



Submit by Monday 14 January 2013

#### **APPLICATION FOR DARWIN FELLOWSHIP PROGRAMME ROUND 19**

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.

**1. Name and address of UK Host organisation** (NB: Notification of results will be by email and addressed to the main UK Expert listed in Section 5)

Name:	Address:
Prof. Jon Lovett	The School of Geography, University of Leeds, Leeds, LS2
	9JT Tel:
	Fax:
	Email:

**2. Name and official address of proposed Darwin Fellow** (include email and telephone details where available)

Biol. Kar	ina Aguilar	Vizcaíno
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Dirección de Conocimiento y Vida SilvestreÁrea de Protección de Flora y Fauna La Primavera, Jalisco, México

#### 3. Project dates, duration and total Darwin Initiative Grant requested

Proposed start date: 1 July 2013 Duration of project: 15 months End date: 30 Sept 2014							
Darwin funding	2013/13	2014/15	Total				
requested	£ 6500	£ 10600	£ 17100				

#### 4. Summary of proposed Fellowship ie Purpose and expected outputs and outcome

#### (Max 100 words)

Purpose: To consolidate the work of DI project 17027 'Market Based Scheme for Conservation in La Primavera Forest Mexico' by providing training and analysis in the selection, design and management of biological corridors that will be implemented in the reserve.

Outputs: 1. Training of the Darwin Fellow in GIS with a focus on tools for biological corridors. 2. Design of biological corridors to be implemented in the La Primavera biosphere reserve.

Outcomes: 1. Darwin Fellow able to pass on GIS training to other members of the management team. 2. Appropriately designed corridors implemented in La Primavera and other adjacent areas.

**5. Principals in the Project.** Please give the details of the individuals from the UK host organisations (and other institutions if relevant) who would be directly involved in supervising/working with the Darwin Fellow. Please 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 than one overseas project partner.

Details	Main UK expert	Other expert	Other expert
Surname	Lovett	Carver	Waters
Forename(s)	Jon	Steve	Ruth
Post held	Chair in Global Challenges	Senior Lecturer in GIS	Head of Ecosystem Services, Principal Specialist
Institution (if different to UK Host)	University of Leeds	University of Leeds	Natural England
Department	School of Geography	School of Geography	Evidence and Delivery
Telephone/ Skype			
Email			

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

#### (max 150 words)

The School of Geography at the University of Leeds seeks to be at the forefront of internationally cutting-edge research, helping to tackle major social, political and environmental challenges associated with global change. It is ranked in the top six geography departments in the UK (2008 Research Assessment Exercise) and awarded an 'Excellent' grading by HEFCE for the teaching quality, the School disseminates cutting edge knowledge and research on topics as diverse as tropical ecology, social inclusion and city futures. Teaching and research is delivered through the following research groups: Centre for Spatial Analysis and Policy, Cities and Social Justice, Citizenship and Belonging, Ecology and Global Change, River Basin Processes and Management, water@leeds, and the Wildlife Research Institute. The School contains, 50 academic staff, 25 postdoctoral researchers, 25 support staff, 700 undergraduates, 60 masters students, 65 research students. £5.4m has been awarded for research since Aug '11 from 24 different sponsors.

# 7. Describe briefly the aims, activities and achievements of the proposed Darwin Fellow's employing organisation. (Large institutions please note this should describe your unit or department)

#### (max 150 words)

La Primavera Natural Protected Area Managerial Office is the official governmental body that operates and monitors the La Primavera biosphere reserve. The managerial office gathers information, GIS files, forest statistics and other primary data on the forest and surrounding area. It coordinates stakeholder involvement in reserve management, runs educational programs and promotes tourism and sustainable use in the area. It was a major stakeholder engaged in the DI project and contributed substantially to the coordination of fieldwork activities within the reserve during the period 2009-2012. The office was also a critical catalyst to form the networks that enabled creation of the first implementation project to conserve wildlife corridors in La Primavera, which were based on the DI project research findings.

# 8. Describe briefly the proposed Fellow's current role within their organisation and their link to a Darwin project (If applicable), including the project reference number, his/her role in that project and any ongoing involvement.

#### (max 200 words)

Karina Aguilar is a senior member of the La Primavera Biosphere Reserve Management team with responsibilities for wildlife ecology and environmental education. As part of the outreach activities of the management office she regularly publishes articles on the reserve and has written a series of guides on natural history and mammals in the forest including 'Guía de Identificación de Rastros de Mamíferos en el Área de Proteccion de Flora y Fauna La Primavera' and 'Guía del Nuevo Guardabosque para el Bosque La Primavera'. Karina coordinated contact between the La Primavera office and DI project 17027 'Market Based Scheme for Conservation in La Primavera Forest Mexico'. In particular she was responsible for establishing collaboration between the Darwin project and the NGO Selva Negra, which resulted in implementation of the Ahuisculco Biological Corridor.

#### 9. Provide a concept note on the Darwin Fellowship. This should include:

9a A clear outline of the aim and objectives of the Fellowship

The aim of the Fellowship is to consolidate the work of DI project 17027 'Market Based Scheme for Conservation in La Primavera Forest Mexico' by providing training and analysis in the selection, design and management of biological corridors that will be implemented in the reserve. The implementation phase of DI 17027 consisted of developing a community-based corridor reforestation project on one of the potential corridor sites identified by the DI project. There are a number of other potential corridor sites and there is some urgency for developing these as a major road is planned around the La Primavera reserve which will create a major barrier to animal migration between the reserve and other adjacent forested mountains. Negotiations are currently underway between the road developers and La Primavera management for inclusion of migration routes across the road. The corridor routes need to be based on sound science so that the planning is well informed and an effective sustainable solution implemented.

The objective of the fellowship is to provide training of the Darwin Fellow in GIS with a focus on tools for biological corridors. The training will make use of the corridor design add on's for ArcGIS (www.corridor-design.org). Contacts will be made with other experts in corridor design, such as Paul Beier and his group in Northern Arizonia University; and UK experts in applied corridor design and management, for example Roger Catchpole who lives in Leeds, in order to create a sustainable international network for the Fellow. As part of a boarder approach to implementation, the Fellow will visit the Natural England ecosystem approach pilot schemes in the South Pennines and Lake District. These pilots are multi-stakeholder projects designed to integrate ecosystem services into landscape-level management plans and have demonstrated economic viability of the approach.

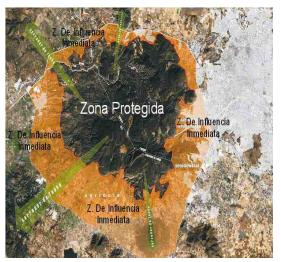
#### 9b The role of the UK Host organisation, and others where relevant (including contacts)

The Darwin Fellow will work within the Wildland Research Institute (WRi) in the School of Geography in the University of Leeds. WRi aims to identify and elucidate the requirements, strategies and policies for a transition to a greater presence of wild landscapes within the wider land uses. The institute is at the forefront of developing and implementing wilderness and wild land mapping techniques utilising spatial information technologies. WRi has developed unique tools and software to help in this process including web-based participatory mapping tools, crowd-sourcing of perception data, real-time rapid viewshed assessment tools, remoteness models, recreation opportunity spectrum mapping, and multiple criteria and fuzzy modelling based approaches to wilderness quality mapping. WRi will provide advice and training on GIS and spatial analysis tools for planning biodiversity corridors in the La Primavera Biosphere reserve and adjacent areas.

The Fellow will also gain experience in practical implementation of the CBD 'Ecosystem Approach' through visiting the Natural England ecosystem approach pilot projects that have been implemented in Bassenthwaite lake catchment (Lake District) and the Southern Pennines National Character Area. The latter area is close to Leeds and provides a good case study with which to compare the La Primavera management strategy. The Natural England programme in this area is focused on identifying and mapping ecosystem services, understanding how they provide benefits and how they can be valued and considered in decisions about projects for, or affecting, the environment. In the upland pilots Natural England aims to show how ecosystem services can be placed at the heart of land and water management in the landscape. The DI project 17027 'Market Based Scheme for Conservation in La Primavera Forest Mexico' aimed to produce a similar approach for the La Primavera reserve. The Natural England projects will thus enable the Darwin Fellow to make a comparison.

9c where appropriate, how the Fellowship will contribute towards sustainable development or sustainable livelihoods ie what the expected outcome of the Fellowship will be, with regard to the higher goals of the Darwin Initiative

The La Primavera Biosphere reserve is adjacent to the city of Guadalajara, which is a major metropolitan area with a population of more than 4 million people. The reserve provides ecosystem services to the city and is an important area for recreation. The reserve consists of two main zones: a central protected area, and a buffer zone within which economic activity is practised. The map below shows these zones and the location of potential corridors.



Biosphere reserves are established under UNESCO's Man and the Biosphere (MAB) Programme specifically to promote sustainable development based on local community efforts and sound science. Under the terms of the MAB programme, management of the reserve aims to 'reconcile conservation of biological and cultural diversity and economic and social development through partnerships between people and nature'. Design and implementation of the corridors will be carried out in line with these basic principles and so will directly contribute to sustainable development and livelihoods. In particular, corridor implementation will include provision for payments for ecosystem services. Whilst in the UK, the Fellow will visit the Natural England ecosystem approach pilot projects where the economic viability of the ecosystem approach has been demonstrated. Implementation of the Ahuisculco Biological Corridor from DI 17027 is via a community development project in keeping with the Biosphere Reserve principles. This approach will be extended to the other corridors to be designed during the Fellowship.

## 10. Legacy. Provide information on how the Darwin Fellow will utilise, promote and disseminate the benefits of the Fellowship on return to his/her home country. Will a strategy be developed during the Fellowship to ensure this is achieved?

#### (max 200 words)

The primary strategy for promoting and disseminating benefits of the Fellowship will be the design and implementation of the biological corridors in the La Primavera biosphere reserve. This will be a long standing legacy because the corridors will be structurally defined through community development projects and engineered migration routes over the proposed major road development around La Primavera. Part of the Fellow's role within the La Primavera office is education and outreach. Training in the principles and techniques biological corridors on the Fellows return to Mexico will be part of the legacy and a strategy will be developed during the Fellowship to achieve this.

#### 11. How will the Fellowship assist the Fellow's organisation and/or local communities and/or home country in working towards the objectives (or implementation) of the CBD/CITES/CMS? Please refer to specific Articles or cross cutting themes as appropriate.

#### (max 200 words)

Mexico signed the CBD in 1992 and ratified it in 1993. As part of implementation of the CBD in 2000 the Mexican Government established the Mexican Biodiversity's National Strategy stating that "Protection and Conservation" of biodiversity is the first strategic line. The Fellowship contributes directly to the first two policies of this strategic line: Conservation in situ, and Rescue of Elements of Biological Diversity. Activities of the Fellowship are also in line with developing the Mesoamerican Biological Corridor and resolutions on corridor made in the 9th World Wilderness Congress in 2009 in Mexico.

Development of the Ecosystem Approach is the primary framework for action under the CBD as stated on the CBD website: 'The Conference of the Parties, at its Fifth Meeting, endorsed the description of the ecosystem approach and operational guidance and recommended the application of the principles and other guidance on the Ecosystem Approach (decision V/6). The seventh meeting of the Conference of the Parties agreed that the priority at this time should be on facilitating implementation of the ecosystem approach and welcomed additional guidelines to this effect (decision VII/11).'

# 12. What collaboration has there been with the Darwin Fellow to date in developing the proposal, and what collaboration is planned for the duration of the Fellowship? Where relevant, describe any consultation or collaboration by the proposed Fellow within his/her own country.

#### (max 200 words)

The proposal has been developed throughout in collaboration with the Fellow and the La Primavera Management Office. DI project 17027 worked closely with the Fellow and the La Primavera office in both the research and implementation phases of the project. The fellowship represents an opportunity to continue this collaboration and build future project activities through developing joint funding applications to sources appropriate to Mexico as a medium-income country.

## 13. Where will the Darwin Fellow be based? Please be specific with organisational details and dates (where more than one location).

#### (max 200 words)

Initially the Fellow will be based in the La Primavera office in Guadalajara and will undertake language training from July 2013 to March 2014. During this period she will gather the data needed for design of the corridors in collaboration with the team at the School of Geography in Leeds. She will travel to the UK in April 2014 and stay for a period of six months to receive training, analyse the data and prepare the corridor management plan. This period has been chosen because of availability of space in the School of Geography and better weather conditions for conducting field visits. The training and analysis will be integrated with the mapping being undertaken at the Wildlife Research Institute on wilderness quality/opportunity with ecological/biological corridor design. Fuzzy/perception mapping using the Map-Me tool will be used for spatial analysis of specific stakeholder groups. Whilst in the UK she will visit the Natural England ecosystem approach pilot projects in order to gain experience of the practical application of the ecosystem approach.

Activity	Duration	2013/14					2014/2015									
		J	Α	S	0	Ν	D	J	F	Μ	Α	М	J	J	Α	S
English Language Training Guadalajara	9 months	Х	Х	Х	Х	Х	Х	Х	Х	Х						
Gathering data for corridor analysis La Primavera	9 months	Х	Х	Х	Х	Х	Х	Х	Х	Х						
Travel to UK	N/A										Х					
Training in GIS corridor analysis	2 months											Х	Х			
Analysis of La Primavera data	2 months													Х	Х	
Finalising corridor design and report writing	1 month															Х
Writing of academic journal paper	2 months														Х	Х
Visits to Natural England Ecosystem Approach pilots and discussions with Natural England	2 weeks													Х	Х	
Develop dissemination strategy	2 weeks									1				Х	Х	1

#### 14. Provide a programme of work, including key milestones, through the duration of the Fellowship

## 15. Costs. Using UK Government Financial Years ie April 2013 – March 2014 etc), please set out your budget for the Fellowship

	Unit cost	Unit cost No of months			Total
		2013/14	2014/15	2013/14	2014/15
Fellow's Subsistence contribution					
Arrival allowance	£300	NA	NA		300
London based	£1,200 pcm				
UK (outside London)	£1,000 pcm		6		6,000
Overseas	£tbc*	9*		4,500	
Host organisation's costs					
UK	£300 pcm				1800
Overseas	£tbc*				
Total Fellow and Host co	sts			4,500	8,100
Travel costs to Fellowship location	(up to £2,000)				
Return airfare	Details: Guadala	ajara - UK		1,200	
Travel to/from airports	Details: Manche	ster - Leeds			100
Visas, insurance, medical cover etc	Details: As per r here is estimate are unknown).		700		
Additional travel costs (up to £500 l	ocal travel OR £1,	500 for interr	national travel)	)	
Purpose of additional travel	Details: Visits to pilots	Ecosystem	Approach		
Airfares/train fares	Details: South P	ennines and	Cumbria		100
Travel to/from airports/stations	Details:				
Subsistence costs (inc number of days and rates)*	Details: 8 days	Details: 8 days @ 50			400
Visas etc	Details:				
Total travel costs	·				2,500
Fees and training costs					
Academic fees	Details:				
English language training costs**	Details: Language training in Guadalajara prior to coming to the UK			2,000	
Total fees				2,000	
TOTAL REQUEST FROM	DARWIN		£	6,500	10,600

\*for advice on rates please call the Darwin Application Unit 0131 440 5181. Following a discussion with the Darwin Application Unit an estimated cost of £500/ month for the nine months of data gathering prior to the Fellow's visit to the UK was agreed.

\*\*these costs are ringfenced and should be surrendered if not used.

#### 16. Other sources of funding: provide details and amounts

None

#### **FCO NOTIFICATION**

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 details of the Darwin Fellowship and the resultant work in the UK or the Darwin Fellow's home country

#### CERTIFICATION

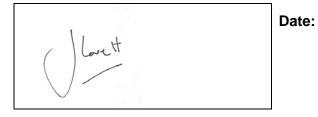
I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

I enclose CVs for project principals and letters of support as requested in the Guidance Notes. Our most recent audited accounts and annual report are also enclosed/can be found at *(delete as appropriate)*:

http://www.leeds.ac.uk/finance/finance\_accounts/Ellie%202/AR%20complete%20draft%2 07.pdf.pdf

Name (block capitals)	Jon Lovett
Position in the organisation	Chair in Global Challenges, School of Geography

Signed



14 January 2013

#### Fellowship Application - Checklist for submission

	Check
Have you provided actual start and end dates for the Fellowship?	Y
Have you provided your budget based on UK government financial years ie 1 April – 31 March?	Y
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?	Y
Is the concept note within 1,000 words?	Y
Has your application been signed by a suitably authorised individual? (clear electronic or scanned signatures are acceptable)	Y
Have you included a 1 page CV for the proposed Fellow and the UK experts listed in Section 5?	Y
Have you provided the relevant letters of support?	Y
Have you included a copy of your most recent annual report and accounts? An electronic link to a website is acceptable.	Y
Have you read the Guidance Notes?	Y
Have you checked the Darwin website immediately prior to submission to ensure there are no late updates?	Y

Once you have answered Yes to the questions above, please submit the application, not later than 2359h GMT on **Monday 14 January 2014** to <u>Darwin-Applications@ltsi.co.uk</u> using the name of the proposed Fellow 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).

**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.