training notes, assisted by Christina Shaw.
2.0	Ni-Vanuatu scientists and students are trained in biodiversity assessment methodologies.	2.2	By the end of 2017 at least 10 Ni-Vanautu Scientist or students will have been trained in biodiversity assessment techniques and the skills learnt assessed as evidence by a report including pre- and post-training evaluations.	Fourteen Vanuatu scientists attended the course on biodiversity assessments. They were mostly new science graduates, seven were male and seven were female. An assessment form was created by Christina Shaw to evaluate particpants' knowledge of the theory of biodiversity assessments and the practical experience they have had with biodiversity assessment techniques. This form was completed at the beginning and the end of the course. All participants' score increased. The average score across the group was 68 out of a possible 434 at the beginning (16%). The average score increased to 328 at the end of the training course (76%). Every attendee increased their theoretical knowledge and gain practical experience in techniques they had never used before. All said that they found the training useful. A report on the training course written by Christina Shaw is attached.

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3.0	Species recovery plan for three endemic species of fruit bat Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox) are submitted for approval to government.	3.1	By July 2018 species recovery plans will have been written for Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox) in consultation with the local communities.	Due to project delays in Vanautu, due to the Covid19 pandemic, the expeditions to gather further information on the Banks Flying Fox was not completed until the last couple of months of the project. This meant that there the information needed to write the species recovery plan was not available until very late in the project. This did not allow for proper community consultation and therefore the writing of the plan has ben delayed until after the end of the project. VESS will continue to work on the plan for the Banks Flying Fox and consult the community and the Department of Environment. As it was decided not to return to the the Solomons Islands project sites, as they are very remote and our Solomon Islands partners were no longer engaged with the project after the initial expedition, community consultation could not happen for theses plans and therefore they have not been written.
3.0	Species recovery plan for three endemic species of fruit bat Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox) are submitted for approval to government.	3.2	By August 2018 the recovery plan for Pteropus fundatus will have been provided to the government of Vanuatu and for Pteropus nitendiensis and Pteropus tuberculatus to the Government of Solomon Islands for approval.	For the reasons described above, the plans have not been written. However work will continue on the plan for the Banks Flying Fox.

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3.0	Species recovery plan for three endemic species of fruit bat Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox) are submitted for approval to government.	3.3	By September 2018 the species recovery plans will have been published on the VESS website. Media outlets such as newspapers, radio and television and social media will have been informed of the plans.	For the reasons described above, the plans have not been written. However work will continue on the plan for the Banks Flying Fox. and once completed, the plans will be published and disseminated.
3.0	Species recovery plan for three endemic species of fruit bat Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox) are submitted for approval to government.	3.4	By the end of the project the communities will have begun to implement some of the activities of the action plans as evidence by correspondence with the communities about the activities.	This deliverable is a duplication of the deliverable 3.7 above. This duplication occurred when the project was transferred to the new system by CEPF after the upgrade to the conservation grants portal. The grant managers were informed of the duplication at the time.
3.0	Species recovery plan for three endemic species of fruit bat Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox) are submitted for approval to government.	3.5	By the end of the project five funding proposals will have been submitted to donors to fund the long-term implementation of the recovery plans.	This deliverable is a duplication of the deliverable 3.8 above. This duplication occurred when the project was transferred to the new system by CEPF after the upgrade to the conservation grants portal. The grant managers were informed of the duplication at the time.

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3.0	Species recovery plan for three endemic species of fruit bat Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox) are submitted for approval to government.	3.6	Other conservation organisations working in the areas will be informed of the plans so they can be incorporated into their work if appropriate.	For the reasons described above, the plans have not been written. However work will continue on the plan for the Banks Flying Fox.
4.0	CEPF monitoring and project management	4.1	Increased capacity of VESS, as evidenced by comparison of civil society tracking tool scores at project start and end.	The CEPF Civil Society Tracking Tool was completed and the beginning and end of the project and the results sent to CEPF.
4.0	CEPF monitoring and project management	4.2	Safeguard policy for Indigenous peoples and environmental assessment plan are effectively evaluated, implemented and followed-up reports are prepared every six months to CEPF	Safeguarding policies and plans were written at the project inception. Reports on safeguarding were reported to CEPF every six months through the project.
4.0	CEPF monitoring and project management	4.3	Complaints system developed, disseminated and monitored with beneficiaries and project partners.	A grievance mechanism was developed at the project inception, the details of which were printed in the project leaflet. Project leaflets were given out at every site visit during the project.
4.0	CEPF monitoring and project management	4.4	CEPF financial and programmatic reports	Financial reports and progress reports were submitted as per the project deadlines

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			submitted on time and accurately	
4.0	CEPF monitoring and project management	4.5	Final impact monitoring report completed at project close.	This is the final impact report
1.0	Increase knowledge about the distribution, ecology, genetics and threats to Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox).	1.5	By the end of 2018 there will have been an exhibition on fruit bats of Vanuatu at the Vanuatu Cultural Centre or other suitable venue as evidence by photos and media reports.	An exhibition on the Bats of Vanuatu was held at the Espace Alliance Française in Port Vila between the 8th and 13th April 2019. Information about the project including the funding and VESS was exhibited at the main entrance. Posters were displayed with: general information about bats; bat feeding and roosting ecology; bats in Vanuatu including general fact sheets on fruit bats, insectivorous bats and fishing bats; fact sheets for each Vanuatu bat species; biodiversity; ecosystems and ecosystem services provided by bats; threats and conservation actions. Additional topics for posters included: threatened species, taxonomy and species. There was a separate section on the flying fox expedition in April and May 2018 including the results. The life-sized models of the 4 flying foxes in Vanuatu, created by Anne O'Brien were displayed and proved very popular with the public and drew in people who saw them from the street. There were eight interactive activities to engage people and reinforce the messages which could be found in he displays. Interviews about the exhibition were given to

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				Radio Vanuatu and to the Daily Post Newspaper. 253 people attended the exhibition 175 were male and 78 female.
4.0	CEPF monitoring and project management	4.7	Gender equality in VESS's activities as evidence by score in the gender tracking tool at the project beginning and end.	The gender tracking tool has been completed both at the beginning and end of the project
5.0	Financial management administration and communications support for VESS	5.1	Strengthened financial management for VESS by the end of the project : Creation of a bespoke spread sheet to automatically track obligations and benefits required under the Vanuatu labour laws and engagement of a bookkeeper to enter transactions, complete	When this activity was proposed there was no commercial software option for payroll management that worked in Vanuatu. Since then however, a New Zealand company has developed a software product called Smooth Pay and has worked with finical services in Vanautu to make sure it is compatible with the needs of Vanuatu employers. VESS has a subscription to this software and is now using it for tracking employment obligations listed under the Vanuatu Labour Act, such as annual leave and sick days. The payroll is entered and run by the firm engaged to manage our accounting and bookkeeping twice monthly.
5.0	Financial management administration and communications support for VESS	5.2	Financial audit of VESS for the 2018 financial year.	The finical audit of VESS was performed by an accounting firm accredited to audit. The report was sent to CEPF.
5.0	Financial management administration and communications support for VESS	5.3	Improved web presence of the Vanuatu Environmental Science Society and means to accept donations.	The VESS website has been moved to hosting controlled by VESS on our own subscription to hosting site and control over the domain name. This give the site and the VESS web presence more security that when this

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				information was held by an IT company. The website continues to be updated with inflation on the project being implemented. The option for donating has not yet been applied to the website as the options for payment gateways for website in Vanautu is very limited and we are waiting for a more suitable option to become available.
5.0	Financial management administration and communications support for VESS	5.4	Report on the review with recommendations for future action. Reviewed constitution, strategic plan and procedure manuals.	Anissa Lawrence conducted the review of VESS and produce a report
1.0	Increase knowledge about the distribution, ecology, genetics and threats to Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox).	1.6	Between May and July 2019 field trips will have been conducted to the 6 main islands in the Banks Group in Vanuatu to conduct a questionnaire to establish where comminutes believe the different species of flying fox live in the Banks. This will be evidenc	The VESS interview team visited 78 locations on 6 islands in the Banks. 413 people were interviewed between November 2019 and February 2020. The questionnaire survey has 73 questions and was designed by VESS to capture information over several topics: Interviewee information, perspectives on bats, information on each species, threats, bats and culture, tourism involving bats and tabu areas. Significant amount of information was gathered. The general consensus is that fruit bats are not declining. The survey has identified behaviours and ecological needs of bats that differ between the species. Threats to bats have been assessed; Bats are hunted but it appears that the hunting pressure is not extremely high; Tourism involving bats is relatively common, but it appears to be

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				generally low impact. But this survey has highlighted some concern over practices that may increase health risks, cause disturbance or impact animal welfare. A report is published on the VESS website: https://www.vanuatuconservation.org/flying-fox-project/. It is very hard to tell the difference between the Banks flying fox and the Vanuatu flying fox, therefore this survey cannot solve the question of the distribution of these two sympatric species but can direct scientific studies to locations where they occur.
1.0	Increase knowledge about the distribution, ecology, genetics and threats to Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox).	1.7	Between May and July 2019 concurrently with the questionnaire field trip, awareness workshops about bats will be conducted as evidenced by photographs and attendance sheets of at least 2 workshops on each island visited (12 in total). At least 30% of the	After the initial expedition, our project was extended so we could revisit the Banks islands to gather more information on the flying foxes of the island group. At the same time as conducting a questionnaire, where we tried to cover as wide an area of the islands as possible, we conducted awareness workshops. Thirteen workshops were conducted, with at least 2 on each island we visited. 330 people attended the workshops, 163 males and 167 females. We surpassed our target of at least 30% women. We re-wrote the Bats of Vanuatu booklet to include information on bat biology and conservation including conservation actions that can be taken at a community level. We also revised the bat awareness workbook. In addition, we also conducted two workshops in schools on Gaua island where

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				219 children and 10 teachers attended. A report on the awareness activities of the project including these workshops and other events we attended is attached and available on the VESS website.
1.0	Increase knowledge about the distribution, ecology, genetics and threats to Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox).	1.8	Between May and July 2019 concurrently with the questionnaire field trip, at least one community on each island where the bank's flying fox is found, which is willing to participate in long-term conservation of this species, will be identified.	Communities on Mota, Mota Lava, Vanua Lava and Gaua and Ra have all indicated they are willing and keen to play and active role in the conservation of the Banks Flying Fox. The communities have already put in place measures to reduce threats such as banning of hunting of the endemic flying foxes. Community members from all of these islands attended the bat conservation workshop that VESS held in Mota Lava and been training on basic monitoring techniques for flying foxes including spot counts, camp counts and transect counts. They have been provided with notebooks, binoculars and clicker counters as basic tools for monitoring and recoding the flying foxes in their areas. VESS will continue to work with this communities after the close of this project to continue to support them in conserving the native bat of Vanuatu.
1.0	Increase knowledge about the distribution, ecology, genetics and threats to Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus	1.9	Between July and November 2019 the VESS team will have conducted fieldwork in the Banks islands where the questionnaire results indicated P.fundatus is believed to be found to	During the second scientific survey, we deployed mist nets over 9 nights in Gaua, Vanua Lava and Mota. The sites were chosen because they were where community members reported seeing the endemic flying foxes and where the surrounding community were willing to implement conservation

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
	tuberculatus (the Vanikoro flying fox).		attempt to capture the flying foxes to verify the species present.	measures to conserve the Banks flying fox. We captured 4 bats (two P.toganus, one P.anetianus and one N.macdonaldi). Unfortunately, we did not capture the Banks Flying fox during this expedition. We did however confirm the continued presence of the Vanuatu Flying Fox on Mota Lava. We conducted 5 transect surveys totalling 5.16 km and encountered 73 bats (64 P. tonganus and 9 endemic flying foxes). During a spot-counts in the coconut plantations in Gaua 18 endemic flying foxes were counted. It is difficult to tell the difference between the Banks Flying Fox and the Vanuatu Flying fox and so we could not definitely identify which species these were. Setting up canopy nets to catch them was not possible in the coconut plantation where they were observed as the trees were too tall and the ropes tend to slip off coconut fronds. Further efforts to capture the bats are needed to definitely confirm the range of the Banks Flying Fox
1.0	Increase knowledge about the distribution, ecology, genetics and threats to Pteropus fundatus (Banks flying-fox), Pteropus nitendiensis (the Temotu Flying Fox) and Pteropus tuberculatus (the Vanikoro flying fox).	1.10	By November 2019 a report will have been written on the fieldwork in the Banks islands By the end of 2017 a workshop on biodiversity assessment techniques will have been delivered by Tyrone Lavery on Efate as	The title of this deliverable has been distorted when moved from the old portal to the new reporting template. It should refer just to the written report on the second expedition to the Banks Island. This report has been written and is attached and on the VESS website.

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
			evidence of a repot and photos of the workshop	

Tools, products or methodologies that resulted from the project or contributed to the results:
Questionnaire designed to capture local knowledge of bats
Report on the questionnaire survey of bats in Sanma Province
Report on the scientific surveys in the Banks Islands and in Temotu province
Awareness materials for bat conservation
Report on the awareness activities.

PORTFOLIO INDICATORS

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
4	48 globally threatened species have improved conservation status and/or available information on status and distribution.			3	Banks flying-fox , Nendo flying-fox and Temotu flying-fox
5	At least 10 partnerships and networks formed among civil society, government and communities to leverage complementary capacities and maximize impact in			1	PacBat (Pacific Bat Network) of bat conservationists and academics meets monthly

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
	support of the ecosystem profile.				
6	At least 40 civil society organizations, including at least 30 domestic organizations, actively participate in conservation actions guided by the ecosystem profile.			0	1 reported (VESS), but validated to 0 because it is counted elsewhere
1.1	Baseline surveys completed for at least 10 priority sites.			2	Vanua Lava, Mota
1.2	Awareness of the values of biodiversity and the nature of threats and drivers raised among local communities within at least 10 priority sites.			1	1 site Planned: At least 2 communities in each of the six main islands of the Banks Island groups (Mota, Vanua Lava, Mota Lava, Uraparapara, Gaua and Mere Lava) and in Vanikoro and Nendo (16 communities in total) will be aware of the significance of the flying foxes in their areas and the threats they face. At least two communities on each islands where the Banks flying-fox, Nendo flying-fox and Temotu flying-fox is

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
					found will be involved in their conservation. Reported: Nineteen community workshops and two in schools were conducted by the VESS team during the project. The workshops delivered information on bat biology and ecology, threats bats are facing and what communities can do to conserve the bats. 939 people attended the workshops in total. 17 community members from 5 islands in the Banks Islands attended a bat monitoring workshop and learnt bat monitoring techniques. A group of bat monitors has been formed and VESS will continue to work with them to monitor the flying foxes in their islands.
3.1	Number of CEPF priority species with improved knowledge of their status and distribution.			3	Banks flying-fox , Nendo flying-fox and Temotu flying-fox
3.2	Number of priority species with recovery plans			0	3 planned: 2. Three Species Recovery and Action Plans will be

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
	developed, implemented and monitored.				developed, one each for the Banks flying-fox, Nendo flying-fox and Temotu flying-fox. They will be shared with the Vanuatu and Solomon Islands governments in the hope of being approved. 0 completed: Data has been collected for the plans but they have not yet been written. Work will continue on the plan for the Banks Flying Fox Although the plans have not been completed, in Vanautu communities have already begun to take measures to conserve the Banks flying Fox. Several chiefs have placed a tabu on the hunting of the endemic flying foxes including all the chiefs on Mota island which is the only island where we have definitely confirmed the Banks Flying Fox. A group of bat monitors has been set up and they have received training in basic monitoring techniques and been given the tools to start a monitoring programme.

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
4.1	Number of civil society networks that enable collective responses to priority and emerging threats			1	PacBat (Pacific Bat Network) of bat conservationists and academics meets monthly
4.2	Number of local civil society organizations that demonstrate improvements in organizational capacity.			0	1 reported (VESS), but validated to 0 because it is counted elsewhere
4.3	Number of civil society organizations that emerge as national conservation leaders in each hotspot country.			0	1 reported (VESS), but validated to 0 because it is counted elsewhere
4.4	Number of conservationists that demonstrate strengthened capacity in conservation management, science and leadership.			34	21 men and 13 women trained in biodiversity assessments and bat monitoring
5.1	Number of civil society organizations that actively participate in conservation actions guided by the ecosystem profile.			0	1 reported (VESS), but validated to 0 because it is counted elsewhere

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
5.2	Number of domestic civil society organizations receiving CEPF grants that demonstrate more effective capacity to design and implement conservation actions.			0	1 reported (VESS), but validated to 0 because it is counted elsewhere

GLOBAL INDICATORS

Protected Areas

Protected areas that have been created and/or expanded as a result of the project. Protected areas may include private or community reserves, municipal or provincial parks, or other designations where biodiversity conservation is an official management goal.

Name of Protected Area	WDPA ID*	Latitude	Longitude	Country	Original Total Size (Hectares) **	New Protected Hectares ***	Year of Legal Declaration or Expansion

*World Database of Protected Areas

**If this is a new protected area, 0 should appear in this column

*** This column excludes the original total size of the protected area.

Key Biodiversity Area Management

Key Biodiversity Areas (KBAs) under improved management—where tangible results have been achieved to support conservation—as a result of the project.

KBA Name	KBA Code	Size of KBA	Number of Hectares with Improved Management

Production Landscapes

Production landscapes with strengthened management of biodiversity as a result of the project.

A production landscape is defined as a site outside a protected area where commercial agriculture, forestry or natural product exploitation occurs.

Name of Production Landscape	Latitude	Longitude	Hectares Strengthened	Intervention

Benefits to Individuals

- **Structured Training:**

Number of Men Trained	Number of Women Trained	Topics of Training
21	13	Biodiversity assessments Bat monitoring techniques

- **Cash Benefits:**

Number of Men – Cash Benefits	Number of Women – Cash Benefits	Description of Benefits

Benefits to Communities

View the **characteristics** column below with the following corresponding codes:	View the **benefits** column below with the following corresponding codes:
1- Small Landowners	a. Increased Access to Clean Water
2- Subsistence Economy	b. Increased Food Security
3- Indigenous/ Ethnic Peoples	c. Increased Access to Energy
4- Pastoralists / Nomadic Peoples	d. Increased Access to Public Services
5- Recent Migrants	e. Increased Resilience to Climate Change
6- Urban Communities	f. Improved Land Tenure
7- Other	g. Improved Use of Traditional Knowledge
	h. Improved Decision-Making
	i. Improved Access to Ecosystem Services

Community Name	**Community Characteristics**							**Type of Benefit**								**Country**	**Number of Males Benefitting**	**Number of Females Benefitting**
	1	**2**	**3**	**4**	**5**	**6**	**7**	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**i**			

Characteristics of "Other" Communities:

Policies, Laws and Regulations

View the **topics** column below with the following corresponding codes:			
A- Agriculture	E- Energy	I- Planning/Zoning	M- Tourism
B- Climate	F- Fisheries	J- Pollution	N- Transportation
C- Ecosystem Management	G- Forestry	K- Protected Areas	O- Wildlife Trade
D- Education	H- Mining and Quarrying	L- Species Protection	P- Other

No.	**Name of Law**	**Scope**	**Topics**														
			A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**

"Other" Topics Addressed by the Policy, Law or Regulation:

No.	Country/ Countries	Date Enacted/ Amended	Expected impact	Action Performed to Achieve the Enactment/ Amendment

Companies Adopting Biodiversity-friendly Practices

A company is defined as a for-profit business entity. A biodiversity-friendly practice is one that conserves or uses natural resources in a sustainable manner.

Name of Company	Description of Biodiversity-Friendly Practice	Country/Countries where Practice was Adopted

Networks and Partnerships

Networks/partnerships should have some lasting benefit beyond immediate project implementation. Informal networks/partnerships are acceptable.

Name of Network/Partnership	Year Established	Country/ Countries	Established by Project?	Purpose

Sustainable Financing

Sustainable financing mechanisms generate funding for the long-term (generally five or more years). These include, but are not limited to, conservation trust funds, debt-for-nature swaps, payment for ecosystem services (PES) schemes, and other revenue, fee or tax schemes that generate long-term funding for conservation.

Name of Mechanism	Purpose	Date Established	Description	Country/ Countries	Project Intervention	Delivery of Funds?

Globally Threatened Species

Globally threatened species (CR, EN, VU) on the IUCN Red List of Threatened Species, benefitting from the project.

Genus	Species	Common Name (English)	Status	Intervention	Population Trend at Site
Pteropus	fundatus	Banks Flying Fox	EN	Increased ecological knowledge, updated distribution, informal protections placed in significant portion of range by chiefly ban on hunting.	Unknown
Pteropus	tuberculatus	Vanikoro Flying Fox	EN	Increased ecological knowledge, confirmed distribution and extant status	Unknown
Pteropus	nitendiensis	Temotu Flying Fox	EN	Increased ecological knowledge	Unknown

LESSONS LEARNED

We have learnt that the scientific study of flying foxes can be difficult, particularly when the species you are working with tends to live a solitary life in the forest. The Banks flying fox was the hardest species to catch in our project. In Australia for example, most of the flying fox species are colonial and therefore easier to find and count and study. Previously studies on the Banks flying fox (in the 1970s and 1980s) involved getting local people to shoot the bats and take away specimens. However as a conservation organisation in a more modern era, we choose to study them in their own environment and not to harm them. But this takes a lot more time and effort. This is helped immensely by working closely with the local communities and gathering their local knowledge of the bats they see in their forests. Much of the information we have gathered comes form their knowledge. However the local knowledge does have limitations, for example it is very hard to tell the difference between the two endemic species of flying fox and scientific studies are needed. The combination of local knowledge and science is best for both increasing our knowledge of the bats and for their conservation. A good working relationship between scientist and local communities is vital.

When discussing our initial project idea with the CEPF team, we were only planning on an expedition to the Banks Islands to study the Banks Flying fox. However, it was suggested to extend the expedition to the Solomon Islands and include the Vanikoro Flying Fox and the Nendo Flying fox in the expeditions. We were recommended to use Tyrone Lavery as the expedition lead as he had already been working on CEPF project in the Solomon Islands. He recommended a local Solomon Islander, Corzziarah Posala, who he had already been working with to help with the Solomon Islands work. Corzzie was also supposed to act as a role model for the Ni-Vanuatu new graduates working on our project. Whilst this idea seemed ideal in theory, the collaboration did not really work well as neither Tyrone nor Corzzie, took full ownership of the tasks they were assigned and agreed to do when they were involved in the project proposal phase. Corzzie failed completely to complete some tasks, the most damaging to the project as not to visit the community in Nendo prior to the expedition to the remote islands. This resulted in the expedition failing to do most of the planned work in Nendo island as consent was not given and we could not extend the expedition to stay and sort out the problem, as it was time bound and would have been too expensive to pay for extra days for the expedition vessel. Tyrone, although he did lead the expedition and taught us techniques for assessing bats which allowed the fundamental aspects of the project to be fulfilled, had not really prepared the course material or the assessment for the biodiversity training course and had not prepared a plan for the scientific studies. We also found it concerning that when he and Diane Fisher were involved in the project proposal neither of them actually told us that Tyrone would no longer be attached to the University of Queensland and would be acting as an independent consultant. The University of Queensland was mentioned throughout the project proposal, which they were both involved in writing, and we were under the impression it was a project with the university. When it came to organising the expedition, we found out that Tyrone was in America at a different institution. We felt mislead by this but were not really in a position to change it at that stage in the project. It also affected the budget for Tyrone's travel to Vanuatu. Tyrone went directly to the Department of Environment to obtain a CITES permit to export the tissue samples from Vanuatu despite the research permit being in Christina's name, without our knowledge. He took the samples to Australia and on to USA and we do not know what happened to any remaining tissue or to the bat parasites that were collected during the expedition. We feel very uncomfortable with this extraction of genetic material from a developing country to a developed country without safeguards in place and proper agreements as to where the material is going and what is the ultimate destinations. We did eventually receive results for the genetic study but have not been told what happened to

the parasites. Useful information was obtained during the expeditions but the planning of the expedition, which as the expedition lead, Tyrone was responsible for, could have been better. The mentoring and role model aspects of the project was not really fulfilled. This meant that more of the tasks fell on VESS and the project lead to do, as VESS was ultimately responsible for the project and the activities within it. In hindsight, it would have been simpler to restrict the project to Vanuatu, where we know the communities well and understand the travel logistics and community sensibilities. In future we will confine our projects Vanuatu. Whist we don't mind being involved in multi-country projects, we would only take responsibility for the project activities within Vanuatu, which is where our expertise lies. We will also do more of our own due diligence, when deciding on our contractors, technical advisors and experts engaged to assist and not solely rely on recommendations. We will make sure that letters of agreement are in place with any institution that receives tissue samples from our scientific work, that ensures we are informed of where the samples are, what they are being used for and where they will be stored if any material is left after the analysis. The agreement will also cover that all the results of the analysis will be communicated back to us in a timely manner.

There were multiple delays to our final fieldwork trip for a mist net survey of flying foxes in the Banks. As this activity involved handling bats, we needed to ensure we were protected against zoonotic diseases. We do not know if the bats in Vanuatu carry Australian Bat Lyssavirus (ABL) or other viruses. Therefore, all project team members that handle bats must be vaccinated against Rabies which gives cross protection to ABL. After the initial vaccination the protocol is to check the immunity level by taking blood every two years. The delay to the fieldwork was due to the difficulty getting blood samples out of the Vanuatu to test the VESS's team's immunity levels. This test is only available in Australia in this region. As immunity in most people lasts longer than two years, it would have been easy to assume that all the team members had adequate protection and carry on with the fieldwork without testing. As the Vanuatu borders were closed due to Covid there were very few cargo flights that could get the samples to the lab within a suitable timeframe. We did not cut any corners and followed correct protocol which is to test every 2 years. This delayed the last project activities by over a year, waiting for suitable freight services for bloods testing overseas to recommence. When we did eventually manage to test, one of the team member's antibody level was insufficient to protect her from Rabies-like diseases. We are glad we waited and did not expose her to a preventable risk and the lesson we learnt, or more accurately was reinforced was that when it comes to health and safety, we must follow the protocols even if it is tempting not to do so because of circumstances. Earlier in the project it transpired that Corzzie had not had his 2 yearly blood test despite being instructed to do so before leaving Honiara. We made the decision that he was not allowed to handle bats. We believe this was a wise choice in light of the results of our staff member.

SUSTAINABILITY/REPLICATION

We have set up a good network of community bat conservationist that have already started to monitor their bats and put in place conservation measures in Vanautu and we feel that be cause of this we will continue to work with the communities to maintain the efforts to conserve the Banks Flying fox. We will apply for funding to continue the work to better understand the distribution of the Banks and the Vanautu flying foxes that was started under this project and efforts are already in place to secure this funding. We have created a bat awareness programme, that has increased the knowledge about bats and resulted in conservation actions being taken. The questionnaire survey, that we designed has been tested and can produce useful information. We now have the skills in country and the

equipment to undertake scientific assessment of bats. We aim to seek funding to extend the awareness campaign, the questionnaire survey and scientific studies of bats in other areas of Vanuatu.

We do not feel we will be able to do the same in the Solomon Islands and as Corzzie went on to a job in the Australian High Commission, SICCP is unlikely to continue the work with the communities in Temotu or Vanikoro.

ENVIRONMENTAL AND SOCIAL SAFEGUARDS/STANDARDS

A grievance mechanism was developed as follows: Indigenous Peoples and other local communities and stakeholders may raise a grievance at any time with VESS or CEPF about any issues relating to the project. During meetings with the communities at the beginning of the project community members will be informed about this possibility and contact information will be provided for the VESS managers, the CEPF RIT and the CEPF secretariat. VESS will respond to grievances in writing and inform the CEPF and RIT in writing within 15 working days of receipt. Claims will be filed, included in project monitoring, and a copy of any grievance will be provided to the CEPF Secretariat. The grievance mechanism and contact details were incorporated in to the project leaflet that was given out at each visit to the communities. The community leaders have been given project leaflets that contain the grievance mechanism. During the field trips to conduct the awareness workshops project leaflets were distributed at every location visited. No grievances have been raised by the community or anyone else regarding this project. Throughout the project Priscila Amkori and Martika Tahi, Ni-Vanuatu project scientists working for VESS have communicated with the communities. A letter explaining the project and the communities' involvement was given to all communities. Consent to go ahead with the project activities was given in writing by village communities in all project sites. Martika Tahi has spoken to the chiefs and landowners, explained the project activities, and obtained or reconfirmed consent to conduct the mist net and observational surveys. Prior to each visit to the communities throughout the project, we contacted local leaders to obtain permission to visit. A research permit application was lodged with the Department of Environmental Protection and Conservation and VESS was issued a research permit for the activities in this project.

Flying-foxes in other parts of the world are known to carry zoonotic diseases that can be transmitted to humans via a bite or scratch from an infected animal. In Vanuatu and the Solomon Islands it is uncertain if bats carry zoonoses, thus as a precaution it must be assumed that every bat has the potential to transmit disease. Bats are to be handled only by people who have been vaccinated against Australian Bat Lyssa virus (ABL). Martika Tahi was vaccinated prior to the expedition. Christina Shaw and Tyrone Lavery have been vaccinated before and the blood test results indicated that their immunity was adequate. Corzzierah Posala has been vaccinated but had not had a blood test within two years to check his immunity. He was told to do this. As his immunity to ABL was not known he was not allowed to handle bats during this project.

Tyrone Lavery as the scientific lead was responsible to training the VESS staff in appropriate handling of live bats. All the research team wore personal protective equipment (including leather gloves, nitrile gloves and long-sleeves). Handling times could have been minimized more to reduce exposure risk. Both Tyrone Lavery and Christina Shaw were bitten. Tyrone's bat bite did not penetrate the glove however Christina did receive a puncture wound in her thumb. On both occasions the protocol for bites was followed: the area was thoroughly washed with soap for 10 minutes and cleansed with povidine-iodine. Vaccinations were kept on the boat during the fieldwork component of the project in case of a bite. Christina was

given vaccination on day 0 and day 3 in accordance with international standards for post exposure prophylaxis for a vaccinated person and in accordance with the vaccine manufacturer's instructions.

The potential for the flying-foxes to be harmed or distressed during the capture and sampling process was identified as a risk. To mitigate this several measures were put in to our protocols for the surveys. One of these was that mist nets should be checked periodically throughout their operation. On one occasion when a mist net had been closed the night before, when the VESS team arrived to open the mist net the next day three N. macdonaldii bats, listed as vulnerable on the IUCN Red List, were caught in the net. The net must have blown open later in the night and caught the bats. Two of the bats were released and placed in a calico bag for a short period. They were quickly examined and found to be bright alert and responsive and therefor released immediately without any procedures to ensure no further stress was inflicted on them. The third bat was dead when discovered. Tyrone Lavery spoke to the chief to explain what happened and the chief was understanding. A Dr. Lavery admitted that this had occurred to him twice before on other projects. However this was not acceptable for VESS projects and a new VESS policy was put in place that any mist nest left closed must be tied so it cannot blow open or the net should be taken down. This incident was reported to the CEPF in a safeguarding report.

Vanuatu has been in a national state of emergency due to the Covid19 pandemic from March 2020 until the end of the project. All international borders are closed except to repatriate citizens and residents, who are required to quarantine for 14 days. With these measures in place Vanuatu remained Covid-free and therefore there was no risk of VESS staff transmitting Covid to vulnerable communities during field visits. VESS has followed all Vanuatu government advice and instructions during the pandemic. VESS staff have voluntarily taken up the opportunity to be vaccinated against Covid19.

The safeguards policies were reviewed every 6 six months during the project and the review reported to the CEPF via the conservation grants portal alongside the project other reports.

ADDITIONAL COMMENTS/RECOMMENDATIONS

It would be advisable for the any overseas consultants or advisor to sign a code of conduct when engaging with local NGOs. The safeguarding of communities is seen as paramount to the CEPF but the safeguarding of local organisations should be important too, particularly in a place where capacity building of new organisations is a focus.

ADDITIONAL FUNDING

Total Amount of Additional Funding Actually Secured (USD)	
Breakdown of Additional Funding	

INFORMATION SHARING AND CEPF POLICY

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. For more information about this project, you may contact the organization and/or individual listed below.

Vanuatu Environmental Science Society (VESS). vess@vanuatuconservation.org. www.vanuatuconservation.org