Submit by Monday 30 November 2009

DARWIN INITIATIVE APPLICATION FOR GRANT FOR ROUND 17: 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.

1. Name and address of organisation (NB: Notification of results will be by post)

Name:	**Address:**
H. Glyn Young	Durrell Wildlife Conservation Trust, Les Augrès Manor, Trinity, Jersey JE3 5BP

2. Project title (not exceeding 10 words)

Saving the Madagascar Pochard: the world's most endangered duck

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

Proposed start date: 1st April 2010 **Duration of project:** 3 years **End date:** 31st March 2013					
Darwin funding requested	**2010/11 £146,062**	**2011/12 £77,197**	**2012/2013 £59,182**	**2013/14 £**	**Total £282,441**

4. Define the purpose of the project (extracted from logframe)

To avert the imminent extinction of the Madagascar Pochard through conservation breeding, site protection, public engagement and capacity building. The conservation of the Pochard is used to promote wetland restoration through community involvement and human livelihood support.

5. Principals in project. 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	**Project Leader**	**Other UK personnel (working more than 50% of their time on project)**	**Main project partner and co-ordinator in host country/ies**
Surname	Young		Lewis
Forename (s)	Hywel Glyn		Richard Eric
Post held	Conservation Biologist		Programme Manager
Institution (if different to above)			Durrell-Madagascar
Department	Conservation Science		
Telephone			
Email			

6. Has your organisation received funding under the Darwin Initiative before? If so, give details.

Reference No	Project Leader	Title
15/005	**H G YOUNG**	Conservation of the Mangrove Finch *Cactospiza heliobates*
15/017	**JOHN E. FA**	Implementing a Recovery Plan for the Critically Endangered Pygmy Hog in Assam
15/038	**CARL JONES**	Restoring Island Biodiversity: the Reintroduction of Endemic Mauritian Reptile Communities
EIDPR089	**RICHARD YOUNG**	Institutional capacity building for invasive bird control in the Pacific
10004	**JOHN E. FA**	Devising solutions to bushmeat exploitation in the Sanaga-Cross region, Africa
EIDPO031	**H G YOUNG**	Restoration of the Mangrove Finch in Isabela, Galápagos.
17025	**RICHARD YOUNG**	Building evidence and capacity to conserve Hispaniola's endemic land mammals

7. IF YOU ANSWERED 'NO' TO QUESTION 6 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)
Activities (50 words)
Achievements (50 words)

8. Please list all the institutions involved including the UK/collaborative (where there are partners <u>in addition</u> to the applicant organisation) and host country partners that will be involved, 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 host country partners to be involved in the project. Please provide written evidence of partnerships. Please copy/delete boxes for more or fewer partnerships.

Lead UK institution and website where available:	**Details (including roles and responsibilities and capacity to engage with the project):**
Durrell Wildlife Conservation Trust www.durrell.org	The **Durrell Wildlife Conservation Trust** (Durrell) was founded by author and naturalist Gerald Durrell in 1949. Its mission is to save species worldwide. It has a proven track in this area, notably in pulling back Mauritius Kestrel, Pink Pigeon and Echo Parakeet from the brink of extinction. Durrell staff work in threatened habitats around the world, and has established a worldwide reputation for its pioneering conservation techniques, with a particular focus on vulnerable communities of endemic animals. Its staff has extensive experience of wildfowl and conservation-breeding programmes, particularly for Malagasy endemics. Durrell has an internationally renowned training centre for conservationists at its UK headquarters. In this project Durrell will manage the Darwin project and provide avicultural support and training to local staff, research capacity and CEPA training to in-country staff.

Lead host country Partner and website where available:	**Details (including roles and responsibilities and capacity to engage with the project):**
Durrell-Madagascar	**Durrell-Madagascar** is a registered NGO which operates through an accord with the Madagascar Government and currently works in seven regions of the country. Its work focuses on threatened species, captive-breeding and community engagement. Durrell-Madagascar employs two staff from Durrell's headquarters, and over 30 nationals. In this project Durrell-Madagascar will manage the conservation breeding programme, employ Malagasy project staff on the ground, manage operations at the conservation breeding facility and engage with local communities.

Partner Name and website where available:	**Details (including roles and responsibilities and capacity to engage with the project):**
Wildfowl & Wetlands Trust www.wwt.org.uk	The **Wildfowl & Wetlands Trust** (WWT) is a leading UK conservation organisation saving wetlands for wildlife and people across the world. WWT is internationally renowned for its avicultural expertise in breeding wildfowl, including threatened species. It has captive-breeding programmes for 11 of the 12 *Aythya* pochard species and was the first institution to devise propagation techniques for three of these. WWT has a long history of wildfowl research, and has led the development of several species action plans for Europe and the African-Eurasian Waterbird Agreement (AEWA). It is increasingly working with local communities in developing countries to create integrated and sustainable conservation solutions. In addition, WWT has over 60 years' experience of delivering high quality Conservation Education and Public Awareness activities (a) at its nine wetland centres in the UK, (b) as part of international conservation projects and (c) through Wetland Link International, a global network of *c*300 wetland education centres across six continents. In this project WWT will provide experienced avicultural personnel to oversee captive husbandry, from collecting eggs in the wild to rearing ducklings, captive breeding and veterinary care. WWT staff will also train Malagasy staff in wildfowl rearing techniques. WWT will lead in designing the breeding facility, development of the species action plan, and help in designing the CEPA programme. With Durrell, WWT will also deliver publicity, provide overall project management, and fundraise for the conservation breeding centre.

Partner Name and website where available:	Details (including roles and responsibilities and capacity to engage with the project):
The Peregrine Fund www.peregrinefund.org	**The Peregrine Fund** (TPF) is a US NGO working worldwide to conserve birds of prey. The organisation's conservation achievements include restoring species in jeopardy, conserving habitat, educating students, training conservationists, providing factual information to the public and accomplishing good science. TPF has been working in Madagascar since 1990 and employs 30 full-time Malagasy staff. It works to create community-based protected areas to conserve tropical forest and wetland ecosystems and to monitor human impacts on fisheries, forests, and other natural resources. TPF biologists were responsible for rediscovering the Madagascar Pochard in 2006 and immediately established a lakeside camp. From this base they have been studying the species' behaviour and natural history since 2006. They have also provided informal site protection by working with the local community to raise awareness, stop hunting and minimise use of the lake. In this project, TPF's role will be to use its lakeside presence and close community links to champion site protection and community engagement.

Partner Name and website where available:	Details (including roles and responsibilities and capacity to engage with the project):
Asity Madagascar www.asitymadagascar.org	Asity Madagascar is a conservation NGO and membership organisation employing 24 staff. Asity is the BirdLife International affiliate in-country and its activities include the conservation of key species, sites and habitats and the active participation of local communities to improve their quality of life through creation of community-based protected areas. In this project, Asity is a new partner but will play a key role in directing and delivering CEPA activities, particularly in schools, and generating national publicity for the project.

Partner Name and website where available:	Details (including roles and responsibilities and capacity to engage with the project):
Le Ministère de L'Environnement et Forêts (Government of Madagascar)	The Government of Madagascar's Ministry of the Environment and Forests is a key project partner and is responsible for all aspects of legal environmental projection in Madagascar, including granting permits for the project activities. The Ministry has been closely involved with the partners to conserve the Pochard. Ministry representatives met with the project partners in July 2009 and a Ministry representative from Antananarivo accompanied the partners on a 12-day reconnaissance trip to assess extraction of wild birds and to identify potential sites for the captive-breeding facility. The representative also helped cement good relations with the local Mayors in the region surrounding the lake with the last remaining wild Pochards. The Ministry has helped develop the major project proposal from the partners and is developing a joint Memorandum of Understanding. It has already provided a permit for egg collection, allowing the partners to carry out emergency egg extraction in October/November 2009. In this project, the Ministry will provide continuing policy support for the project. It has the legal capacity to establish protected area status for the lake and to provide permissions for ongoing activity, and will liaise with other local government offices in the region.

9a. Have you consulted stakeholders not already mentioned above? ✓ **Yes** ☐ **No**
If yes, please give details:
The villagers at Bemanevika (the village closest to the lakes where the Pochard was rediscovered) and other communities in the Bealanana region (the nearest town) have been consulted throughout the planning of this project since the Pochard's rediscovery in 2006. In observance of local traditions, the approval of the ancestors was sought at a village celebration (Joro) in October 2009 attended by representatives of several local villages, project partners and national and local government. Local stakeholders feel strong ownership of the project and have stipulated that all potential sites for the captive breeding facility should be within the same region (Sofia) as the Bemanevika lakes.

9b. Do you intend to consult other stakeholders? ✓ **Yes** ☐ **No**
yes, please give details:
We have closely consulted a wide range of stakeholders and developed support for the project from all quarters. In addition, the following further stakeholders will be invited to attend the action planning workshop held as part of the Darwin project: key organisations active in Madagascar wetland conservation (e.g. CI and WWF); advisory bodies to Ministry of Environment and Forests including the National Ramsar Committee and Protected Area Development Committee; Madagascan zoos including Ivoloina and Parc Tsimbazaza; Ministries of Agriculture & Fisheries and Rural Development and the NGO, Madagascar National Parks (formerly ANGAP).

9c. Have you had any (other) contact with the government not already stated? ✓ **Yes** ☐ **No**
If yes, please give details:
- Ministry representatives from the Sofia region (in which the lake is found) are fully engaged and integrated with the project. They accompanied project staff to the lakes at Bemanevika in July 2009 and helped choose the location for the conservation breeding facility
- Representatives of local government offices (planning department) also took part in the July trip to identify a site for the facility
- In addition, we have met with the mayors of Bemanevika (the village by the Pochard lakes) and local towns. The mayors are all supportive of the project. These are influential figures within their communities who will play a key role in ensuring that local people work with us to protect the Pochard.

We are confident that we are fully engaged at all relevant political levels and that there is active support for the project among national, regional and local political stakeholders.

9d. Is any liaison proposed with the CBD/CMS/CITES focal point in the host country? ✓ **Yes** ☐ **No**
If yes, please give details:
Le Ministère de L'Environnement et Forêts is the main focal point for all matters concerning the CBD, CMS and CITES and is a main project partner.

9e. Will your project support any work in the UK Overseas Territories? ☐ **Yes** ✓ **No**
If yes, please give brief details stating which Territory/ies will be involved.

PROJECT DETAILS

10. Please provide a Concept note (Max 1,000 words) (repeat from Stage 1, with changes highlighted)

The Madagascar Pochard (*Aythya innotata*), the most threatened duck and possibly most threatened bird in the world, was believed extinct for 15 years until rediscovered in 2006. Today, around 20 birds exist in the wild in two small lakes, in north-western Madagascar; the species is classified as Critically Endangered by IUCN. Birds breed in a tiny area of one of the lake's shorelines, and although more than 10 nests were found in 2007 and 2008, no ducklings survived in 2008. Observations in 2009 revealed a skewed sex ratio, with just 6–8 females. The lake has currently only temporary statutory protection. A local site guardian is being provided by The Peregrine Fund (TPF). There is an urgent need for emergency measures, since without dedicated conservation action; the species is likely to become extinct in the near future.

The long-term aim of this project is to establish a viable population of Madagascar Pochard in the wild, through a conservation-breeding and release programme to restore the species in its former

range. The purpose of this project is to ensure the immediate survival of the species, initiate the breeding programme and facilitate participation of the local community in conservation actions at the breeding lakes.

Since the Stage I application, the partners undertook emergency action given the imminent risk of extinction. Three clutches of Pochards were extracted from the wild in October 2009 and 24 ducklings are being reared by Durrell and WWT aviculturalists in a temporary breeding facility. All are growing well under expert care. The emergency activity in 2009 has enabled us to prove the viability of several aspects of our methodology. Our plans for extraction have been shown to be successful, and sufficient to overcome logistical and practical difficulties of working, and applying UK rearing practices, in this part of Madagascar. It has also greatly increased the chances that birds will be available for a conservation-breeding programme beginning in 2010, even if the species becomes extinct in the wild in the meantime.

As a consequence, there has been a small increase to the overall budget: since we have ducks in captivity, we have budgeted for a full complement of staff at the conservation breeding facility from July 2010. This will enable Malagasy technicians to be trained as aviculturalists with the existing captive birds from the outset rather than, as previously intended, waiting until November (when birds would have been secured from the wild).

Long-term restoration for the Pochard requires healthy wetlands managed sustainably by local communities. Therefore this species will act as a flagship for integrated habitat conservation within its range, as well as a model for wetland restoration in Madagascar. Madagascar's natural assets are key to ecotourism development and sustainable livelihoods. Wetlands have long been important for fishing, hunting and agriculture, but this has become more intensive and less discerning in recent decades, seriously threatening native biodiversity. Key threats are the conversion of wetland habitat to rice production or drainage for crops; hunting of birds; and overfishing, particularly using fine-mesh gill-nets. Deforestation within wetland catchments has also led to increased siltation, reducing water quality and further damaging wetlands. Invasive alien plants and fish have also altered the functioning of many wetlands.

Over the long term, the project will need to address many of these challenges and assist Madagascar meet its CBD obligations, through the delivery of Article 6 (a) the development of national plans or programmes for the conservation and sustainable use of biological diversity, Article 9 (a-e) (*Ex-situ* conservation), Article 12 (Research and Training) and Article 13 (Public Engagement and Awareness). The project is also contributes to Articles 7, 8 and 10 (d & e).

Local stakeholder engagement and community support is fundamental, and a participatory approach will be used to build ownership. The project will build capacity within Madagascar to deliver a comprehensive outreach programme targeting local communities near the breeding centre, focusing on schools, and tourists and general public nationally. The local community feels a strong sense of ownership of the species, and it is important that any breeding facility is established close to the remaining site. In July 2009, a government owned area of land was identified near Antsohihy to build a conservation-breeding centre and public engagement facility. Here, we will also train Malagasy staff in aviculture and public engagement.

We will employ action planning, using a participatory stakeholder approach, to identify the full range of measures required. Given the species' urgent plight, an *ex situ* population will be established as an emergency measure. A species recovery plan will distinguish key activities needed over the next 10 years, organisational responsibilities, and timeframes for their delivery. Research, monitoring, release-site identification and restoration, reintroduction, policy, engagement, and livelihood needs will be identified, along with potential funding mechanisms.

Basic research into ecological requirements of the species in the wild to guide reintroduction is being conducted. Complementary research is planned to investigate wetland status and resilience, and the distribution and values of ecosystem services, at a landscape scale in order to design a wetland restoration programme optimised for benefits to biodiversity and people. A genetic analysis of all captive birds will establish relatedness and guide captive-breeding programme.

Long-term statutory safeguards for Bemanevika will be instituted and implemented with the close involvement of central government.

By the end of the Darwin project we intend to have reduced significantly the risk of extinction of the Madagascar Pochard, through establishment of a viable captive population. We aim to have established statutory protection for the wild population, to have developed skills in Communication, Engagement and Public Awareness (CEPA) and to have built a wide constituency of support for the project locally, and across Madagascar. Beyond the 3-year scope of this project, we will facilitate and promote restoration of key wetland habitats for the benefit of local livelihoods and for reintroduction of the Madagascar Pochard. This effort will act as a model for the use of a flagship species for conservation of Madagascar's biodiversity.

11a. Is this a new initiative or a development of existing work (funded through any source)?
Please give details:
The project builds on Durrell's long-term research into the Madagascar Pochard since 1989. However, planning for the Darwin project started in earnest following the rediscovery of the Madagascar Pochard at the Bemanevika lakes in 2006.

In July 2009, the project partners (Durrell, Durrell-Madagascar, WWT, TPF-Madagascar and the Ministry of the Environment and Forests) made a reconnaissance visit to Bemanevika to develop plans for extracting eggs and transporting ducklings, and to identify a location for a breeding facility.

The partners decided to implement an emergency programme of egg extraction in 2009. Three clutches of eggs were collected by partners at the lake in October and November 2009, and 24 ducklings are now being reared in temporary accommodation. The need to develop this early work into a full conservation programme through the Darwin project remains unchanged.

The work to date has been funded through a grant from the Mitsubishi Corporation Fund for Europe & Africa (£30,000 awarded to WWT) and a United States Fish & Wildlife Service Assistance Award (£17,899 awarded to Durrell), with core funds provided by partners.

11b. Are you aware of any other individuals/organisations/Darwin Initiative projects carrying out similar work? ☐ **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:

No other organisation is working on the Madagascar Pochard.

12. Please indicate which of the following biodiversity conventions your project will contribute to: -
At least one must be selected.
- Only indicate the conventions that your project is directly contributing to.
- No additional significance will be ascribed for projects that report contributions to more than one convention

Convention on Biological Diversity (CBD)	✓ **Yes** ☐ **No**
CITES	☐ **Yes** ☐ **No**
Convention on Migratory Species (CMS)	☐ **Yes** ☐ **No**

What problem is this project addressing and how was it identified? (150 words)
The Madagascar Pochard is classed by IUCN as Critically Endangered. Surveys documented a decline since the early 20th Century, and the species was considered possibly extinct earlier this decade.

After it was rediscovered at Bemanevika lake in 2006, Durrell and WWT undertook surveys for Pochards in the region in 2007 but none was found. It is likely that the world population numbers just 20 birds in the wild. All occur on one small (35 ha) lake. Only six females were found in 2009, and observations show breeding success is very poor (no young fledged in 2008). There is a high

risk of imminent extinction due to chance events.

The species' decline follows centuries of wetland habitat degradation throughout Madagascar, including habitat loss (particularly conversion to agriculture), siltation as a result of deforestation, and the introduction of exotic fish, and indiscriminate hunting.

What will change as a result of this project? (150 words)

This project will avert the imminent extinction of Madagascar Pochard.

- An *ex situ* population of 50 birds will be established. A bespoke conservation-breeding facility will be built, and Malagasy staff trained as aviculturalists. This will provide birds for release into the wild in future.
- Protection of the last remaining site will be secured. This, combined with raising public awareness in the region to build a wide constituency of support, will greatly reduce the risk of extinction in the wild.
- A species action plan will be published, identifying threats and conservation needs and priorities over the next 10 years.
- These measures will pave the way for re-introduction of the species to the wild in future. The Pochard will then be used as a flagship species for the restoration of wetland biodiversity that considers sustainable use and livelihood needs surrounding wetlands in Madagascar.

Why is the project important for the conservation of biodiversity? (150 words)

This project will prevent extinction of a unique and endemic species (the only true diving duck in Madagascar) and create a platform for the restoration of eastern wetlands, the most threatened ecosystem in Madagascar. Wetlands support high levels of biodiversity, and those in Madagascar support large numbers of endemic species. Wetland loss has resulted in a decline in important ecosystem processes, particularly aquatic plant dispersal and a revival of natural waterbird communities will help restore these.

The partners are committed to a long-term investment in this species. Eventual re-establishment of the Pochard will require a network of healthy wetlands, and habitat restoration will be an important part of the key long-term objectives. These will develop solutions for sustainable wetland use and livelihood needs of local communities in a particularly poor country. This will also be the first bird re-introduction project in Madagascar and will provide transferable skills for other species.

How does this relate to one or more of the biodiversity conventions? (150 words)

The project will assist Madagascar to meet its CBD obligations through the delivery of Article 6 (a) the development of national plans or programmes for the conservation and sustainable use of biological diversity, Article 9 (a-e) (*Ex-situ* conservation), Article 12 (Research and Training) and Article 13 (Public Engagement and Awareness). The project is also contributes to Articles 7, 8 and 10 (d & e).

13. How will the results of the project be disseminated; how will the project be advertised as a Darwin project and in what ways will the Darwin name and logo be used? (max 200 words)

The Darwin Initiative will be fully acknowledged in all publications, materials, interviews and publicity and the logo prominently displayed.

- PR teams at Durrell, WWT, TPF and Asity Madagascar have already generated huge press/public interest in 2009's emergency egg extraction. The high-profile story generated headlines such as 'World's rarest duck gets second chance' and was covered in all UK national papers and on the BBC World Service. We will use this momentum to generate interest in the Darwin project.
- Durrell and WWT, combined, have a membership of around 200,000 individuals and their visitor centres attract almost one million members of the public annually. Durrell and WWT will disseminate information about the project to their visitors and members, through their Centres, membership magazines and their websites. Both organisations' websites already feature a blog following the Pochard story.
- Findings will be published in scientific papers in peer-reviewed journals and in popular articles

in birdwatching magazines, websites *etc*.
- The Darwin logo will be included on capital items, e.g. the breeding facility, signage, project vehicle.
- Various documents/materials will be produced as a result of the project, including the Species Action Plan, training materials and husbandry guidelines.

14. What will be the long term benefits of the project in the host country or region and have you identified any potential problems to achieving these benefits? (max 200 words)

Benefits include:
- Madagascar Pochard saved from extinction and, in time, returned to areas where formerly present
- A secure infrastructure at the captive-breeding facility established and running well beyond end of this funding
- Methodologies developed during Darwin project will be vital to continuation of Pochard conservation in the future
- Skills acquired for Pochard conservation transferable to other species
- We will build capacity in partner Asity Madagascar by providing training in conservation techniques including CEPA
- The process for design of integrated wetland restoration strategies developed for project can be applied widely throughout Madagascar.

Potential problems are:
- Issues with captive-breeding e.g. quality of founder stock and genetic diversity, unpredicted housing requirements, inadequate food supplies, diseases and parasites and inability to attract staff of required quality
- Logistical and practical issues e.g. extreme weather, unpredictable water and electrical supply
- Political instability (although unrest focused around the capital and currently poses no threat to the project) and future support for the project from the Ministry
- A drop in community support around Bemanevika, breeding facility and, looking further ahead, suitable release sites.

None of these potential problems is considered to pose a long-term risk to the project.

15. 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)

This project forms part of a long-term programme. The activities within the Darwin project will lay the foundation for future outcomes, including: a permanent conservation-breeding facility, a team of 3–4 trained Malagasy staff to run the facility, an *ex situ* population of Pochards of sufficient number to provide offspring for release into the wild, community support within the region, and an action plan identifying conservation actions and priorities over the next 10 years.

The project is already a key component of the work programmes of the NGOs in Madagascar. Malagasy staff will run the project day-to-day, based on the model already successfully established for long-term captive-breeding of threatened tortoises and turtles. Durrell, WWT, TPF and the Madagascar Government already have a joint agreement outlining the long-term project. These organisations will continue to provide support and drive for the project, and pursue other funding opportunities to ensure delivery of future phases of the project.

16. If your project includes training and development, please indicate how you will assess the training needs in relation to the overall purpose of the project. Who are the target groups? How will the training be delivered? What skills and knowledge to you expect the beneficiaries to obtain. How will you measure training effectiveness. (max 300 words)

You should address each of these points.

The project will provide specific vocational training for 15+ local Malagasy people. At the end of the project we expect that at least three Malagasy staff trained in bird husbandry and management techniques will be employed at the captive-breeding facility. Ten Malagasy staff will be trained in CEPA training skills. In addition, field staff from Durrell-Madagascar, TPF-Madagascar and Asity

Madagascar will be given vocational field training to develop new skills.

Training will be delivered through a combination of one-to-one tuition. Avicultural training will be provided on the job by UK aviculturalists supervising the breeding facility during the first 18 months. Durrell-Madagascar already has in-house capacity to deliver training in CEPA related activities and the theory and practice of conservation techniques and is, therefore, well placed to deliver training for the project. The project partners have acquired the necessary expertise to deliver the training through other projects in Madagascar (e.g. Durrell's tortoise and turtle breeding facility at Ampijoroa). Partners will provide further training in their own areas of expertise through in-country technical support.

We will train local staff in management techniques required for long-term husbandry of endangered birds. This includes bird handling, egg-harvesting, and artificial incubation. Training in census methodologies and establishment of monitoring programmes will be taught. Asity Madagascar will acquire new knowledge of CEPA principles and techniques.

Progress of facility staff will be constantly monitored by UK aviculturalists supervising the facility. Staff within this project will be included in Durrell-Madagascar's staff structure and receive full benefits of in-house training and evaluation during and after the allotted years of DI funding. In addition, there will be a workshop to evaluate progress at the end of year 2.

LOGICAL FRAMEWORK

17. Please enter the details of your project onto the matrix using the note at Annex 3 of the Guidance Note. This should not have substantially changed from the Logical Framework submitted with your Stage 1 application. Please highlight any changes. (Use no smaller than Arial 10 pt)

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Goal: Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.			
Sub-Goal: Extinction of Madagascar Pochard averted, and its long-term future secured in the wild. The conservation of the Pochard is used to promote wetland restoration through community involvement and human livelihood support	• Madagascar Pochard IUCN status downgraded from CR to EN within 10 years • Existing and one new population self-sustaining in the wild within the species' historic range within 25 years • Resident community engaged in conservation activities, and environmental awareness increased by project completion	• IUCN Red List • Population monitoring reports • Reports on awareness campaigns. Numbers of nationals employed by the project	[redacted]
Purpose To avert imminent extinction of the Madagascar Pochard through recovery planning and capacity building for a conservation breeding programme, site protection and public engagement.	• Conservation breeding programme established in-country • Species' current habitat at Bemanevika officially protected. • Community outreach programme established • Species recovery plan developed with all stakeholders	• Conservation breeding programme assessed against *IUCN Technical Guidelines on the Management of Ex Situ Populations for Conservation* • Site included in Government official list of protected areas • Regular field reports produced. • Species recovery plan endorsed by Government of Madagascar	• Current level of Government support for conservation continues • Stochastic events do not lead to extinction of the wild population before *ex-situ* population is established • Political stability in Madagascar allows project to be completed
Outputs 1. Project effectively managed and coordinated	• Annual reports and finance claims delivered on time and in budget	• Annual reports and finance claims to Darwin	
2. Key conservation needs for Madagascar Pochard identified	• Analyse genetic diversity of captive founders and recommend pairings • Key limiting factors at site identified • Species recovery plan endorsed by Government by Y3	• Species recovery plan published, and widely circulated in-country and abroad • One scientific publication	

3. Conservation-breeding programme and Malagasy capacity for aviculture established	• Captive breeding population producing around 20 birds Y1 • Three Malagasy staff trained in aviculture, and endangered species management • Preliminary assessment of wetlands as sites for release of captive-bred birds	• Updates posted in project website • Studbook created • Reports on breeding success and survival of birds in captivity • Annual avicultural assessment reports for all staff • Husbandry guidelines produced • Two scientific papers published	• Fecundity of birds not affected by inbreeding depression • Political support is national stability are maintained
4. Malagasy capacity for environmental CEPA of Madagascar Pochard established	• Minimum of 20 school teachers and local groups and NGOs trained in environmental CEPA • Ten Malagasy project staff trained in environmental CEPA.	• Training reports produced. • Ten CEPA certificates awarded.	
5. Long-term protection of Bemanevika secured	• Site included within the new Protected Areas framework by Y3 • Site support group in place Y2	• Necessary documentation produced to justify declaration of site as protected area • Site management plan produced	• Assignation of protected area status compatible with the long-term survival of the Pochard and other key species in the site
6. Local community and national audiences support conservation of the species.	• Rapid assessment of social, cultural and economic situation of communities undertaken • At least 80% of schoolchildren aware and supportive of conservation activities around the target species by Y3 • Legal status of local communities to manage Bemanevika established	• Project start and end questionnaire surveys • Awareness and education material produced in Malagasy for communities and schools • Training reports produced.	

Activities (details in workplan)
1.1 Establish Project management team and planning structure
2.1 Research prioritisation and development of collaborative studies
2.2 Analyse genetic diversity of captive founders and recommend pairings
2.3 Hold Recovery Plan workshop, action plan published and circulated
3.1 Build captive-breeding facility
3.2 Recruit avicultural and support staff
3.3 Collect eggs from wild birds and establish breeding pairs in captivity
4.1 Develop local partner's capacity for CEPA training and establish CEPA training in Bemanevika area
5.1 Maintain protection of Bemanevika site
5.2 Establish statutory protection for site
6.1 Establish national awareness programme through local media and publicity materials.
6.2 Assess communities and undertake questionnaire surveys in Bemanevika area.

Monitoring activities:
Indicator 1: Project leaders to track and report progress against measurable indicators and institutional workplans to ensure timely delivery of project outputs
Indicator 2: Constant monitoring of key demographic rates in captive population as part of adaptive management of the captive breeding programme
Indicator 3. Repeat appraisals to monitor staff skill development and knowledge generation of CEPA techniques
Indicator 4. Evaluation of change in community awareness of the pochard and conservation intervention through repeated questionnaires.

18. 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	Months	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.1	Establish Project management team and planning structure	2												
1.2	Half-annual and annual reports to Darwin produced and circulated	4												
2.1	Plan research programme and develop funding proposals	2												
2.2	Analyse genetic diversity of captive founders and recommend pairings	6												
2.3	Species Recovery Planning Workshop	2												
2.4	Publish and distribute Action Plan	6												
3.1	Build captive-breeding facility	6												
3.2	Recruit avicultural and support staff	4												
3.3	Run captive-breeding facility	34												
3.4	Collect eggs from wild birds and establish breeding pairs in captivity	6												
4.1	Develop local partner's capacity for CEPA training	6												
4.2	Establish and run CEPA training in Sofia region	12												
5.1	Maintain protection of Bemanevika site	36												
6.1	Establish national awareness programme through local media etc.	6												
6.2	Behavioural and attitudes surveys and reporting	10												
7.1														
7.2														

19. Please indicate which of the following Standard Measures you are likely to report against. You will not necessarily plan to cover all these Standard Measures in your project. Separate guidance on Standard Measures can be found at http://darwin.defra.gov.uk/resources/reporting/standard_measures/

Standard Measure No	Description	Tick if Relevant
1A	Number of people to submit thesis for PhD qualification (in host country)	
1B	Number of people to attain PhD qualification (in host country)	
2	Number of people to attain Masters qualification (MSc, MPhil etc)	√
3	Number of people to attain other qualifications (ie. Not outputs 1 or 2 above)	√
4A	Number of undergraduate students to receive training	
4B	Number of training weeks to be provided	√
4C	Number of postgraduate students to receive training	
4D	Number of training weeks to be provided	
5	Number of people to receive at least one year of training (which does not fall into categories 1-4 above)	√
6A	Number of people to receive other forms of education/training (which does not fall into categories 1-5 above)	√
6B	Number of training weeks to be provided	√
7	Number of (ie different types - not volume - of material produced) training materials to be produced for use by host country	√
8	Number of weeks to be spent by UK project staff on project work in the host country	√
9	Number of species/habitat management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country	√
10	Number of individual field guides/manuals to be produced to assist work related to species identification, classification and recording	√
11A	Number of papers to be published in peer reviewed journals	√
11B	Number of papers to be submitted to peer reviewed journals	
12A	Number of computer based databases to be **established** and handed over to host country	
12B	Number of computer based databases to be **enhanced** and handed over to host country	
13A	Number of species reference collections to be **established** and handed over to host country(ies)	
13B	Number of species reference collections to be **enhanced** and handed over to host country(ies)	
14A	Number of conferences/seminars/ workshops to be **organised** to present/disseminate findings	√
14B	Number of conferences/seminars/ workshops **attended** at which findings from Darwin project work will be presented/ disseminated.	
15A	Number of national press releases in host country(ies)	√
15B	Number of local press releases in host country(ies)	√
15C	Number of national press releases in UK	√
15D	Number of local press releases in UK	√
16A	Number of newsletters to be produced	√
16B	Estimated circulation of each newsletter in the host country(ies)	√
16C	Estimated circulation of each newsletter in the UK	√
17A	Number of dissemination networks to be **established**	
17B	Number of dissemination networks to be **enhanced/ extended**	
18A	Number of national TV programmes/features in host country(ies)	√
18B	Number of national TV programmes/features in UK	√
18C	Number of local TV programmes/features in host country(ies)	√
18D	Number of local TV programmes/features in UK	√
19A	Number of national radio interviews/features in host county(ies)	√
19B	Number of national radio interviews/features in UK	√
19C	Number of local radio interviews/features in host country(ies)	
19D	Number of local radio interviews/features in UK	√
20	Estimated value (£'s) of physical assets to be handed over to host country(ies)	√
21	Number of permanent educational/training/research facilities or organisations to be established and then continued after Darwin funding has ceased	
22	Number of permanent field plots to be established during the project and continued after Darwin funding has ceased	
23	Value of resources raised from other sources (ie in addition to Darwin funding) for project work	√

PROJECT BASED MONITORING AND EVALUATION

20. Describe, referring to the Indicators in the Logical Framework, how the progress of the project will be monitored and evaluated, including towards delivery of its outputs and in terms of achieving its overall purpose. This should be during the lifetime of the project and at its conclusion. Please include information on how host country partners will be included in the monitoring and evaluation.

Progress will be monitored by Durrell-Madagascar and TPF-Madagascar managers on a day-to-day basis, and through regular reports to and meetings of the project leader and respective managers in each organisation:

- Quarterly progress reports submitted from each partner to Durrell
- At least monthly communication (eg via Skype) between managers
- Monthly progress reports from the breeding facility supervisor and UK aviculturalists posted at the Pochard breeding facility

These reports and meetings will monitor progress against the workplan to ensure that products are delivered in a timely fashion. They will report and assess delivery of the products and outcomes listed in the verification column of the logframe, to measure progress against the indicators. Assessment and feedback by expert staff (eg UK aviculturalists) and by managers will provide quality control of these outputs. An evaluation meeting will be held towards the end of the project to review delivery against the project's purpose.

FUNDING AND BUDGET

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

NB: Please state all costs by financial year (April to March). Use current prices – and include anticipated inflation, as appropriate up to 3% per annum. The Darwin Initiative will not be able to agree increases in grants to cover inflation on UK costs once grants are awarded.

21. How is your organisation currently funded? (max 100 words)

Durrell is a non-profit organisation dedicated to saving species from extinction with a worldwide membership of >10,000. Its headquarters in Jersey has a conservation-oriented animal collection which is open to paying public. It does not receive regular government funding, either from the States of Jersey or the UK, and depends on entrance fees to the animal collection, membership contributions, and restricted funding from different sources. Legacies make up a proportion of income, but additional funding is received from individuals, multilateral institutions, government bodies (Jersey States, UK-DEFRA, US Fish & Wildlife), and non-government research institutions (IUCN, FFI, CI, The Royal Society).

22. Provide details of all <u>confirmed</u> funding sources identified in the Budget that will be put towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity. Please include any additional <u>unconfirmed</u> funding the project will attract to carry out addition work during or beyond the project lifetime. Indicate those funding sources which are confirmed.

Confirmed: To date a total of £72,899 has been secured towards the cost of the project in 2009 and 2010. This includes:

- £30,000 from the Mitsubishi Corporation Fund for Europe & Africa
- £17,899 from a United States Fish & Wildlife Service Assistance Award
- £25,000 from an individual donor

Project partners have also provided in-kind contributions of approximately £XXX for staff costs in 2009 and 2010.

Unconfirmed: Several proposals for funding have been submitted including an application to The Mohammed Bin Zayed Species Conservation Fund. We are confident that the Mitsubishi Corporation Fund for Europe & Africa will provide further grant support in future years; WWT will be submitting an application for the capital costs of the conservation-breeding facility in January 2010. WWT will also submit applications to the Disney Worldwide Conservation Fund and the SeaWorld & Busch Garden Conservation Fund. Durrell and WWT are identifying other potential individual

donors. An application to NERC/ESRC for a PhD studentship will be submitted early in 2010 for a project to plan wetland restoration at a landscape-scale for biodiversity benefits, including pochard re-introduction, and to maximise ecosystem service provision. Supervision would be undertaken by University of Bath, Durrell and WWT. We are currently raising funds to enable a Durrell-Madagascar member of staff to start his doctoral training with a focus on pochard ecology at the breeding lakes.

23. Please give details of any further funding resources (confirmed or unconfirmed) sought from the host country partner (s) or others for this project that are not already detailed in the Budget or Question 22. This will include donations in kind or un-costed support eg accommodation. (max 50 words per box)

Financial resources:
Not applicable.

Funding in kind:
Durrell-Madagascar will provide office facilities, administration, in-country transport assistance, emergency logistical support and practical advice throughout.

The Peregrine Fund-Madagascar will provide support field personnel at Bemanevika, transport assistance, emergency logistical support and practical advice throughout.

Asity Madagascar will provide office facilities, support field personnel and practical advice throughout.

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 the local UK embassy or High Commission directly to discuss security issues (see Guidance Notes) and attach any advice you have received from them.

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

CERTIFICATION 2010/11

On behalf of the trustees of Durrell Wildlife Conservation Trust

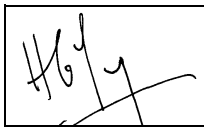
(*delete as appropriate)

I apply for a grant of £146,062 in respect of expenditure to be incurred in the financial year ending 31 March 2011 on the activities 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 lead UK institution to submit applications and sign contracts on their behalf.)

I enclose a copy of the organisation's most recent audited accounts and annual report, CVs for project principals and letters of support.

Name (block capitals)	H GLYN YOUNG
Position in the organisation	CONSERVATION BIOLOGIST

Signed  **Date:** 30th November 2009

Stage 2 Application - Checklist for submission

	Check
Have you provided actual start and end dates for your project?	✓
Have you provided your budget based on UK government financial years ie 1 April – 31 March?	✓
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?	✓
Is the concept note within 1,000 words?	✓
Is the logframe no longer than 2 pages and have you highlighted any changes since Stage 1?	✓
Has your application been signed by a suitably authorised individual? (clear electronic or scanned signatures are acceptable in the email, but a wet signature should be provided in the hard copy version)	✓
Have you included a 1 page CV for the Project Leader, any other UK staff working 50%+ on this project, and for a main individual in each overseas partner organisation?	✓
Have you included a letter of support from the main overseas partner organisations?	✓
Have you checked with the FCO in the project country/ies and have you included any evidence of this?	
Have you included a copy of your most recent annual report and accounts? An electronic link to a website is acceptable.	✓
Have you read the Guidance Notes ?	✓

Once you have answered Yes to the questions above, please submit the application, not later than midnight GMT on **Monday 30 November 2009** 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**. However, 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). **In addition**, a signed hard copy of the application and any supporting documents not available electronically should be submitted to the Darwin Applications, c/o LTS International, Pentlands Science Park, Bush Loan, Penicuik EH26 0PL **postmarked** not later than **Tuesday 1 December 2009.**

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.**