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**REEFNET: a sustainable marine
conservation network for Komodo
National Park**

Peck, Mika | University of Sussex

Funding sought
Project start/end

£4,800.00
2 Jan 2019 - 22 Jan 2019

1. Contact Details

Q1. Lead applicant contact details

Please enter the contact details for the lead applicant. The lead applicant is the same as the Flexi-Grant account holder. Please note that the Flexi-Grant account holder will be the only contact point for the application.

Dr Mika Peck

University of Sussex

Primary Applicant

<http://www.sussex.ac.uk/lifesci/pecklab/>
(Work)

JMS5D24, University of Sussex, Brighton,
UK, BN19QJ, United Kingdom (Work)

Q2. Lead organisation contact details

Please enter the applicant organisation details

University of Sussex

<http://www.sussex.ac.uk/lifesci/pecklab/>

JMS5D24, University of Sussex, Brighton,
West Sussex, BN19QJ, United Kingdom

Please add any 'Committee Feedback' to the field below:

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Please add any 'Specific Ineligibility' feedback to the field below:

Please add any 'Conditions' to the field below:

Please add any 'Positive Feedback' to the field below:

2. Title & Location

Q3. Working title of the proposed Darwin project

REEFNET: a sustainable marine conservation network for Komodo National Park

Q4a. Host country (of proposed Scoping trip)

Indonesia

Q4b. Other collaborating country/ies

Q5. Is this a resubmission of a previous scoping application?

No

3. Scoping Principals & Lead Organisation Summary

Q6. Principals in Scoping work i.e. the travellers

Please give the details of the individuals (up to 2) from the lead organisation who would be directly involved in the Scoping work - i.e. making a visit to a host country. One page CVs must be provided.

Details	Main traveller	Second traveller
Surname	Peck	Eldridge
Forename(s)	Mika	Alice
Post held	Senior Lecturer in Conservation Biology	Lecturer in Music and Music Technology
Department	Ecology, Behaviour & Environment	Music
Telephone/Skype		
Email		
Country travelling from	UK	UK
Please attach the traveller's CV		

Q7a. About the lead applicant organisation

Briefly discuss your expertise in sustainable use or conservation of biodiversity and/or development. Please refer to recent track record you have in this field. You may be asked to provide evidence of this track record.

Dr Peck (University of Sussex) has expertise in developing and managing large successful multi-partner international conservation projects as PI of Darwin Initiative (DI) PRIMENET project 14-040 (2005–2008: Developing a sustainable conservation

network for primates in Ecuador) and subsequent legacy of parabiologist training, protected area establishment and reserve connectivity (2014–2018: Establishment of protected area for the critically endangered brown-headed spider monkey in NW Ecuador, Scott Rasmussen Family Foundation: \$1,250,000). Co-PI of DI CART project 22002 (2015-2018: Complete Altitudinal Rainforest Transect for research and conservation in PNG) and DI project 19008 (2012-2015: Building Biodiversity research capacity as a model to protect 100 km² of Papua New Guinea rainforest from logging) that addressed sustainable livelihood issues in a complex system and was awarded the prestigious Equator prize for sustainable development by the UNDP

The PI has established citizen science programmes (i.e. Earthwatch 2008 – 2013: Climate change, canopies and wildlife) that have left a proven legacy of sustainability (Santa Lucia Reserve www.santaluciaecuador.com). The PI research group, in collaboration with Dr Eldridge, has pioneered research into passive acoustic monitoring (Leverhulme Trust: Rapid Acoustic Survey: Validating Acoustic Methods for Biodiversity Assessment in tropical and temperate forest) providing the framework for establishing the marine conservation network.

Q7b. Would you like to include a letter of support from the lead applicant?

Yes

The limit for any single file uploaded as supporting materials with your application is 6MB. Please ensure documents are saved in PDF form where possible in order to minimise size.

5. Project Partners

Q8. About the partner organisation(s)

Please list all the partners involved and explain their roles and responsibilities in the Scoping work. Briefly discuss your partner's expertise in sustainable use or conservation of biodiversity and/or development. Please refer to recent track record they have in this field. You may be asked to provide evidence of this track record. If there is more than 1 partner organisation, you can enter the details of more partners below. Please specify which of the partners is new to the partnership.

1. Partner Name:	WWF - Indonesia
Website address:	www.wwf.or.id
Details of anticipated roles and responsibilities:	Core local partner with links to build network of key stakeholders for sustainable marine conservation network. Role in local funds management, advocacy and public engagement in full Darwin project. Central core contact for scoping visit partners (i.e. Dive Organisation Community Komodo (DOCK)/Komodo National Park Authority (KNPA)/Community groups)

<p>Expertise in sustainable use or conservation of biodiversity and/or development:</p>	<p>Effective Marine Protected Area (MPA) management is key to maintaining coastal resources, but it is presently inadequate across most of Southeast Asia with only 14 percent rated as effectively managed. WWF supports ecosystem based management or "EBM" - integrating protection of the productivity of ecosystems with sustainable use and preservation of marine biodiversity. Responsible and broad participation in use and management of marine natural resources is one of the main criteria to achieve successful EBM. In Komodo existing management capacity has been identified as limited at all levels with the mandate for management interventions unclear, and basic scientific knowledge of key characteristics that would drive meaningful EBM is low. WWF is currently working with the Komodo National Park Authorities and stakeholders (governments, industries and communities) to revive the Komodo Park management plan to address issues associated with explosive growth in tourism and conflict with fisheries. In-line with the WWF-Indonesia's overall conservation strategy, the marine program focuses on policy advocacy, establishing examples of successful conservation and management in the field and utilizing communication strategies to magnify results or create the will for change.</p>
<p>Name of main contact point and post held:</p>	<p>Sus Yantil Kamil (Marine Conservation Officer – Komodo)</p>
<p>Would you like to include a letter of support from this organisation?</p>	<p><input checked="" type="radio"/> Yes</p>
<p>Letter of Support:</p>	<p>The limit for any single file uploaded as supporting materials with your application is 6MB. Please ensure documents are saved in PDF form where possible in order to minimise size.</p>

Do you have more than one partner involved in the Scoping work?

No

Q9. Can you confirm that none of the partners (excluding the lead applicant) have led a Darwin Initiative Main Project before?

Yes

6. Justification & Concept Notes

Q10. Justification of need for a Scoping Award

Please provide written details of why alternative funding is not available from within your own organisation or from other sources. Will matched funding be provided?

There is the need to identify and strengthen links between the partner organisations and to develop a local stakeholder network. It is within this overall aim that scoping funding is sought from the Darwin Initiative for a 20-day visit to Labuan Bajo (Flores, Indonesia), Komodo National Park and local fishing communities to:

- i) Organise workshops with identified stakeholders to generate a framework for application for DI funding.
- ii) Identify extended stakeholder network
- iii) Generate a framework proposal for the Darwin Initiative identifying costs, methods, and outcomes
- iv) Review existing ecological datasets and participatory pelagic and reef monitoring methods and trial passive acoustic methodologies to enable us to gain an understanding of the practical problems that need to be overcome in designing a participatory, passive acoustic marine biodiversity monitoring system to monitor threat and biodiversity status for Komodo National Park.

University of Sussex does not have funds to support a scoping visit however it can offer match funding of £14,041 through contribution of the time/insurance cover of academic staff for scoping visit and project proposal development (£7687 Dr Peck/£6470 Dr Eldridge).

Carrying out this series of workshop to bring together all stakeholders would ensure the development of a participatory, focused and successful Darwin Initiative Project.

Q11. Concept note for the Scoping Award

This question concentrates on the scoping study work and should demonstrate the objectives of the Award including:

- objectives of the visit
- what work (including research, remote communications or other collaborations) has been carried out prior to applying for this Award
- what work will be carried out under the Award – please see the guidance for advice on what type of activity can be funded
- evidence of the proposed partners' intentions to collaborate in your Scoping work

The geographical location of Komodo National Park (KNP) within the coral triangle, at the intersection of both Indian and Pacific Oceans, make it a global centre for marine

biodiversity and a major draw for marine-based tourism that continues to grow exponentially. Lack of training in marine conservation within Komodo National Park Authority (KNPA) staff and ongoing conflict between fishing communities and tourism make it challenging to protect the biodiversity that underpins long-term sustainable livelihoods. WWF-Indonesia is currently working with KNPA to formulate a sustainable marine tourism development plan to address issues facing the park. Key issues identified include 1) the need to address lack of capacity in marine conservation for KNPA staff (KNP is administered by the department of forestry and staff generally have terrestrial training only), 2) monitor impacts to reef environments from fishing activity, 3) establish reef carrying capacities for tourist boat traffic, and 4) address conflicts between fishing communities and tourism through generation of sustainable livelihood alternatives.

This scoping award aims to bring UK expertise, via the Darwin Initiative, to the challenges faced by marine environments of Komodo National Park and local fishing communities. It will enable effective and participatory development of a project proposal built around a parabiologist network trained to establish and maintain a passive aquatic marine monitoring system (PAMMS). The network and system will provide KNPA with the capacity to better address threats to biodiversity within the Park whilst building win-win relationships with local communities.

The scoping travellers are invited by WWF based on their expertise in working with multiple stakeholders in previous DI projects in Ecuador and PNG, focusing heavily on capacity building of protected areas, monitoring and participatory engagement with rural and indigenous communities and expertise in passive acoustic monitoring.

Objectives of visit: Work undertaken as part of this award will include; meetings to develop the stage 1 application with existing stakeholders (WWF/DOCK/Komodo National Park Authority), participatory meetings with buffer zone fishing communities, and enable a contact visit to regional Universities - UNDANA University (West Timor) and UDAYANA (Bali) - to engage local academics and students. It will bring together a network to support marine conservation of Komodo National Park through a programme of research, capacity building and establishment of sustainable livelihoods. The scoping trip will allow partners to:

- Define project methods and budgets with stakeholder network
- Determine training needs and capacity building requirements for the proposed passive acoustic marine monitoring network
- Assess on-site infrastructure requirements and trial equipment for passive monitoring
- Identify mechanisms for long-term project support (identify exit scenarios with DOCK)
- Identify in-kind funding mechanisms (short and long-term)
- Outline roles and responsibilities of project participants in draft Memorandum of Understanding

No work has been undertaken prior to this award other than establishment of contact between WWF and DOCK by the PI in a visit to Komodo (personal funds) where the need for the project was identified. WWF/DOCK will provide support during the scoping trip organised by invitation from WWF/DOCK.

Q12. Concept note for the resultant project

This question concentrates on the full Darwin application you intend to submit after the Scoping Award and should discuss:

- the expected outcome and outputs of the resultant Darwin project
- how the resultant Darwin project would meet a need in the host country (and the wider region if applicable e.g. if the proposed project would be based in a UMIC)
- how the project would contribute to any or all of the following Conventions: the Convention on Biological Diversity (CBD); the Nagoya Protocol on Access and Benefit-sharing (ABS); the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA); the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- how the project will contribute to sustainable development in the country concerned
- briefly what the proposed partner's/s' expected role in the resultant Darwin project will be
- briefly the expected role of the Scoping travellers in the resultant Darwin project.

Outcome: Marine biodiversity of Komodo National Park protected by Komodo National Authority (KNPA), and sustainable livelihoods generated for community-based marine parabiologists, through establishment of passive acoustic marine monitoring system.

Outputs:

1. Establish passive acoustic marine monitoring system (PAMMS)
2. Community parabiologists and KNPA staff professionally trained to manage PAMMS.
3. Capacity building programme for communities and KNPA staff in marine conservation
4. Postgraduate training for KNPA staff at UoS (MSc Global Biodiversity Conservation) and/or local Universities
5. Sustainable livelihoods established by operating PAMMS through commercial diving operations

Indonesia's Komodo National Park, originally established to protect the terrestrial environments of the Komodo Dragon, is a Marine Protected Area (MPA) biodiversity hotspot. Its >1000 fish and 385 coral species generated a boom in dive tourism, with visitors growing from 44,672 over 5 years to 95,410 by 2015 and numbers set to rise. Rapid growth creates challenges for local government and KNPA and resource conflict between fishing and tourism impacts on effective management of marine resources that underpin opportunities for long-term sustainable development.

WWF-Indonesia and KNPA are formulating a sustainable marine tourism development plan to address issues facing the park. Key challenges are: building capacity in marine conservation for KNPA staff, monitoring impacts to reef environments from fishing activity, establishing carrying capacities for diving activity, and identifying sustainable livelihood opportunities for communities.

The REEFNET project addresses this through a 'Marine Parabiologist Network' to build capacity for KNPA staff, and livelihood alternatives for fishing communities (the parabiologists concept recruits and trains community members in addressing sustainability). The PI has applied parabiologist networks to engage communities in

conservation in Ecuador (DI Project number:14-040), that led to establishment of a protected area, and PNG (DI Project number:19008) to protect 10,000ha of forest. REEFNET would be the first application of the parabiologist model to marine conservation.

REEFNET will train KNPA staff and communities (parabiologists) to establish and maintain a passive acoustic marine monitoring system to monitor marine health, illegal fishing activity and tourist boat activity. Bringing together communities and park staff through training builds trust and sought-after transferrable skills and opportunities in the growing dive industry. Project sustainability, and an effective exit strategy, can be secured via commercial 'scientific tourism' with Dive Operators Community Komodo (DOCK) members offering tourists 'environmental diving packages' to maintain the PAMMS data collection network.

REEFNET addresses CBD Aichi Biodiversity targets through capacity building in environmental assessment tools to ensure biodiversity values are integrated into development and poverty reduction strategies. Operating through monitoring and educational programmes, established by expert field survey teams in association with community-based monitors, supported by government, academic institutions and NGOs, the project supports governmental implementation of CBD Articles 7,8,8c,10,12,13 & 18 incorporating the ecosystem approach (principles 5,6,10,11 & 12) whilst directly supporting UN SDGs 14 (Life Below Water) & 8 (Decent Work and economic growth).

Partner roles: UoS – Project management, passive acoustic monitoring system development, training (parabiologists/undergrad/postgrad). Scoping grant required to engage stakeholder network in participatory development of REEFNET proposal. Scoping travellers will PI/Co-PI final grant project.

7. Costs

Q13. Costs

Provide a detailed breakdown of costs to be funded by the Darwin Initiative in GBP.

	Main traveller	Second traveller	Total
Airfare including travel to airport			1,700.00
Visas and other travel documents			0.00
Total daily subsistence claimed (please provide details below)			2,000.00
Workshop costs (please provide details below)			£200.00
Other costs (please provide details below)			£900.00
		Total request from Darwin (must not exceed £10,000)	4,800.00

Additional details to support the figures above

	Main traveller	Second traveller
Daily subsistence rate per day	£50.00	£50.00
Number of days subsistence claimed (max 30 days per traveller)	20	20

Workshop costs

Please provide further details on your workshops costs.

Workshop costs cover costs for the following series of series of workshops and field assessments:

1. Core partner workshops x 2 Labuan Bajo (initial meeting WWF-Indonesia/KNPA/DOCK and draft proposal and budget MOU workshop)
2. Food costs for community meetings (3 communities min) and community members (min 3) accompanying research and dive team in scoping deployment of passive acoustic systems and training needs assessment.

Other costs

Please provide further details on your other costs.

Other costs of £900 cover local boat hire at £180 per day x 5 days. Boat hire is required for independent travel to communities (road connections do not exist) and for scoping trial of passive acoustic methodology.

Access to reef environments and deployment of acoustic monitoring equipment during the 5 day community visits will provide preliminary datasets to determine methodological feasibility for full grant proposal and provide community members (future marine parabiologists) experience in accompanying research and dive team in deployment of passive monitoring systems and help identify training needs for future network team.

8. Timetable & Activities

Q14. Activities and timings

Please complete the Scoping Award Timetable to include your anticipated dates of travel (start and finish) and activities to be undertaken on your trip. N.B.: this question is specifically about your travel plans – your dates and specific milestones during travel – NOT your timetable to Stage 1 application. Your application will be considered ineligible if this section does not specifically cover your planned scoping trip.

Date	Milestone
02/01/2019	START
03/01/2019	Arrival Labuan Bajo (Indonesia)
04/01/2019	Preliminary planning meetings with key partners (KNPA/WWF-Indonesia/DOCK) to introduce partners to scope of DI project. Preliminary needs assessments for KNPA.
05/01/2019	Participatory community Komodo National park and buffer - field deployment of passive acoustic monitoring trial with potential community marine parabiologists for capacity needs assessment
13/01/2019	Travel to Regional University partner UNDANA (Kupang, West Timor) to build local academic support network and engage local research team in project development.
17/01/2019	Return travel to Labuan Bajo for project draft development with local partners WWF-Indonesia/DOCK/KNPA and stakeholder representatives

21/01/2019	Return flight Denpasar (Bali) and present Darwin proposal to UDANA University (Denpasar) to extend academic support network.
22/01/2019	Return flight UK.
22/01/2019	FINISH

Q15. In what year would you expect to submit the full Darwin project application?

Round 26

9. Certification

Q16. Certification

On behalf of the

trustees

of

University of Sussex

I apply for a grant of

£4,800.00

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 scoping 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 have uploaded CVs for project principals
- I have uploaded letters of support from the lead application organisation and the partner(s)



Name	Dr Mika Robert Peck
Position in the organisation	Senior Lecturer in Conservation Biology
Signature (please upload e-signature)	

Date

31/01/2018

If this section is incomplete the entire application will be rejected.

10. Submission Checklist

Checklist for submission

	Check
Have you provided anticipated start and end dates for your Scoping trip?	<input checked="" type="checkbox"/>
Has your application been signed by a suitably authorised individual?	<input checked="" type="checkbox"/>
Have you read the Guidance documents for both <u>Main projects</u> and <u>Scoping awards</u> , and are you satisfied that your concept would be eligible for a main project application?	<input checked="" type="checkbox"/>
Have you read the current <u>Terms and Conditions</u> for this fund and can you confirm you are willing to be bound by these if your application is successful?	<input checked="" type="checkbox"/>
Have you uploaded 1 page CVs and letters of support as required?	<input checked="" type="checkbox"/>
Have you checked the <u>Darwin website</u> immediately prior to submission to ensure there are no late updates?	<input checked="" type="checkbox"/>