



1094

DARWIN INITIATIVE

APPLICATION FOR DARWIN FELLOWSHIP PROGRAMME 2007

Please read the Guidance Notes before completing this form. Give a full answer to each section; applications will be considered on the basis of information submitted on this form. Please note the additional information requirements (CVs and letters of support as detailed in the Guidance for Applicants). Whilst this form is to be submitted by the host institution the proposed Fellow should be fully involved in development of the proposal. Please keep to word limits as specified and do not use a font size smaller than Arial 11pt for main text, Arial 10pt for financials.

Submit by Friday 16 March 2007

1. Contact Details

Ref. (Defra/ECTF only):

Name and address of UK applicant organisation (results will be sent to the postal address provided here)

School of Biological Sciences

University of Aberdeen

Aberdeen

AB24 2TZ

2. Darwin Fellow. A one page CV must be enclosed.

Name and official address of proposed Darwin Fellow

Hanta Julie Razafimanahaka, Madagasikara Voakajy, B. P. 5181, Antananarivo (101), Madagascar

3. Summary of proposed Fellowship (no more than 100 words)

The Fellowship is for one of Madagascar's most promising conservation scientists to follow an MSc course in Applied Ecology and Conservation at the University of East Anglia. The course has an excellent reputation and the modules offered provide high quality teaching in subjects that are not taught in Madagascar. It includes a dissertation which will be conduced with the Mauritian Wildlife Foundation, UEA, Aberdeen and Madagasikara Voakajy. The Fellow will return to her post with Madagasikara Voakajy where her many responsibilities, including projects on bushmeat, conservation education and training, will provide her with the ideal opportunity to transfer her newly acquired skills.

4.	Principals in 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. A 1 page
	CV on each must be enclosed.

Details	Main UK expert	Other UK expert	Other UK expert	Other UK expert
Surname	Bell	Racey		
Forename(s)	Diana	Paul		
Post held	Senior Lecturer	Regius Professor of Natural History		
Institution (if different to above)	University of East Anglia			
Department	School of Biological Sciences			
Telephone				
Fax				
Email				

5. Describe briefly the aims, activities and achievements of the UK applicant organisation. (Large institutions please note that this should describe your unit or department) (150 words)

The School of Biological Sciences brings together zoologists, botanists, foresters and agriculturalists into a single unit. It aims for excellence in teaching and research. The Units of Assessment in Organismal Biology and Plants and Soils were each rated 5 in the last research assessment exercise, and teaching was uniformly rated excellent by the Quality Assurance Agency. Main activities include: degree programmes at undergraduate and postgraduate levels, including an undergraduate degree in Tropical Environmental Science. Darwin Initiative funded projects by the University of Aberdeen have sponsored over 15 Malagasy trainees, led to the description of four new endemic bat species and created a new Malagasy biodiversity organisation to foster the aspirations of the young conservation scientists by providing academic and institutional support within Madagascar and to act as leaders in the field of applied ecology and conservation.

6. Describe briefly the aims, activities and achievements of the proposed Darwin Fellow's organisation. (Large institutions please note that this should describe your unit or department) (150 words)

Madagasikara Voakajy is a Malagasy biodiversity organisation dedicated to conserving endemic vertebrates and their habitats and specializes on bats and reptiles. It was created through a Darwin post-project grant (EIDP 10) and aims to provide career opportunities for promising Malagasy biologists. Regarding bat conservation, activities include (i) conservation education and awareness raising of local communities and environmental professionals (ii) studies on habitat preference and landscape ecology (iii) studies on diet, seed dispersal and pollination (iv) bushmeat investigations (v) advising government. The reptile work focuses mainly on developing ecological monitoring protocols for chameleons. All project activities include a large capacity building component for Malagasy students, local partners and national park staff. Since its creation in May 2005, Malagasy staff members have authored 12 peer-reviewed publications.

7. Describe briefly the proposed Fellow's current role within their organisation and link to a Darwin project. (150)

The proposed Darwin Fellow was an undergraduate trainee on a Darwin project (16/10/024) to build the capacity of Malagasy students to conserve microchiropteran bats and was then employed as a staff member on the subsequent Darwin post-project grant (EIDP 10). General responsibilities in her current position include student training, media liaison, transfer of GIS skills, database upkeep and management. Julie's specific responsibilities include managing a collaborative environmental education project with Madagasikara Voakajy and the Ministry of Higher Education and Research to produce curriculum material about bat conservation resources for rural primary schools. She is also principal investigator in a study on the conservation and ecology of *Hipposideros commersoni* which investigates habitat preferences, roost site behaviour and the demand for bat bushmeat.

- 8. Provide a concept note on the Darwin Fellowship. This should include:
 - a clear outline of the aim and objectives of the Fellowship
 - . the programme of work, including key milestones through the duration of the Fellowship and their timing
 - the role of the UK applicant organisation, and others where relevant (including contacts)
 - where appropriate, how the Fellowship will contribute towards sustainable development or sustainable livelihoods

Maximum 800 words

<u>AIM AND OBJECTIVES</u>: This fellowship is to follow and MSc course in Applied Ecology and Conservation that will provide training and research instruction of the highest standard and in disciplines that are not available on Malagasy post-graduate courses.

<u>WORK PROGRAMME:</u> The UEA's MSc in Applied Ecology and Conservation will provide Julie with the additional technical skills and perspective needed to make a significant contribution to sustainably managing Madagascar's natural resources. Her DEA (diploma) at ESSA-Forêts was largely vocational and designed to prepare students for a career in environmental management, particularly at the Ministry of the Environment, Water and Forests.

The UEA course will therefore augment her academic capacity through it focus on analysis, molecular technology, the philosophy of conservation, statistical treatment of large data sets, population modelling, problem solving and experimental design. As regional development plans in Madagascar are increasingly expected to address the needs of biodiversity conservation, extractive industries and poverty alleviation, decision makers require scientists to provide thorough analyses using appropriate methods and concise summaries. The UEA masters course will improve her ability to perform as a conservation biologist, leader and advisor.

During the first two semesters, four core modules will be taught:

- 1. Issues in conservation providing an in depth knowledge of current topics in fields relating to conservation
- 2. Multivariate statistics used in general ecological analyses
- 3. Ecological census methods including practical training in research planning and field trips
- 4. Research skills for ecologists, including presentation, information gathering and organisational skills.

Optional units that Julie has expressed an interest in include univariate statistics, conservation and society, conservation science, population dynamics and modelling and understanding environmental change.

The last 16 weeks will be used to undertake a research project that will develop the newly acquired skills and widen her knowledge and experience by using new field work techniques and analysis. UEA students have a strong tradition of undertaking their compulsory research projects across the world. Although Julie's project has yet to be defined, she will benefit the most from tackling a project outside of Madagascar. With the course director at UEA, we have proposed a project in collaboration with the Mauritian Wildlife Foundation (MWF). This would not only serve to bolster the links between UEA and MWF, but also between MWF and Madagasikara Voakajy. It would also enable Julie to become more active in conservation in the western Indian Ocean region.

<u>APPLICANT ORGANISATION:</u> As the applicant organisation, the University of Aberdeen, will administer the project funds.

SUSTAINABLE DEVELOPMENT: Back in Madagascar, the candidate's biggest challenge will be to develop Madagasikara Voakajy into a strong institution and, along with her colleagues, develop conservation plans for bats that recognise their inherent importance to Malagasy life (e.g. ecological role in fragmented landscapes, and as a source of meat for rural communities) as well as the problems (e.g. bat depredation of fruit crops) and the concern of the international conservation community (i.e. Madagascar's fruit bats are threatened species). This will take a delicate balance of advising government, conducting and using the results of sound science, and engaging local communities. Bat conservation offers potential livelihood benefits (e.g. ecotourism opportunities, direct payment reward for conservation and supplies of wild meat) that need to be implemented within a conservation framework. The UEA course, with numerous options available from the Schools of Biological Sciences, Environmental Sciences and Development Studies will provide a wide range of relevant modules that Julie will learn from and implement on her return to Madagascar.

9. 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? (200 words)

The candidate already holds occasional internal training seminars for her colleagues on GIS and radio tracking analysis. This would be extended to pertinent topics that Julie receives training in whilst in the UK that are not thoroughly covered in Malagasy universities (such as statistics, genetics). In reality however, most of the dissemination will be indirect and will occur on a daily basis after the candidate returns to work with Madagasikara Voakajy. No formal strategy will be developed, although the candidate will be expected to give a presentation to her colleagues and former academic supervisors on the salient points learned during the MSc. Julie will contact the non-resident British Ambassador in the British High Commission (Mauritius) for support on disseminating the benefits of the Fellowship and this is most likely to involve newspaper and television coverage in Madagascar. It is hoped that Julie will also establish important new academic links and donor contacts with UK-based individuals and organisations. The long-term future and success of Madagasikara Voakajy will depend on Julie and her colleagues developing their own scientific contacts and funding avenues. In this respect the legacy from Julie's fellowship is pivotal to the continued development of Madagasikara Voakajy.

10. 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 Convention on Biological Diversity? References to the Convention should be specific, for example, by referring to articles, cross-cutting or thematic issues¹. (200 words)

On her return to Madagascar Julie will be a leading scientist in a number of different projects that will assist Madagascar in its CBD obligations. Assessments of bats as bushmeat, the impact of the demand for this meat on bat populations and the importance of meat in providing food security for local populations will be a major theme (Art 6b, 8c). Madagasikara Voakajy also plans to establish a national network of bat roosts that are monitored by community groups or NGOs (Art. 7a) and it already has developed links with the extractive industry to monitor the impacts of environmental change (Art. 7c). By recommending important bat roosts for inclusion in Madagascar's new suite of protected area, Julie will assist Art. 8ab and planned investigations into the viability of sustainably harvesting fruit bats is consistent with Art. 8c and 10a. Julie's interest in the role that scared forest and taboo sites play in bat conservation are relevant to Art. 8j and 10ce. Julie is already actively involved in training students and this role will be enhanced following her Fellowship (Art. 12a). Julie is coordinating a pilot project with the Ministry of Higher Education and Research about bat conservation for the curriculum in rural primary schools. This project is expected to grow annually (Art. 13ab). Julie's ability to cooperate with other scientists will be augmented during the Fellowship with the fruits borne on her return to Madagascar (Art. 18).

11. 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. (200 words)

This proposal was prepared jointly by Richard Jenkins and the candidate in Madagascar and through email correspondence with Professor Paul Racey. The details presented reflect the aspirations of the candidate and the needs of her institution. The information on course content and structure was obtained by the candidate on a short visit to the UK in 2004 and her subsequent research on the internet which culminated in her being awarded a place on the UEA masters course for 2007/08. The letters of recommendation that support his application were solicited by the candidate. The collaboration between R. Jenkins and the candidate will continue, both by email when R. Jenkins is in Madagascar, and through meetings in the UK on his return. The main collaborative activities planned for 07/08 are fund raising for Madagasikara Voakajy and the submission of scientific papers to peer-reviewed journals. As a UEA alumnus, R. Jenkins will also act as an advisor to the candidate during her MSc on social and lifestyle matters related to living in the UK and studying in Norwich.

Defra December 2006

¹ Refer to the Guidance Notes for Applicants for further information

12. Provide details of the Darwin Initiative project (including the reference number) that the proposed Fellow was associated with, including his/her role in that project and any ongoing involvement. (200 words)

Julie was an undergraduate trainee on a Darwin project (16/10/024) and completed her research thesis in 2004. As a highly promising scientists, she was quickly recruited as a staff member on our Darwin post-project grant (EIDP 10), during which the candidate was a also part-time Diplôme d' Etudes Approfondies student at the Ecole Superieure des Sciences Agronomiques, Département des Eaux et Forêt, Université d'Antananarivo funded by a WWF Prince Bernhard Scholarship. The candidate returned to Madagasikara Voakajy as a full-time staff member in October 2006. EIDP 10 finishes in March 07 but the candidate will continue to manage the environmental component for a Darwin project in western Madagascar (14-006) and will continue her other duties for Madagasikara Voakajy through grants she recently received from the British Ecological Society (Overseas Bursary) and Wildlife Conservation Society (Research Fellowship). As a senior person in Madagasikara Voakajy Julie will be involved in future application to the Darwin Initiative as member of the host country institution.

13. Duration of the Fellowship: what are the intended start and finish dates?

1 September 2007 to 31 August 2008

14. Where will the Darwin Fellow be based? Please be specific with organisational details and dates (where more than one location). (200 words)

University of East Anglia, Norwich, Norfolk, UK. Registered at the School of Biological Sciences but also following courses in the Schools of Environmental Sciences and Development Studies (Sept. 07 to May 08 and August 2008)

Mauritian Wildlife Foundation, Grannum Road, Vacoas, Mauritius Mauritian Wildlife Foundation (June and July 2008)

15. Financial Aspects. Please use UK Government Financial Years ie April 2007 – March 2008 etc)

Fellow payment							
	07/08 08/09	2007/08	2008/09				
London: £1200/month	Number of months	£	£				
UK (outside London): £1000/month	Number of months 7 3	£	£				
Overseas location £ /month*	Number of months 0 0	£0	£0				
Host Organisations' costs							
	07/08 08/09	2007/08	2008/09				
UK: £300/month	Number of months	£0	£0				
Overseas location: £ /month*	£0	£0					
A. Total Fellow & Host Organisation Cos	£	£					

^{*} Figures available from Margaret Okot on 0207 082 8430

Actual travel costs (Return journey to Fellowship location)					
	2007/08	2008/09			
Return airfare. Details Antananarivo-Paris-London rtn.	£	£0			
Travel to/from airports. Details London (Heathrow) to Norwich (First open single)	£	£			
Taxi, train station-university	£	£			
Visas etc. Details Student (multiple entry) £85 pus DHL carriage to Embassy in Mauritius	£	£0			
B. Total Fellowship Travel Costs (Actual costs up to £2000 will be paid)	£	£			

Specify purpose. Maximum £500 within country of Fellowship location, £150	00 for internation	onal travel.
	2007/08	2008/09
Airfares Details Rtn. To Mauritius for research dissertation	£0	£
Subsistence Details (including number of days)	£0	£
1 month Port Louis, (30 days) @ £98 per day (4,400 MUR B&B, 1,768 MUR residual)		
1 month Rodrigues, (30 days) @ £36 per day (1,635 MUR B&B, 535 MUR residual)		
Rates provided by M. Okot on 1.3.07		
Travel to/from airports. Details UEA to Heathrow (£88), Mauritius (£20x2)	£0	£
Visas etc. Details No cost for Malagasy citizens	£0	£0
C. Total (Other travel) costs	03	£
		!
D. ACADEMIC FEES	2007/08	2008/09
Details University of East Anglia, MSc, Applied Ecology and Conservation	£1	£0
	£	£

FCO NOTIFICATION

Actual travel costs 'Additional Travel'

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

Additional costs to support the dissertation will be available from the University of East Anglia.

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.

Name (bl	ock capitals)			
Position organisat				
Signed			Date:	

Please return completed form to The Edinburgh Centre for Tropical Forests (ECTF) by 16 March 2007 (to arrive by midnight) by email to darwin-applications@ectf-ed.org.uk. A hard copy of the full application should also be sent to ECTF, Darwin Applications Unit, Pentlands Science Park, Bush Loan, Penicuik, Edinburgh EH26 OPH and should be postmarked 16 March 2007.