Department for Environment Food & Rural Affairs

Submit by Monday 2 December 2013

DARWIN INITIATIVE APPLICATION FOR GRANT FOR ROUND 20: STAGE 2

Please read the Guidance Notes before completing this form. Where no word limits are given, the size of the box is a guide to the amount of information required.

Information to be extracted to the database is highlighted blue.

ELIGIBILITY

1. Name and address of organisation (NB: Notification of results will be by email to the Project Leader)

Name of organisation: 1) The Samoan conservation society, 2) ANU university Fenner School	**Address:1) Samoa Conservation Society,** PO Box 2035 C/O Conservation International, Vailima SAMOA **2) ANU,** Fenner School of Environment & Society Australian National University Building 141, Linnaeus way Canberra, ACT, 0200

2. Stage 1 reference and Project title

(max 10 words) Developing a conservation action plan for Samoa's little dodo- the Manumea or tooth billed pigeon 15 words LTS noted

3. Project dates, and budget summary

Start date:1st May 2014		**End date:31st March 2017**		**Duration: 3 years**
Darwin request	**2014/15** **£86,382**	**2015/16** **£71,430**	**2016/17** **£72,030**	**Total** **£229,842**
Proposed (confirmed and unconfirmed) matched funding as percentage of total Project cost: 20% CLP- 15 000 USD 2013-2014 MBZ-5000 2013-2014 USD Rufford- £5000 2013-2014. Samoan government support- staff time, field equipment, vehicle support eqv- 25,000 USD per annum (CONFIRMED).				
Are you applying for DFID or Defra funding? (Note you **cannot** apply for both)		**DFID No**		**Defra Yes**

4. Define the outcome of the project. This should be a repetition of Question 24, Outcome Statement.

The establishment of methods, based on sound ecological knowledge, which will halt the decline of the Manumea and its habitat and the support of the community to implement these methods.

5. Country(ies)

Which eligible host country(ies) will your project be working in. You may copy and paste this table if you need to provide details of more than four countries.

Country 1: Samoa	**Country 2:**

6. Biodiversity Conventions

Which of the three conventions supported by the Darwin Initiative will your project be supporting? Note: projects supporting more than one convention will not achieve a higher scoring

Convention On Biological Diversity (CBD)	**YES**
Convention on Migratory Species (CMS	**no**
Convention on International Trade in Endangered Species (CITES)	**no**

6b. Biodiversity Conventions

Please detail how your project will contribute to the objectives of the convention(s) your project is targeting. You may wish to refer to Articles or Programmes of Work here.
Note: No additional significance will be ascribed for projects that report contributions to more than one convention

(Max 200 words)

Our project aims to save the Manumea, thus contributing to Aichi Target 12, which states that "by 2020, the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline has been improved and sustained." Saving the Manumea will also involve preserving native forest which contains a rich fauna and flora of native species, thus contributing to Aichi Target 11. Thus this project will contribute to the CBD through the conservation of biological diversity it will also increase the sustainable use of components of biological diversity by reducing hunting pressure on the Manumea by working with the local communities hence contributing to Aichi target 1.

Is any liaison proposed with the CBD/CITES/CMS focal point in the host country?

X Yes ☐ No if yes, please give details:

The planning and implementation of the project is done in collaboration with the Ministry of Natural Resources & Environment the national technical focal point for conservation work in Samoa and for relevant conventions Samoa is a party to including the CBD, CITES, CMS, Ramsar and WHC.

7. Principals in project. Please identify and provide a one page CV for each of these named individuals. You may copy and paste this table if you need to provide details of more personnel or more than one project partner.

Details	**Project Leader**	**Project Partner 1 - Main**	**Project Partner 2**
Surname	**Stirnemann**	Heinsohn	**Stirnemann**
Forename (s)	**Rebecca**	Robert	**Rebecca**
Post held	**Scientist**	Professor	
Institution (if different to above)	**Samoa Conservation Society Inc/ Post doctoral position through ANU university.**	Australian National University	**Samoa Conservation Society Inc**
Department		Fenner School of Environment and Society	
Telephone			
Email			

Details	Project Partner 3	Project Partner 4	Project Partner 5
Surname	**O'Brien**	**Luscomb**	**Uili**
Forename (s)	**Mark**	**Peter**	**Moeumu**
Post held	**Senior Technical Advisor at BirdLife International**	**President / CEO**	
Institution (if different to above)	**Birdlife Pacific**	**Pacific Conservation**	**Ministry of Natural Resources & Environment**
Department	**Pacific**	____	**DEC**
Telephone			
Email			

Details	**Project Partner 6**
Surname	**Russell**
Forename (s)	**James**
Post held	**Senior Lecturer**
Institution (if different to above)	University of Auckland
Department	**Biological sciences**
Telephone	
Email	j.

8. Has your organisation been awarded a Darwin Initiative award before (for the purposes of this question, being a partner does not count**)? If so, please provide details of the most recent awards (up to 6 examples). NO**

Reference No	Project Leader	Title

9a. If you answered 'NO' to Question 8 please complete Question 9a, b and c.

If you answered 'YES', please go to Question 10 (and delete the boxes for Q9a, 9b and 9c)

What year was your organisation established/ incorporated/ registered?	**1946**
What is the legal status of your organisation?	NGO No Government No University Yes Other (explain)
Type of organisation (e.g. University, NGO, private sector, Government Department etc)	**University**
Have you unsuccessfully applied to the Darwin Initiative before? If yes please	**No**

provide the application reference number(s)	
How is your organisation currently funded?	(Max 100 words) ANU receives funding from a variety of sources: student revenue, research grants, block grants to support research, trading revenue, investment income etc. ANU is unusual in Australia in that it has a large investment portfolio for the size of the University budget. Annual University revenue is $0.9B, while funds in investments total $1.1B.
Have you provided the requested audited/independently examined accounts?	Yes, the link is http://about.anu.edu.au/profile/annual-reports and they contain the financial statements.

9b. DO NOT COMPLETE IF YOU ANSWERED 'YES' TO QUESTION 8.

Provide detail of 3 contracts previously held by your institution that demonstrate your credibility as a research organisation and provide track record relevant to the project proposed. These contacts should have been held in the last 5 years and be of a similar size to the grant requested in your Darwin application.

Contract 1 Title	The endangered swift parrot as a model for managing small migratory birds
Contract Value	**Aus$230,000**
Contract Duration	**2012-2014**
Role of institution in project	**Professor Heinsohn is chief investigator. The ANU is providing facilities and received and administered grant funds.**
Brief summary of the aims, objectives and outcomes of the contract.	This project is adapting cutting-edge technologies for aerial-tracking of small migratory birds across vast landscapes, and providing multi-scale insights into the conservation needs of endangered swift parrots. Conservation of migratory species requires knowledge of the species' ecology at multiple sites and the links between phases of the migratory cycle. Austral (within southern hemisphere) migrants such as swift parrots can be challenging to conserve because variable climatic conditions cause great plasticity in their movements. Knowledge of habitat requirements, reproductive success, and mortality, including disease prevalence and return rates from migration, will enable optimal conservation strategies and effective land management.
Client reference contact details (Name, e-mail, address, phone number).	**Australian Research Council** GPO Box 2702 CANBERRA ACT 2601 AUSTRALIA 61 2 6287 6600 info@arc.gov.au

Contract 2 Title	Evolutionary and conservation implications of extreme predation on female endangered swift parrots
Contract Value	**$539,000**
Contract Duration	**2014-2016**
Role of institution in project	**Professor Heinsohn is chief investigator. The ANU is providing facilities and received and administered grant funds.**

Brief summary of the aims, objectives and outcomes of the contract.	Introduced predators have wrought havoc on native species worldwide. The impacts on prey species may be exacerbated when they are subject to sex-selective predation, leading to biased adult sex ratios. In Tasmania, introduced sugar gliders are killing up to 100% of nesting female endangered swift parrots at many of their breeding sites. Our project integrates evolutionary theory, state-of-the-art population metamodels and field experiments to (i) achieve practical conservation outcomes; (ii) assess the evolutionary and ecological consequences of sex-selective predation on population dynamics and (iii) determine whether swift parrots are modifying their behaviour adaptively through learned or genetic change.
Client reference contact details (Name, e-mail, address, phone number)	**Australian Research Council** GPO Box 2702 CANBERRA ACT 2601 AUSTRALIA 61 2 6287 6600 info@arc.gov.au

Contract 3 Title	**A unique non-human model for the evolution of musical tool use: drumming by the palm cockatoo**
Contract Value	Aus$78,891
Contract Duration	**2012-2014**
Role of institution in project	**Professor Heinsohn is chief investigator. The ANU is providing facilities and received and administered grant funds.**
Brief summary of the aims, objectives and outcomes of the contract.	While there is growing evidence of a valid analogy between human song and the song of whales, birds and seals, there are no comparable studies of the production of instrumental music by non-human species. This reflects a virtual absence of instrument manufacture and instrumental music production in non-human species. However, one species has been repeatedly identified as a likely candidate; the palm cockatoo (Probosciger aterrimus). As far as we can discover, this is the only non-human species that manufactures and uses a musical instrument, or 'sound tool'. Palm cockatoos manufacture a 'drumstick', by breaking off a living branch, stripping off the foliage and trimming it to the appropriate length. They then grasp the drumstick in their foot and beat it against a hollow trunk. The drumming is audible at over 100 m. In this proposal, we explore the evolution of complex cognition through analysis of tool manufacture in palm cockatoos. We then ask whether palm cockatoo drumming provides a useful evolutionary analogy to human instrumental music. Our study is highly significant because it offers a unique, tractable non-human model for studying the evolution of music, tool use and complex culture.
Client reference contact details (Name, e-mail, address, phone number).	**Hermon Slade Foundation** **Dr B.K. Filshie** **PO Box 9144** **Port Macquarie** **NSW 2444 Australia** Phone: (02) 6582 7813 E-mail: bfilshie@apscience.org.au

9c. DO NOT COMPLETE IF YOU ANSWERED 'YES' TO QUESTION 8.

Describe briefly the aims, activities and achievements of your organisation. (Large institutions please note that this should describe your unit or department)

Aims (50 words) The Fenner School of Environment & Society (ANU) is unique in Australia for its inter-disciplinary aproach to environmental issues. It is one of very few places in the world where economists and hydrologists, historians and ecologists, foresters, geographers and climatologists work together on the big environmental problems facing contemporary society.
Activities (50 words) For the purposes proposed here, the Fenner School conducts primary research in landscape ecology, evolutionary biology, and biodiversity conservation, and has an excellent record at working with governments to implement practical applications of research. A large presence in Pacific countries including water science and biodiversity conservation.
Achievements (50 words) Novel and innovative research, both disciplinary and inter-disciplinary, published in top ranking journals. Practical applied research translated by policy experts into actions by state and federal governments. Successful projects in the Pacific region.

10. Please list all the partners involved (including the Lead Institution) and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. This section should illustrate the capacity of partners to be involved in the project. Please provide written evidence of partnerships. Please copy/delete boxes for more or fewer partnerships.

Lead institution and website: http://fennerschool.anu.edu.au	**Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)**
	Capacity: The ANU Fenner school integrates knowledge from a diverse range of disciplines, encompassing the physical, biological, social, economic, legal and cultural domains. They have extensive experience in developing projects working on endangered species and finding practical application to aid in conservation management. **Role and responsibility**: SCS and ANU will be working as co-partners on this project i.e. ANU as fund the manager but SCS as implementer. ANU will support the project by being1) providing university resources to tracking the financial status of the project, 2) provide advice and technical support for research and conservation implementation (including scientific literature access) at all stages of the project and 3) assist with project development and overview all technical reports and scientific papers which are produced during the project. The project leader will be officially a postdoc within the university system and will have office space and research resources available.

Partner Name and website where available: SCS www.samoanbirds.com	Details (including roles and responsibilities and capacity to engage with the project): (max 200 words) **Role:** SCS and ANU will be working as co-partners on this project i.e. ANU as fund the manager but SCS as implementer. SCS will develop and undertake all fieldwork and community education in collaboration with the MNRE and all other interested parties. The SCS will be responsible for all reporting for the project and will also undertake further fundraising activities to insure the project will continue into the future. They will also maintain links with all interested partner organizations by providing feedback on the status of the project at 6 monthly intervals. **Responsibility:** SCS will be responsible for all primary administration, strategic and operation for project. All report writing for this project will be under taken by SCS and they will over see all field and community work. SCS will also be the institution which maintains contact with all the other groups working on the Manumea project. **Capacity:** SCS is made up of individuals with extensive conservation experience. Members have worked for the last 3 years on the Mao and Manumea project and have considerable skills in ornithology monitoring as well as the necessary contacts to undertake this project. They have already successfully undertaken surveys of the species and have experience in high canopy mistnetting of pigeons as well as experience in monitoring nests (of Mao) in Samoa. This project will enable continual expansion of the NGO to insure future conservation action within this region will continue. 237 words

Partner Name and website where available: Conservation International http://www.conservation.org	Details (including roles and responsibilities and capacity to engage with the project): (max 200 words) Conservation International has considerable experience in: • Community capacity experience • Experience building capacity of NGOs • Experience in conservation education **Role:** Building capacity for the local NGO, SCS, and providing support and expertise in the development of a community education program aimed at reducing hunting of the Manumea while preserving forest habitat.
Have you included a Letter of Support from this institution?	**Yes**

Partner Name and website where available: MNRE http://www.mnre.gov.ws	Details (including roles and responsibilities and capacity to engage with the project): (max 200 words) The Ministry of Natural Resources and Environment focuses on developing regulatory frameworks for sustainable management of the Samoan environment and its natural resources along with the implementation of projects at the local and national levels that promote improved quality of life for all. The involvement of the Ministry in the Manumea project indicates its strong support and commitment to preserve and protect the biodiversity of Samoa in order to maintain Samoan culture and natural heritage. **Role**: The MNRE will be closely involved with all fieldwork and community work. They will provide resources to assist with technical field members, vehicles, and other equipment not supported by the project. **Responsibility:** The MNRE will be responsible for helping us work with the local communities as well as providing assistance in the field. In turn we will help them reach their Aichi Targets. **Capacity**: The MNRE having been working with members of the SCS for the last 3 years on the Mao project and have built considerable skills in ornithology monitoring. They also lead the development of the Recovery Plan for Tooth Billed Pigeon 2006-2016. MNRE staff members will benefit through capacity building. For more information visit: http://www.mnre.gov.ws/

Have you included a Letter of Support from this institution?	Yes

Partner Name and website where available: Birdlife http://www.birdlife.org/pacific BirdLife have considerable expertise in developing local NGOS, aiding work in endangered bird conservation and gathering local conservation support. For this project they will provide technical expertise especially re pigeon monitoring, the design of a pest control program and conservation as well as site conservation and local empowerment. They are have already donated considerable staff time to this project and endeavor to continue in this role in the future and assisting in building a sustainable future for the manumea. They are currently partnered with SCS who is the official manumea birdlife guardian. They will be aiding the society to raise future funds and will provide advice on monitoring and conservation action as required.	Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)

Have you included a Letter of Support from this institution?	Yes

Partner Name and website where available: Pacific Invasive Initiative http://www.issg.org, Auckland University University of Auckland is the leading research institution in New Zealand with a broad focus including Pacific Islands. The Centre for Biodiversity and Biosecurity at the University of Auckland houses the country's leading island conservation scientists with a focus on both threatened species recovery and pest control. University of Auckland has the experience to contribute expertise in island conservation, threatened species recovery, and introduced pest control, for the project. We will be working with both PII and UoA to develop the pest eradication program for this study. PII will provide an independent review on the project at its midpoint.	Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)

Have you included a Letter of Support from this institution?	Yes

Partner Name and website where available: Pacific Conservation **Organisation Purpose / Mission Statement**: To advance the science of capturing and relocating endangered bird species and to coordinate the resources and expertise of zoos from around the world to assist with the scientific research, the design and implementation of conservation actions that are needed to ensure the conservation of native species. Goals: 1. Use captive management techniques to support wild populations 2. Establish new populations through translocation. 3. Establish captive populations that can support the wild population 4. Develop community programs that support conservation objectives Pacific Conservation experts are project advisors with extensive knowledge with working on rear and declining island species. They are providing the project with expertise on pigeon management and are helping with fund raising activities through zoos. They are also ready to provide any expertise if injured birds are found following another cyclone event. They are also available to aid in any captive breeding venture, which maybe required in the future to supplement wild population numbers or to aid in the establishment of new populations through translocations.	**Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)**
Have you included a Letter of Support from this institution?	**Yes**

11. Have you provided CVs for the senior team including the Project Leader	**Yes**

12. Problem the project is trying to address

Please describe the problem your project is trying to address. For example, what biodiversity and challenges will the project address? Why are they relevant, for whom? How did you identify these problems?

(Max 200 words)

The Manumea or tooth-billed pigeon is found only in Samoa. It is currently listed as Endangered by the IUCN, although recent surveys in upland and lowland forest on both Upolu and Savaii confirm that Manumea numbers are extremely low, and that the species should be upgraded to Critically Endangered. A major cyclone (cyclone Evan) in December 2012 is likely to have further affected Manumea, and other native bird, populations. It is essential that the locations of any remaining populations of Manumea are identified so conservation efforts can be focused. As stated in the Manumea recovery plan (MNRE, 2006) it is also critical that information on the basic breeding biology (e.g. whether nesting occurrs low to the ground or in trees) and the spatial requirements of this species are determined so that threats can be identified and appropriate conservation management can be implemented. We aim to provide a detailed analysis of the status, distribution and ecological requirements of this globally threatened species.

Because the majority of land in Samoa is under customary ownership local consultations and education regarding the Manumea are critical to enable conservation to occur. Furthermore because both habitat loss and hunting of Manumea are likely to be contributing to the Manumea's decline, it is critical to engage the support of village matai (chiefs) in order to limit local hunting in key areas and protecting key forest. So far 3 communities have indicated that they would like to be involved with Manumea conservation, but they have to limited meansand knowledge to be effective. This project will involve consultations with key individuals in villages and conservation education to develop a sustainable plan of action to empower them to be involved with Manumea conservation.

The recovery of the Manumea will take time and needs an organisation behind the project that will target its needs over the long-term. There is currently a 'fledgling' NGO in place with the support of multiple organisations and with experienced people involved. The NGO itself is new

and needs support in terms of capacity development. Therefore, we are also proposing capacity development support for the Samoan conservation NGO that will in turn contribute to the sustainability (and legacy) of the project for the future.
367 words LTS noted

13. Methodology

Describe the methods and approach you will use to achieve your intended outcomes and impact. Provide information on how you will undertake the work (materials and methods) and how you will manage the work (roles and responsibilities, project management tools etc.).

(Max 500 words – repeat from Stage 1 with changes highlighted)

This project will take place in five parts.
We will identify as many sites with Manumea as possible in the first 8 months of the project. Key villages will be approached and people who spend time in the forest or have previously spent time in the forest (e.g. hunters, plantation holders) will be interviewed. A pilot study (CLP funded) has confirmed this is the best way to survey for Manumea. Three Manumea sites have already been identified using this method. The survey will determine:
a) if the community representatives have seen Manumea,
b) if they can identify Manumea,
c) where and when they have seen Manumea, and
d) any phenology or diet/nesting observations that may have been made.
Based on these surveys we will determine the key areas for further assessment/surveys.

Second, new sites will be surveyed. Manumea population and habitat use assessment: All targeted sites will be covered on foot at least three times at appropriate times to identify fruiting trees in the area that Manumea are likely to be using. Automatic recorders will be placed in appropriate locations for 1-2 months to determine the presence or absence of individuals. The effectiveness of high canopy mist-netting in these areas will be evaluated by finding appropriate trees and fly through paths to create a captive breeding population in the future, and the potential difficulties of implementing rat/cat control in these areas will be assessed. When Manumea are sighted, data on their age (adult or juvenile), diet and spatial use will be made to further inform management. Play back of calls will be used to attract Manumea at all targeted sites.

The third component will involve targeted conservation discussions at key sites. This section of the project will include consultations with key Matai (chiefs) and relevant groups (women, youth and faith-based groups) in villages to begin to develop a sustainable plan of action where they are involved with Manumea conservation. We will include discussions on the importance of partnership and establishing non-pigeon hunting zones as well as protecting key forest areas. Key forest sites will also be determined, as part of this study and villages will be informed as part of the consultation process. We would work towards building incentives of why protecting the Manumea would be benefit their community economically, socially and culturally focusing on the long term. Whenever possible we will involve local ecoguides in the surveys to build passion for the Manumea and also add in increasing the skills of those interested in the the eco-tourism industry for future bird watching activities, eco-tour trips, eco-friendly facilities etc.

The fourth step of the project will involve the capture of birds and the attachment of radio transmitters. Whenever possible breeding pairs will be targeted for transmitter attachment to increase the likelihood of nest discovery. Captured birds will be swabbed and tested for avian diseases in collaboration with experts in Australia and sexed using DNA techniques. All captured birds will be ringed to add in future identification. When nest trees are located, they will be wrapped in metal to prevent rats predating the nest (if possible) and other measures to prevent nest predation will be put in place. If nest predation is high (eg rats), the lower trunk of nest trees will be wrapped in metal to prevent predators from accessing nests. Knowledge of the biology of the species will be enhanced at this stage (this is critical for any future ex situ-captive breeding efforts).

The fifth step will be to refine the current recovery plan for the species based on the threats

identified for the species. This will then be followed with trials of recovery techniques by undertaking a pest eradication program and the appropriate training for staff to implement continual recovery either through invasive pest control or captive breeding.

Whilst all of these activities occur we will also be developing the capacity for the Samoan Conservation NGO insuring the sustainability and legacy of the project into the future.

660 words

14. Change Expected

Detail what the expected changes this work will deliver. You should identify what will change and who will benefit.

- If you are applying for Defra funding this should specifically focus on the changes expected for biodiversity conservation and its sustainable use.
- If you are applying for DFID funding you should in addition refer to how the project will contribute to reducing poverty. Q19 provides more space for elaboration on this.

(Max 250 words)

- Key sites for future *in situ* conservation action established (Priority High)
- Knowledge of the threats to the Manumea enabling appropriate conservation management (High)
- Knowledge of the biology of the species (this is critical for any future *ex situ*- captive breeding efforts) (Med)
- Development of capture and management techniques (Med)
- The development of a revised recovery plan which is based on new knowledge of the species and its threats (Low)
- The establishment of the disease which maybe impacting the population (Med)
- Support from villages/local people for conservation action. Local people will be empowered to establish rules to save the Manumea including limiting pigeon hunting in key areas and protecting key forest sites. (High – linked with bullet 1)
- The development of protected areas (by villages) against hunting and further logging (linked to above)
- An increase in local capacity (government and local NGO staff) for dealing with threats which are established to be leading to the decline of the Manumea (High)
- The capacity development of the Samoan Conservation Society. This in turn can impact the status of the Manumea and conservation in Samoa into the future (High see previous bullet)

15a. Is this a new initiative or a development of existing work (funded through any source)? Please give details (Max 200 words):

The Manumea species recovery plan was developed in 2006 with little knowledge of the species biology. In 2009 a team, visited three of the eight key areas identified in the recovery plan. No sightings of Manumea were obtained. A rapid biodiversity assessment of upland Savaii occurred in 2012. During this intensive survey only a single Manumea was sighted suggesting that the uplands of Savaii was not a strong hold for the species. This survey resulted in the upgrading of the species to Critically Endangered by the IUCN. On 10 occasions, during fieldwork on Ma'oma'o, Manumea were observed on Upolu. All these surveys represent snapshots and not a sustained effort; they indicate that Manumea are now rare. A workshop in Samoa was held in 2012 to discuss the future management of Manumea. It recognised that a combined programme of field and captive management was required for Manumea recovery as well as the development of an in country birdlife partner. In 2013 the Samoan Conservation Society was established and awarded a Conservation Leadership project (CLP) for the Manumea and guardianship of the Manumea. Initial surveys established 3 forest sites where the Manumea are regularly sighted.

15b. Are you aware of any other individuals/organisations/projects carrying out or applying for funding for similar work? **X ☐ Yes No**

If yes, please give details explaining similarities and differences, and explaining how your work will be

additional to this work and what attempts have been/will be made to co-operate with and learn lessons from such work for mutual benefits:

MNRE has some GEF funding however government capacity needs to be enhanced to increase the effectiveness of these funds and therefore partnerships are essential

15c. Are you applying for funding relating to the proposed project from other sources? X Yes ☐ No

If yes, please give brief details including when you expect to hear the result. Please ensure you include the figures requested in the spreadsheet as Unconfirmed funding**.**

National Geographic conservation fund- $18 000 USD- May 2014

Zoos Victoria- 5885 pounds- 2014

CLP continuation grant- $25 000 AUD- 2014

Crowd source funding- $60 000 USD ??? - 2014

16. Value for money

Please describe why you consider your application to be good value for money including justification of why the measures you will adopt will secure value for money?

(Max 250 words)

The team that will work on the Manumea conservation project have on-the-ground experience in Samoa working with local communities and in the sometimes inhospitable environment. Value for money will be provided by working with an already assembled and conservation-ready team, on a project that has already had recent media exposure and is primed for support and action. The amount of the grant will also provide value for money by unifying a series of currently small endeavors in to a unified framework, effectively levering already existing capacity in a positively interactive way to generate a result greater than the individual projects could have achieved. The proposed project will be based in Samoa and operate with reduced local costs, but at the same time work closely with experienced agencies in foreign developed nations (e.g. New Zealand) where the project will be able to maximize conservation impact at minimum cost. The skills developed by stake-holder investment in this project will be directly transferable; those in the local community will be able to continue the work developed by the project on the Manumea, while foreign researchers will be able to transfer the skills learnt to conservation projects on other island nations throughout the Pacific, and contribute to being regional conservation leaders.

17. Ethics

Outline your approach to meeting the Darwin Initiative's key principles for research ethics as outlined in the guidance notes.

(Max 300 words)

With the CLP project we showed strong research ethics and will continue to undertake these for the any further Manumea work. We will also fulfil all ethical requirements of the University (ANU) and follow ANU safety regulations.

- All research will follow all the requirements of the ANU ethics committee including the rules for animal capture and handling welfare
- We have strong health and safety standards and train all staff in safe procedure. Safety gear is provided when required along with appropriate training.
- Informed consent will be requested of all partners and local partners are involved with all elements of the study.
- We also insure that the well-being of all people involved with the project are considered in the study design this will be assessed by the ANU.

18. Legacy

Please describe what you expect will change as a result of this project with regards to biodiversity conservation/sustainable use and poverty alleviation (for DFID funded projects). For example, what will be the long term benefits (particularly for biodiversity and poor people) of the project in the host country or region and have you identified any potential problems to achieving these benefits?

(Max 300 words)

Long term benefits

- Knowledge of threats, biology and distribution of Manumea in Samoa will be enhanced
- Management techniques to produce suitable Manumea habitat in and around protected areas will be developed and trailed
- There will be a informed management plan with trained practitioners in place which will enable conservation management in selected sites to occur
- Capacity for the Manumea Conservation Programme in Samoa built
- There will be support in key villages for continued action to save the Manumea
- Key sites will be set aside with reduced hunting and a logging ban
- There will be a strong in country Conservation NGO in place which can continue the work long term.

Potential problems

- Cyclones can have a major impact on the forest and the Manumea and heavily affect access into sites.
- Increase in the population increases demand for food and new settlements which means more forest clearings in the future

19. Pathway to poverty alleviation

Please describe how your project will benefit poor people living in low-income countries. All projects funded through DFID in Round 20 must be compliant with the OECD Overseas Development Assistance criteria. Projects are therefore required to indicate how they will have a positive impact on poverty alleviation in low-income countries.

(Max 300 words)

The project will provide full time and part time jobs for local community members who provide assistance through tour guides and other field assistance responsibilities. Local communities can benefit from this initiative through increasing their capacity in biodiversity conservation strategies and actions which in turn build into providing and strengthening eco-tourism developments such as bird watching activities, eco-tour trips, eco-friendly facilities. All benefits will go into the community for maintenance and improving local livelihoods.

20. Exit strategy

State whether or not the project will reach a stable and sustainable end point. If the project is not discrete, but is part of a progressive approach, give details of the exit strategy and show how relevant activities will be continued to secure the benefits from the project. Where individuals receive advanced training, for example, what will happen should that individual leave?

(Max 200 words)

Completion of this project will terminate phase 1 of conservation of Manumea. We will have identified Actions that will turn around the decline in population, we will have identified key representatives in Civil Society, Government and at the local community level who will be empowered to undertake these actions and we will have established further programmes to fine-tune our knowledge regarding best practice conservation action.

21. Raising awareness of the potential worth of biodiversity

If your project contains an element of communications, knowledge sharing and/or dissemination please provide a description of your intended audience, how you intend to engage them, what the expected products/materials there will be and what you expect to achieve as a result. For example, are you expecting to directly influence policy in your host country or is your project a community advocacy project to support better management of biodiversity?

(Max 300 words)

Community advocacy project at the village level to support better management of biodiversity.

How to engage them-

1) Information on the Manumea will be sent to all Chief/Majors of villages with a Manumea newsletter based on the monitoring scheme designed for key sites to update them on the progress of the project

2) Local village meeting will occur at key areas

- Educational presentation on the Manumea
- Discussions on how to save the species- protecting areas and reducing hunting of pigeons (safe havens)
- A field trip to the forest will be undertaken and native trees will be donated for planting

3) Interested parties will be identified

4) Follow up meetings and formalisation of plans including the development of management

What we expect to achieve: The establishment of protected areas for Manumea against hunting and forest loss.

22. Access to project information

Please describe the project's open access plan and detail any specific costs you are seeking from Darwin to fund this. (See Section 9 of the Guidance Notes for further information)

(Max 250 words)

- All scientific papers arising from the project will be available as open access on the internet
- Datasets will be open access with the MNRE of Samoa and on research gate
- A summary of our results will be translated into Samoan and disseminated to the Matai through the Pulenuu/village mayor council.
- We will also have open access management plans available to download from the internet

23. Importance of subject focus for this project

If your project is working on an area of biodiversity or biodiversity-development linkages that has had limited attention (both in the Darwin Initiative portfolio and in conservation in general) please give details.

(Max 250 words) Understanding the basic biology of a species is critical for designing management plans to save species. Despite a high percentage of endemic birds in the Pacific being both endangered or critically endangered, even basic information on the biology of many species is lacking and has received little attention. For example, Samoa contains 11 endemic species of these the nesting biology of only 3 species is known. Countries in the Pacific Islands have little resources or capacity to undertake this work and it has received little to no attention for conservation organisations.

24. Leverage

a) Secured

Provide details of all funding successfully levered (and identified in the Budget) towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity.

Confirmed:

MBZ - $5000 USD

Rufford – £ 5757

CLP – $15 000 USD

MNRE- We are working closely with the MNRE staff on this project to build staff capacity. This partnership has lead to our receiving the CLP funding with some key MNRE staff.

b) Unsecured

Provide details of any matched funding where an application has been submitted, or that you intend applying for during the course of the project. This could include matched funding from the private sector, charitable organisations or other public sector schemes.

Date applied for	Donor organisation	Amount	Comments
	National Geographic conservation fund	**18 000 USD**	
	CLP continuation grant **Crowd source funds**	**25 000 USD**	

PROJECT MONITORING AND EVALUATION

MEASURING IMPACT

25. LOGICAL FRAMEWORK

Darwin projects will be required to report against their progress towards their expected outputs and outcomes if funded. This section sets out the expected outputs and outcomes of your project, how you expect to measure progress against these and how we can verify this. Further detail is provided in Annex C of the guidance notes which you are encouraged to refer to. The information provided here will be transposed into a logframe should your project be successful in gaining funding from the Darwin Initiative. The use of the logframe is sometimes described in terms of the Logical Framework Approach, which is about applying clear, logical thought when seeking to tackle the complex and ever-changing challenges of poverty and need. In other words, it is about sensible planning.

Impact

The Impact is not intended to be achieved solely by the project. This is a higher-level situation that the project will contribute towards achieving. All Darwin projects are expected to contribute to poverty alleviation and sustainable use of biodiversity and its products.

This project aims to reduce biodiversity loss in Samoa by preventing the continual decline of the Manumea and its associated forest habitat.

Outcome

There can only be one Outcome for the project. The Outcome should identify what will change, and who will benefit. The Outcome should refer to how the project will contribute to reducing poverty and contribute to the sustainable use/conservation of biodiversity and its products. This should be a summary statement derived from the answer given to question 14.

(Max 30 words) The establishment of methods, based on sound ecological knowledge, which will halt the decline of the Manumea and its habitat and the support of the community to implement these methods.

Measuring outcomes - indicators

Provide detail of what you will measure to assess your progress towards achieving this outcome. You should also be able to state what the change you expect to achieve as a result of this project i.e. the difference between the existing state and the expected end state. You may require multiple indicators to measure the outcome – if you have more than 3 indicators please just insert a row(s).

Indicator 1	Knowledge of threats, biology and distribution of Manumea in Samoa enhanced.
Indicator 2	Management techniques to produce suitable Manumea habitat in and around Manumea sites developed and trialled.
Indicator 3	Local communities and relevant conservation organizations support Manumea conservation by setting aside conservation areas and reducing hunting pressure
Indicator 4	Capacity for the Manumea Conservation Programme in Samoa is increased

Verifying outcomes

Identify the source material the Darwin Initiative (and you) can use to verify the indicators provided. These are generally recorded details such as publications, surveys, project notes, reports, tapes, videos etc.

Indicator 1	At least 5 new sites have been identified for future conservation of the Manumea, >30% of forested areas in samoa will be surveyed for Manumea, More than 3 Manumea have been tagged and radio tracked, position of nests have been identified
Indicator 2	Management of invasive species trialled in 1 area
Indicator 3	Increased number of sites given increased protection from hunting and logging agreed upon by community groups, Population metrics of pigeons (not only Manumea) in protected areas increasing
Indicator 4	The number of experienced and trained permanent staff has increased

Outcome risks and important assumptions

You will need to define the important assumptions, which are critical to the realisation of the *outcome and impact* of the project. It is important at this stage to ensure that these assumptions can be monitored since if these assumptions change, it may prevent you from achieving your expected outcome. If there are more than 3 assumptions please insert a row(s).

Assumption 1	Natural disasters (cyclones) do not prevent assess to key sites and lead to the complete disappearance of the species and staff turn over remains manageable
Assumption 2	New invasive species present which wipes out Manumea population
Assumption 3	Target communities remain open to working with the project
Assumption 4	That we will receive the funds needed to do this work

Outputs

Outputs are the specific, direct deliverables of the project. These will provide the conditions necessary to achieve the Outcome. The logic of the chain from Output to Outcome therefore needs to be clear. If you have more than 3 outputs insert a row(s). It is advised to have less than 6 outputs since this level of detail can be provided at the activity level.

Output 1	Manumea biology and threats established with sites for further conservation effort selected
Output 2	Management of invasive species (targeted species established in output1) trialled and management plan established
Output 3	Pigeon hunting bans and logging restrictions for key areas developed through participatory methods with key villages.
Output 4	The capacity for the local conservation NGO (the Samoan conservation Society) is enhanced

Measuring outputs

Provide detail of what you will measure to assess your progress towards achieving these outputs. You should also be able to state what the change you expect to achieve as a result of this project i.e. the difference between the existing state and the expected end state. You may require multiple indicators to measure each output – if you have more than 3 indicators please just insert a row(s).

Manumea biology and threats established with sites for further conservation effort selected	
Indicator 1	Revised recovery plan which incorporates biological information on the species
Indicator 2	Peer reviewed papers submitted on the biology of the Manumea
Indicator 3	At least 3 Manumea tracked with radio transmitters
Indicator 4	At least 5 new sites identified where Manumea conservation effort can be targeted

Output 2	
Indicator 1	Sites established where monitoring can occur
Indicator 2	Invasive management trialled at one site
Indicator 3	Working paper outlining the success of the techniques submitted to the Ministry of Natural resources

Output 3	
Indicator 1	Increased protection of sites recorded in minutes of village meetings
Indicator 2	Village groups self-reporting on success of venture submitted by yr 3.

Output 4	
Indicator 1	SCS improve capacity in working with threatened species conservation action and management

Verifying outputs

Identify the source material the Darwin Initiative (and you) can use to verify the indicators provided. These are generally recorded details such as publications, surveys, project notes, reports, tapes, videos etc.

Indicator 1	Peer reviewed publications, surveys, project report, videos, Recovery plan, maps
Indicator 2	Management plan, surveys, project report

Indicator 3	Videos, village meeting notes, project report, videos, village's report
Indicator 4	Project report, meeting notes

Output risks and important assumptions

You will need to define the important assumptions, which are critical to the realisation of the achievement of your outputs. It is important at this stage to ensure that these assumptions can be monitored since if these assumptions change, it may prevent you from achieving your expected outcome. If there are more than 3 assumptions please insert a row(s).

Assumption 1	Natural disasters (cyclones) prevent assess to key sites and lead to the complete disappearance of the species
Assumption 2	New invasive species present which wipes out Manumea population
Assumption 3	Target communities remain open to working with the project
Assumption 4	That we will receive the funds needed to do this work

Activities

Define the tasks to be undertaken by the research team to produce the outputs. Activities should be designed in a way that their completion should be sufficient and indicators should not be necessary. Risks and assumptions should also be taken into account during project design.

Output 1	
Activity 1.1	**Manumea surveys undertaken**
Activity 1.2	**Site identified where further research/conservation can occur**
Activity 1.3	**Radio tracking of Manumea**

Output 2	
Activity 2.1	**Sites selected for future conservation effort**
Activity 2.2	**Both cats and rats controlled in the 50ha area in the 6 week/ 2weeks prior to the start of the breeding season**
Activity 2.3	

Output 3	
Activity 3.1	**Development of short educational program on Manumea and forest preservation**
Activity 3.2	**Discussions with key village chiefs over the preservation of forest and reduction of pigeon hunting of specific sites as well**
Activity 3.3	**A local native tree planting program established to benefit Manumea in collaboration with the forestry department**
Output 4	
Activity 4.1	**Additional staff hired and trained for SCS**
Activity 4.2	**Funds applied for to insure the sustainable future of the organisation**
Activity 4.3	

26. Provide a project implementation timetable that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project.

	Activity	No of Months	Year 1				Year 2				Year 3			
			Q1	Q2	Q3 April	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1	**Manumea biology and threats established with sites for further conservation effort selected**													
1.1	Manumea surveys undertaken	7	x	x	x	x	x	X						
1.2	Site identification of where further research/conservation can occur	4			x	x	X	X						
1.3	Radio tracking of Manumea	9				x	x	x	X	x	x	X		
Output 2	**Management of key invasive species trialled and management plan established**													
2.1	Sites selected for future conservation effort	2						x	x					
2.2	Both cats and rats controlled in the 50ha area in the 6 week/ 2 weeks prior to the start of the breeding season	4								x	x	x	x	
2.3														
Output 3	**Pigeon hunting bans and logging restrictions for key areas developed through participatory methods with key villages.**													
3.1	Development of short educational program on Manumea and forest preservation	2		x	x									
3.2	Discussions with key village chiefs and relevant groups (women, youth and faith-based groups) over the preservation of forest and reduction of pigeon hunting of specific sites	4 4					x	x	x	x				
3.3	Local native tree planting program established to benefit Manumea in collaboration with the forestry department and the involved villages	3										x	x	x
Output 4	**The capacity for the local conservation NGO (the Samoan conservation Society) is enhanced**													
4.1	Additional staff hired and trained for SCS	2	x	x					x					
4.2	Funds applied for to insure the sustainable future of the organisation	10	x				x	x	x	x	x	x	x	x

27. Project based monitoring and evaluation (M&E)

Describe, referring to the Indicators above, how the progress of the project will be monitored and evaluated, making reference to who is responsible for the projects M&E. Darwin Initiative projects are expected to be adaptive and you should detail how the monitoring and evaluation will feed into the delivery of the project including its management. M&E is expected to be built into the project and not an 'add' on. It is as important to measure for negative impacts as it is for positive impact.

(Max 500 words)

The project leader will undertake interim evaluations during implementation as a first review of progress, a prognosis of a project's likely impacts, and as a way to identify necessary adjustments in project design. For instance, the sites identified from radio tracking (ie. size in the landscape the species requires) and the surveys (Manumea present at a site) will alter which sites are a priority for community liaisons. Depending on the site of the nest the targeted control of invasive species may also alter. Currently both cats and rats are identified as likely threats but nest cameras and nest position may identify another species ie. pigs as a threat. If this is the case pest control may also alter. All changes in pest control will require discussions with PII, birdlife and the MNRE as well as local communities.

Sites which are visited and where birds are sighted will be recorded by SCS every two weeks to have a ready measure of land area covered by the project. All captured birds will also be recorded and any nests found will entered into a database along with the number of hours the team spends in the field monitoring birds. SCS will also map the areas which are given increased protection from hunting and logging by community groups at the end of the liaison period. Population metrics of pigeons (not only Manumea) in protected areas will be measured when sites are established and 1.5 years later by SCS. This data will form a base line for further data collection by the MNRE to determine if the area is successfully increasing Pigeon numbers.

A secondary independent evaluation will be undertaken by Birdlife and ANU at the mid point of the study to identify any further changes that need to be made to the project. Terminal evaluations will be conducted at the end of each section of the project so that appropriate adjustments can be made to the project plan with the new knowledge which has been gained throughout the study.

FUNDING AND BUDGET

Please complete the separate Excel spreadsheet which provides the Budget for this application. Some of the questions earlier and below refer to the information in this spreadsheet.

NB: Please state all costs by financial year (1 April to 31 March) and in GBP. **Budgets submitted in other currencies will not be accepted.** Use current prices – and include anticipated inflation, as appropriate, up to 3% per annum. The Darwin Initiative cannot agree any increase in grants once awarded.

28. Value for Money

Please explain how you worked out your budget and how you will provide value for money through managing a cost effective and efficient project. You should also discuss any significant assumptions you have made when working out your budget.

(max 300 words)

Value for money will be provided by working with an already assembled and conservation-ready team, on a project that has already had recent media exposure and is primed for support and action. The amount of the grant will also provide value for money by unifying a series of currently small endeavours in to a unified framework, effectively levering already existing capacity in a positively interactive way to generate a result greater than the individual projects could have achieved. The proposed project will be based in Samoa and operate with reduced local costs, but at the same time work closely with experienced agencies in foreign developed nations (e.g. New Zealand, Australia and USA) where the project will be able to maximise conservation impact at minimum cost.

When calculating the budget we assumed an exchange rate of 1 British pound- to 1.79 AUD to $2.01 NZ D to 3.80 Samoan which is the current exchange rate as of 2, Dec 2013. An anticipated inflation of 3% for fuel has been added to the budget. Payment for the postdoc was based on the average payment of a postdoc at the ANU university. The staff payment in Samoa is based on the amount an employee working in the local government will receive. All equipment costs were estimated based on local New Zealand prices.

FCO NOTIFICATIONS

Please check the box if you think that there are sensitivities that the Foreign and Commonwealth Office will need to be aware of should they want to publicise the project's success in the Darwin competition in the host country. ☐

Please indicate whether you have contacted your Foreign Ministry or the local embassy or High Commission (or equivalent) directly to discuss security issues (see Guidance Notes) and attach details of any advice you have received from them.

Yes (no written advice) x ☐ **Yes, advice attached** ☐ **No** ☐

CERTIFICATION

On behalf of the trustees/company* of ANU

I apply for a grant of £**229,842** in respect of **all expenditure** to be incurred during the lifetime of this project based on the activities and dates specified in the above application.

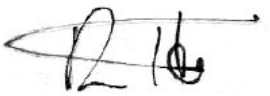
I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

(*This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)*

- I enclose CVs for project principals and letters of support.

Our most recent audited/independently verified accounts and annual report are also enclosed/can be found at: http://about.anu.edu.au/profile/annual-reports

Name (block capitals)	ROBERT HEINSOHN
Position in the organisation	Professor and Associate Director (Research), Fenner School of Environment and Society, ANU

Signed  **Date:** 2 December 2013

Stage 2 Application - Checklist for submission

	Check
Have you **read the Guidance Notes**?	yes
Have you provided **actual start and end dates** for your project?	Yes
Have you indicated whether you are applying for DFID or Defra funding. NB: you cannot apply for both	**Yes**
Have you provided your **budget based on UK government financial years** i.e. 1 April – 31 March and in GBP?	Yes
Have you checked that your **budget is complete**, correctly adds up and that you have included the correct final total on the top page of the application?	Yes
Has your application been **signed by a suitably authorised individual**? (clear electronic or scanned signatures are acceptable in the email)	**Yes**
Have you included a **1 page CV for all the Principals** identified at Question 7?	Yes
Have you included a **letter of support from the main partner(s) organisations** identified at Question 10?	Yes
Have you **been in contact with the FCO** in the project country/ies and have you included any evidence of this? We have been working in the country for the last 3.5 years	Yes
Have you included a **copy of the last 2 years annual report and accounts** for the lead organisation? An electronic link to a website is acceptable. http://about.anu.edu.au/profile/annual-reports - contains the financial statements.	yes
Have you **checked the Darwin website** immediately prior to submission to ensure there are no late updates?	**Yes**

Once you have answered the questions above, please submit the application, not later than midnight GMT on Monday 2 December 2013 to Darwin-Applications@ltsi.co.uk using the application number (from your Stage 1 feedback letter) and the first few words of the project title **as the subject of your email**. If you are e-mailing supporting documentation separately please include in the subject line an indication of the number of e-mails you are sending (eg whether the e-mail is 1 of 2, 2 of 3 etc). You are not required to send a hard copy.

DATA PROTECTION ACT 1998: Applicants for grant funding must agree to any disclosure or exchange of information supplied on the application form (including the content of a declaration or undertaking) which the Department considers necessary for the administration, evaluation, monitoring and publicising of the Darwin Initiative. Application form data will also be held by contractors dealing with Darwin Initiative monitoring and evaluation. It is the responsibility of applicants to ensure that personal data can be supplied to the Department for the uses described in this paragraph. A completed application form will be taken as an agreement by the applicant and the grant/award recipient also to the following:- putting certain details (ie name, contact details and location of project work) on the Darwin Initiative and Defra websites (details relating to financial awards will not be put on the websites if requested in writing by the grant/award recipient); using personal data for the Darwin Initiative postal circulation list; and sending data to Foreign and Commonwealth Office posts outside the United Kingdom, including posts outside the European Economic Area. Confidential information relating to the project or its results and any personal data may be released on request, including under the Environmental Information Regulations, the code of Practice on Access to Government Information and the Freedom of Information Act 2000.