Post/1027

Submit by 5 January 2007

DARWIN INITIATIVE: APPLICATION FOR POST-PROJECT FUNDING 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 and on the merit of your current / recently completed Darwin Initiative project. The space provided indicates the level of detail required. Please do not reduce the font size below 11pt or alter the paragraph spacing. Please note the additional information requirements (CVs and letters of support as detailed in the Guidance for Applicants).

1. Name and address of UK organisation

Wildlife Conservation Research Unit (WildCRU), Department of Zoology, University of Oxford, Tubney House, Abingdon Road, Tubney, Abingdon, Oxfordshire OX13 5QL

2. Post-Project details

Project Title: Implementing an otter action plan for marine environments of Tierra del Fuego, Patagonia.				
Proposed start and end dates: 1st June 2007			**Duration of project:** 24 months	
Darwin funding requested	**2007/08**	**2008/09**	**2009/10**	**Total**
	£ 41,820	**£** 45,820	**£** 4,600	**£** 92,240

3. Original Project Title and Defra reference number (eg 162/-/--- or 10-065)

Endangered otter and invasive mink in Patagonia (162/13/016)

4. Principals in project. Please provide a one page CV for each of these named individuals. Letters of support must also be provided from the host country partner(s) endorsing the partnership and value of the Post-Project funding.

Details	**Project leader**	**Other main UK personnel**	**Main project partner or co-ordinator in host country**
Surname	Macdonald		Cassini
Forename(s)	David Whyte		Marcelo Hernan
Post held	Director (Professor)		President
Institution (if different to above)			Organizacion PROFAUNA
Department	Zoology, Oxford University		
Telephone			
Fax			
Email			

5. Define the purpose (main objective) of the Post-project (extracted from logical framework). How is it linked to the objectives of the original Darwin project? (Max 200 words)

The Post-project aims to evaluate the current status of the two Patagonian otters on the marine coast of the Beagle Channel in the southern region of Argentinean Patagonia. This includes assessment of the factors regulating otter distribution in this area, and the development of a plan for integral management of the coastal habitats of Beagle Channel and De los Estados Island.

These objectives are directly linked to the broader purpose of the original Darwin project: "To protect the vertebrate biodiversity of Argentina's Andean-Patagonian region".

6. What have been the main outcomes (achievements) of the original project to date? (max 300 words)

The original project targeted two species: the endangered otter *Lontra provocax*, and the invasive mink *Mustela vison*. During the project we were able to obtain additional data on another endangered otter species, *Lontra felina*. We consider our three years' work to have delivered CBD goals, fulfilling and exceeding the original aims.

To date the main outcomes of the project have been:

1) **An assessment of the status of *L.provocax* across Argentinean Patagonia.** Research results suggest that the conservation status of *L. provocax* could be changed from 'endangered' to 'vulnerable'. This is dependent on the status of the marine population of the Beagle Channel.
2) **A proposal for increasing the range of *L. provocax* through translocation.** Colonisation of freshwater environments is limited by large areas with low prey availability. Translocation to areas rich in prey could help expand their distribution.
3) **Identification of conservation requirements for *L. provocax* populations.** We discovered that the two Argentinean populations of *L. provocax* correspond to different genetic stocks. We proposed separate conservation policies.
4) **Preliminary data on *L. felina* indicating occurrence is markedly lower than currently believed.** Initial results suggested this species may be at risk of extinction in Argentina.
5) **The provision of information relevant to mink control.** In areas with limited prey availability waterfowl may constitute a large proportion of mink prey. We proposed that mink control is feasible but only to protect breeding areas for endangered waterfowl.
6) **Analysis of mink-otter interactions.** There was no evidence that mink cause a decline in otters. However in marine environments we discovered mink used burrows previously occupied by otters, potentially providing a source of resource competition.
7) **Successful collaborations between a variety of stakeholders.** Constructive relationships were developed with more stakeholders than originally proposed. Important outcomes from these collaborations were meetings, workshops, databases, papers, thesis, student training, conference attendance, and dissemination.

7. What steps have been taken to ensure that project purpose and outputs will be achieved within the original project term? (max 200 words)

Over the last decade the Wildlife Conservation Research Unit (WildCRU), PROFAUNA and Administración de Parques Nacionales (APN), the latter demonstrating the commitment of the Argentinean Government to this research, have collaborated successfully. Projects carried out under this partnership have strictly followed proposed schedules and timetables, finishing on time. The Post-project maintains this successful trio of partners and incorporates a new arm, the Ministerio de la Producción Subsecretaría de Planeamiento Dirección de Áreas Protegidas (Planning Department). This new partnership is necessary as the majority of the otter distribution in Tierra del Fuego is outside the National Parks. The Planning Department is a local governmental agency in charge of the development of plans for the creation and management of protected areas. It is the best institution to guarantee the success of the project. To ensure continued project success with this new partner we will work with methods that we have already refined and proven repeatedly to be successful.

8. Please list the overseas partner organisation(s) that will be involved in the Post-project and explain their role and responsibilities in this work and in the original project (if applicable).

Partner	**Details (including roles and responsibilities in the Post Project and in the original project if applicable):**
i) PROFAUNA Organisation:	Since 1993 this non-profit making organisation has been researching evidence to underpin wildlife conservation in the South Cone of South America. PROFAUNA acts as a link between scientists and institutions dedicated to ecological research and official organisations responsible for environmental and wildlife management. **Role:** PROFAUNA will be the main local partner and will be responsible for: 1) scientific research with participation of resident scientists and university students; 2) project implementation and coordination; 3) communication, outreach and publicity; 4) logistical support, accommodation, office space; 5) GIS and diet analyses; 6) co-managing finances with WildCRU.

Partner	**Details (including roles and responsibilities in the Post Project and in the original project if applicable):**
ii) Ministerio de la Producción Subsecretaría de Planeamiento Dirección de Áreas Protegidas	The Protected Areas Department is the authority responsible of the development of action plans for wildlife and management of the protected areas in the Province of Tierra del Fuego. **Role:** Lic. Nora Loekemeyer, a senior member of this Department, will collaborate in coordination of field logistics.

Partner	**Details (including roles and responsibilities in the Post Project and in the original project if applicable):**
iii) GEMA group, Universidad Nacional de Luján, Departamento de Ciencias Básicas	The office and laboratories of GEMA group (Group of Studies in Ecology of Mammals) are located in the University of Luján and will be used for this project. GEMA group is supported by the Department of Basic Sciences of this University and by PROFAUNA organisation.

9. Please provide written evidence of commitment and capability of overseas partner in achieving the purpose and outputs of this Post Project. Are formal agreements in place for overseas partner responsibility in this project? (max 200 words)

PROFAUNA's President, Dr. Marcelo H. Cassini, will be responsible for coordination of the project in Argentina. Dr. Cassini has been closely involved in the original project design and implementation, and will continue to be heavily involved throughout the Post Project study. The Wildlife Conservation Research Unit and PROFAUNA have been research partners since 1996. PROFAUNA and the University of Luján has a long term general agreement for mutual cooperation (see letters of support).

POST PROJECT DETAILS

10. Please provide a Concept Note (max 800 words)

Introduction

In Argentina, our initial project revealed that there are two populations of Southern river otters: one population exists in northern Patagonia, occupying the Nahuel Huapi National Park and the Limay river and the other population exists in southern Patagonia, occupying the coast of the Beagle Channel of Tierra del Fuego and De los Estados Island. The second Patagonian otter, the marine *Lontra felina* was also thought to be found in the southern area.

In the original project, we principally studied the population of *L. provocax* in freshwater environments. This allowed us to propose an action plan for inland conservation in Patagonia. Additionally we collected new data about the marine populations along the southern sea coast. These data provided information of fundamental importance for the conservation of the marine populations of both species of otters. The main results were:

1) We found preliminary evidence that *L. provocax* has a substantially wider distribution than expected from previous studies. New locations were determined outside protected areas, thus changing the perceptions of the challenges for the conservation of this species.
2) We found that this southern population was genetically distinct from the northern population and requires its own conservation policies.
3) We did not find evidence that *L.felina* lived in this region. Research indicated that in the past this species was exclusively found along the southern coast, however in the last few years there has been no confirmed evidence of *L. felina* in the region. It seems certain that its status has deteriorated, and it may be threatened with extinction in (or even have disappeared from) Argentine territory.
4) We found that invasive American mink had invaded marine habitats in Tierra del Fuego, utilising the burrows previously used by otters.

Research

The objectives of the research component of the Post Project are:

1) To confirm the distribution of otters along the coast of the Beagle Channel. This will clarify and confirm whether the conservation status of *L. provocax* should be re-classified from 'endangered' to 'vulnerable'.
2) To search for evidence of the presence of *L. felina* in order to evaluate the magnitude of its apparently radical decline in Argentina.
3) To estimate the degree of use of otter burrows by mink in order to evaluate their impact on marine otter populations.
4) To estimate resource availability and evaluate the threats for otter conservation. This information is necessary for developing an action plan for marine otters of Argentina.

The methodology will start with a survey (Oct 2007-Mar 2008) of the Beagle Channel coastline. We will use a standard method, refined in our original project, based on searching for signs in 600 m segments of the coast. In each transect, we will count dens, describe local characteristics of the coast, count prey remains, collect scats and conduct bird censuses. Three types of analysis will be conducted (May-Sept 2008): GIS analysis will be conducted relating results of the survey to data extracted from satellite images and maps; genetic analysis of scats will be used to discriminate different species and to estimate genetic variability of the population, and diet analysis will determine food requirements.

Action

The objectives of the action component of the project are:

1) To coordinate otter conservation activities between Chilean and Argentinean experts and managers.
2) To formulate an action plan for otter conservation in marine environments.
3) To train a team of biologists, guards and managers for future monitoring of coastal environments.
4) To coordinate the action plan with stakeholders and initiate its implementation.
5) To use the otter action plan as the starting point for a mixed management project for the Beagle Channel coast.

The methodology will involve: a bi-national meeting organised to discuss general strategic criteria and future common actions for otter conservation (Apr 2008); development of a action plan draft from information obtained by the research component (Feb 2009); organisation of a workshop for presentation and discussion of the plan with stakeholders (Mar 2009), and formulation of a broadly-based biodiversity management project for the Beagle Channel coast during the stakeholder workshop. With its history of British colonisation, and indeed Anglo-Argentine ancestry of several current land owners especially influential in contemporary conservation along the Beagle Channel, the involvement of the Darwin Initiative is particularly appropriate. The link between these British settlers, the local (now extinct) Fuegian Indians, and the then abundant otters of both species is related in Lucas Bridges' enthralling book, "*The Uttermost Part of the Earth*" (1949)).

Dissemination and training

The objective of this section is to inform a wide public about the project. It is intended that the following outputs will be produce: 2 internet newsletters, 3 local press releases in Argentina, 3 publications in peer reviewed journals, 3 presentations in conferences, and a book of the action plan.

A team of 6 people (2 biologist students, 2 guards and to managers) will be trained to carry out future biodiversity monitoring of the coast and to analyse data on the distribution and use of resources.

11a. Have you consulted stakeholders not already mentioned above? x **Yes** ☐ **No**
If yes, please give details:

We will work in close collaboration with the Argentinean National Park Administration, in particular with Lic. Claudio Chehébar and with Lic. Laura Malmierca, with whom we have been collaborating during the original DI project.

Other consulted stakeholders are:

- Lic. Miguel Isla, Director, *Dirección de Pesca (Fishery Agency of Tierra del Fuego)*
- Lic. Clotilde Susana Lizarralde, Directora, *Dirección de Ciencia y Tecnología (Science and Technology Agency of Tierra del Fuego)*
- Dr. Federico Tapella, Expert on crustaceans, *Centro Austral de Investigaciones Científicas (Austral Centre of Scientific Research, CADIC)*
- Lic. Claudia Boy, Expert in fish ecology and physiology, *CADIC*
- Dr. Adrían Schiavini, Expert in marine mammals and birds, *CADIC*
- Santiago Reyes, Director, *Museo del Fin del Mund*o *(Word End Museum)*
- Luis Benegas, Expert in austral wildlife, *Museo de Río Grande (Río Grande Museum)*
- Dr. Gonzalo Medina, Chilean expert in otters
- Lic. Walter Sielfeld, Chilean expert in wildlife of southern Chile
- Lic. Maximiliano Medina, Chilean expert in *Lontra provocax*

11b. Do you intend to consult other stakeholders? x **Yes** ☐ **No**
If yes, please give details:

- The management of the Tourism Agency of Tierra del Fuego
- An expert in marine water pollution (within CADIC)

11c. Have you had any (other) contact with the government not already stated? ☐ **Yes** x **No**
If yes, please give details:

12. Are you aware of any other individuals/organisations/Darwin Initiative projects carrying out similar work? **x Yes ☐ No**

If yes, please give details explaining similarities and differences, and explaining how your work will be additional to this work and what attempts have/will been made to co-operate with and learn lessons from such work for mutual benefits:

Dr. Adrián Schiavini is an expert on the marine mammal and avifauna of Tierra del Fuego. Dr. Schiavini is the supervisor of a PhD thesis on the impact of mink on marine birds. We collaborated with Dr. Schiavini during the original project to the point that he is co-author of two of the manuscripts that we have developed. In addition, we have established preliminary collaborations under the original project with a Chilean team investigating mink impacts on nearby Navarine Island, and we expect to foster a unique cross-border collaboration with Fauna Australis (Santiago) in this Post Project.

13. How does the work meet a clearly identifiable biodiversity need or priority defined by the host country? Please indicate how this work will fit in with the National Biodiversity Strategies or Environmental Action Plans, if applicable.

In January 2003, Argentina announced the Final Document of their National Strategy for Biodiversity, derived from the CBD. Two of the document's seven sections related specifically to conservation and capacity building. Our project fulfils several objectives within these: (vi) to strengthen the national system of protected areas; (vii) to identify, protect, and recover endangered species; (viii) to prevent and control exotic species; and (xi) to increase knowledge on biological diversity.

14a. How will the project assist the host country in its implementation of the Convention on Biological Diversity? Please rank the relevance of the project to the relevant article(s) of the CBD thematic programmes and/or cross-cutting themes by indicating percentages. **Articles**	**% Relevance**	**Themes**	**% Relevance**
5. Co-operation	5	Access and Benefit Sharing	
6. General measures for Conservation and Sustainable Use		Agricultural Biodiversity	
7. Identification and Monitoring	5	Alien Species	
8. *In-situ* Conservation	25	Biodiversity and Tourism	
8h. Alien Species	5	Bio-safety	
8j. Traditional Knowledge		Climate Change and Biodiversity	
9. *Ex-situ* Conservation		Economics, Trade and Incentives	
10. Sustainable use of components of Biological Diversity		Ecosystems approach	
11. Incentive measures		Forest Biodiversity	
12. Research and Training	15	Global Strategy for Plant Conservation	
13. Public education and awareness	5	Global Taxonomy Initiative	
14. Impact assessment and minimizing adverse impacts		Impact Assessment, Liability and Redress	
15. Access to genetic resources		Indicators	
16. Access to and transfer of technology		Inland Waters Biodiversity	
17. Exchange of information	5	Marine and Coastal Biodiversity	30
18. Technical and scientific co-operation		Mountain Biodiversity	
19. Handling of biotechnology and distribution of its benefits		Protected Areas	5
20. Financial resources		Public Education and Awareness	
21. Financial mechanism		Sustainable Use and Biodiversity	
22. Relationship with other international conventions		Traditional Knowledge, Innovations and Practices	
23. Conference of the Parties			
24. Secretariat			
25. Subsidiary Body on Scientific, Technical and Technological advice			
26. Reports			

14b. Is any liaison proposed with the CBD national focal point in the host country? **xYes** ☐ **No**

If yes, please give details:

The host country, Argentina, is a party to the Convention of Biological Diversity, signed in 1992. This project aims to help Argentina fulfil its obligations under the Biodiversity Convention by working with and training local people (e.g. National Park wardens). Dr Cassini will strengthen links with the CBD personnel in Argentina. The Post project will develop the knowledge and tools necessary for conserving marine and coastal biodiversity, initiating a permanent conservation programme in the region.

15. If relevant, please explain how the project work will contribute to sustainable livelihoods in the host country. (Max 200 words)

The aim of the project is to contribute to a broadly-based management strategy of resources available along the coast of the Beagle channel. This inter-disciplinary, cross-cutting action plan will contribute towards the promotion of sustainable fishery and tourism in the region. Providing hard information on the requirements of regional 'umbrella' species and on the dynamic of the coastal ecosystem will enable us to collaborate with the local office in charge of Land Planning and Programming to create a program that considers the complexity of uses and needs of this unique Channel. The region faces a particular challenge due to the exponential growth of international tourism, with an imminent risk of stimulating economic growth in the region with non sustainable impacts. We hope to work with local fishing and tourist businesses to develop sustainable livelihoods.

16. What will be the impact of the work, and how will this be achieved? How will these help to strengthen the long-term impact and legacy of your original Darwin project? Please include details of how the results of the project will be disseminated and put into effect to achieve this impact. (max 200 words).

The impact of the work will be on the survival of two species of endangered otters: the marine population of Southern river otters (a unique genetic stock) and the marine otters in southern Patagonia. This work will complement the successful results of our original Darwin project, which underpinned our recommendations in an action plan for southern river otters in inland waters of Patagonia.

A two-year project is required for us to collect basic biological data, hold discussions with stakeholders, and prepare an action plan for the otters of the Beagle Channel coast, using them as a charismatic flagship for developing a wider biodiversity conservation plan for the Beagle Channel (itself an evocative site with the potential also to become a flagship for conservation in the region). Beyond that, our long-term purpose is to continue working in the area with the aim of developing a plan for integrated management of the coastal habitats of the Beagle Channel, a unique environment, rich also in cultural and historical treasures, and currently the recipient of all too many invasive species (in addition to mink, there are introduced beavers and foxes).

17. Explain how gains from the Post-project work will be distinct and <u>additional</u> to those of the existing project. Show where possible how these gains require limited resources and could not be achieved without the funding. (max 200 words)

In the original project we investigated key ecological traits of Southern river otters and mink in a large geographic area (with length equivalent to the distance between London and Rome), enabling us to propose actions at a national and international level. In the new project we concentrate on the Beagle Channel coast for four fundamental reasons: (1) if we find evidence of *L. provocax* in a large proportion of the coast we will be able to propose upgrading its IUCN status from endangered to vulnerable; (2) the area potentially supports the only remaining *L. felina,* and lack of evidence will shed crucial evidence on the status of this perhaps highly threatened (and remarkable) species in Argentina; (3) the region provides a suitable field study area for evaluating the use of huillin (river otter) dens by mink and examining the potential for resource competition between this exotic species and the native otter; and (4) the region urgently requires the development of complex integrated strategies for management of oceanic, freshwater and terrestrial habitats, that include pollution control, policies for sustainable fishery, and sustainable tourism, for which the two otter species can act as emblems. Thorough and accurate assessment of these four themes will require much time spent on intensive field work and relationship building with local stake-holders.

18. How will the work leave a lasting legacy in the host country or region? (max 200 words)

The Beagle Channel of Patagonia is the corridor for marine wildlife between the Pacific and the Atlantic oceans. The Andean mountain chain, which starts in the very north of South America, reaches the ocean at the Channel and cold woodland covers the steep coastline. Considering the enthusiasm of Charles Darwin, and his inspirations (and indeed the link with HMS Beagle), it is relevant to remember the importance of Tierra del Fuego's geography, its biodiversity and its Indian communities in Darwin's ideas – and highly suitable to link these today with the Darwin Initiative. During the XIX century, the coast of this channel was colonized by British pioneers, who learned to love this solitary land and worked with astonishing diligence to protect it – several of their descendent families will be important in implementing the Post Project. In this way, not only will our project leave a legacy, it also champions Darwin's own special legacy in the southern cone.

This project has two approaches to building a lasting legacy in the host country, Argentina. Firstly the work will contribute directly to the conservation of two endangered, charismatic, and potentially emblematic Argentinean mammal species. Secondly, it will be the initial step for the development of an integrated management plan for the coast of the Beagle Channel. Therefore it will provide a vital catalyst to raising (radically) the profile of biodiversity issues in this extraordinary part of the world. We hope to see an exceptional future partnership here between British expertise and local stake-holders and conservationists, leading to greatly enhanced livelihoods and well-being of local communities.

The Argentinean coast of the Beagle Channel has a complex conservation status. There are different levels of protection and diverse types of threats to the biodiversity, including pollution, non-sustainable fishing, and uncontrolled new tourism (one of our key priorities is to ensure that this tourism is turned to a force for good in terms of sustainability and biodiversity conservation). It requires a cross-cutting inter-disciplinary management strategy and it is our intention that the Post Project will instigate this.

19. Please provide a clear exit strategy and describe what steps have been taken to identify and address potential problems in achieving impact and legacy. (Max 200 words)

For the duration of the project we will collaborate with the governmental agencies in charge of wildlife and land conservation in Tierra del Fuego. With them we will produce an otter conservation action plan for their future use. However it is probable that some of the proposals for successful conservation will need more far-reaching actions including: (1) a plan for sustainable fishery in Channel waters; (2) a proposal for sustainable tourism on the Channel coast and nearby islands; (3) a control of the pollution produced by Ushuaia town, and (4) the creation of a protected area in the more isolated Península Mitre coastal segment. These actions cannot be achieved in two years but can be drafted in an action plan offering local managers a tool for initiating the process. Our previous experience with Darwin Projects demonstrates delivery beyond expectations, and a keen appreciation of the balance between ambitious goals and realistic deliverables. Therefore, we will implement an exit strategy that is based on four criteria: (1) close collaboration with local managers; (2) regular workshops for reaching agreements amongst stakeholders; (3) dissemination of information through local media to engage the public and (4) production of a clear action plan to guide the future action of local agencies. If the project is as successful as our experience leads us to believe it will be, we anticipate that our partnership will itself play a continuing role in the legacy.

20. How will the project be advertised as a Darwin project and in what ways would the Darwin name and logo be used? (max 100 words)

The recommendations derived from this work will inform government conservation strategies, through the APN's, and the government of Tierra del Fuego province's, confirmed commitment to the project. As a result of our original DI project, our partnership is very well connected with decision-makers and those with influence on policy, and we expect to use fully these connections, operating in arenas where we have already made the Darwin Initiative widely recognised and much respected. The Darwin Initiative will be cited in any media item (TV, radio or newspapers) produced by the project. It will be acknowledged in all publications (peer reviewed journals, reports, manuals etc.). The Darwin logo will be featured conspicuously in projects outputs, on field equipment, in posters used during workshops and in appropriate places on the WildCRU and PROFAUNA websites. The special link with Darwin's personal history in the Beagle Channel will be a powerful shop-window for both our project and the Darwin Initiative, especially in the forthcoming Darwin anniversary year.

21. Will the Post-project include training and development? If so, please indicate a) who the trainees will be, b) the criteria for selection, c) what the level and content of training will be, d) how many people will be involved, e) which countries will they be from, f) how will you measure the effectiveness of the training, g) will those trained then be able to train others and h) how will trainee outcomes be monitored after the end of the training? (max 300 words)

a) Three students, two APN guards and two managers of the province government will be trained.

b) Students will be selected based on their Curriculum Vitae, motivation, and potential as biodiversity professionals. Guards will be selected by Lic. Laura Malmierca from the guards working in the Tierra del Fuego National Park, and the managers will be selected by Lic. Nora Lokemayer from TFPD's members.

c) Students will conduct undergraduate theses on: the distribution and habitat use of otters, otter diet, and otter genetics (with respect to conservation priority). Guards and agents will be trained in recognising signs, collecting samples, recording local variables, and in field sampling methods in general, within monitoring programmes.

d) A total of 7 people will be trained,

e) All trainees will be Argentineans.

f) Theses will be defended at local universities, and acquisition of monitoring techniques will be tested in the field.

g) The 3 future conservation professionals, the 2 guards and 2 managers will be able to train others in future work.

h) Lic Malmierca and Lokemeyer will be in charge of monitoring work after the end of the training.

LOGICAL FRAMEWORK

22. Please enter the details of your project onto the matrix using the notes at Annex C of the Guidance Note.

Project summary	Measurable indicators	Means of verification	Important assumptions
Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve • the conservation of biological diversity, • the sustainable use of its components, and • the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources.			
Purpose To protect the vertebrate biodiversity of Argentinean Patagonia both by protecting the marine populations of two endangered otters, and initiating a plan of multiple management actions for the coast of the Beagle Channel.	**New knowledge** regarding the present distribution of *Lontra provocax* and *L. felina* in Argentinean marine habitats and the resource requirements of both species. **Increased capacity** for researchers, wildlife managers and Park wardens to implement effective monitoring of otter status. **Increased stakeholder commitment** on a plan for integrative management of Beagle Channel coasts. **Establishment of a flagship conservation initiative** in the name and memory of Charles Darwin, capitalising on a unique historical link. Ultimately**, prevention of the extinction of *L. felina* and of the marine stock of *L. provocax* in Argentina**	Publication of theses, papers accepted by peer-reviewed journals, technical reports produced for National Park and partner organisations. Management plans, training & implementation guides, computer databases, fieldwork reports, workshop records, and formal agreements with National Park Administration and local environmental agencies. Stakeholder workshops organised every two years. Development of an inter-disciplinary, cross-cutting action plan to be adopted by the Planning Department of the Tierra del Fuego government.	National and local authorities maintain their present support for our CBD activities and continue to be prepared to incorporate our new management proposals.

Outputs			
Training of future Argentinean conservation biologists, along with managers and wardens of the National Parks of Patagonia. Education of stakeholders and policy makers via workshops	3 undergraduate theses, 2 guards and 2 managers will receive training. Students will work for 1yr, while guards/managers will receive 3 weeks of field training. Additionally a bi-national workshop will be held with 30 stakeholders.	3 undergraduate theses submitted/defended. Student performance reports, workshop participant records.	Students, National Park managers, and stakeholders are available and motivated for training and application of new skills.
Action plans and other research products for the conservation of vertebrate biodiversity in Patagonia. Academic outputs.	An action plan for the conservation of marine populations of otters; a draft action plan for the conservation of vertebrate biodiversity in Tierra del Fuego. A training guide for monitoring marine coasts. A computer database. 3 manuscripts for peer-reviewed journals, and 3 conference presentations.	Management plans, field implementation and training guides and computer databases sent to the DI. Papers and conference abstracts sent to the DI. Copies of all publications and records sent to the DI.	Journal editors/ conference organisers will accept papers. Newspaper, radio and TV producers will be interested. National Park Administration will be interested.
Diverse methods of disseminating results.	3 local press releases in Argentina. 2 webpage newsletters. 2 books (printed and pdf versions) for the dissemination of action plans.	Agreement with local agents and National Park administrators.	Local press will be interested in conservation problems.
Activities [details in workplan] 1. Detailed survey of the coast of the Beagle Channel. 2. Sample and data processing with GIS, molecular techniques and diet analysis. 3. Development of a draft action plan. 4. Organisation of a bi-national meeting and a stakeholder workshop for discussion and dissemination of work.	**Activity milestones (summary of project implementation timetable)** **Inputs** **Budget** £92,240 over 2 years **Staff:** UK project leader, 3 local partners, 3 students, 3 field assistants, occasional training and research assistants. **Equipment:** Project office, molecular laboratory, diet analysis laboratory, field work equipment, 4x4 van.		**Assumptions** Availability of equipment. Interest of stakeholders for attending workshops and meetings.

23. Provide a project implementation timetable that shows the key milestones in project activities.

Project implementation timetable		
Date	Financial Year	Key milestones
Jun-Sep 2007	Apr – Mar 2007/08	Project planning, project announcement, selection of 3 students, 2 guards and 2 managers, preliminary training.
Oct 2007		Six month report, travel to UK by main local partner and attendance of the IUCN Xth International Otter Colloquium 2007 in South Korea.
Nov 2007		Travel to Argentina by the project leader, bi-national meeting
Dec 2007-Apr 08	Apr – Mar 2008/09	First year report, field work, training of 1 student, 2 guards and 2 managers.
May-Set 2008		Data processing with Geographic Information Systems, with molecular techniques and with diet analysis methodologies.
Oct 2008		Six month report, travel to UK by main local partner.
Nov 2008-Feb 09	Apr – Mar 2009/10	Preparation of draft of action plan, writing of manuscripts for peer review journals, conference attendance, organization of workshop, dissemination of results.
Mar 2009		Stakeholder workshop and travel by the project leader to Argentina.
Apr 2009		Second year report.
May 09		Agreements with authorities, dissemination of results.

24. Set out the project's measurable outputs using the separate list of output measures.

PROJECT OUTPUTS		
Year/Month	**Standard output number (see standard output list)**	**Description (include numbers of people involved, publications produced, days/weeks etc.)**
Sep 2007	3 (4A), 24 (4B) 4 (6A), 16 (6B) 1 (16A) 1 (15B)	3 students receive 8 training weeks each 2 guards, 2 managers receive 4 training weeks each 1 internet newsletter 1 local press release
Oct 2007	1 (14B)	1 Colloquium attendance
Mar 2008	1 (8) 1 (14A)	1 week of project leader in Argentina 1 international meeting organised
May 2008	8 (4B), 48 (6B) 60 (4A)	1 student, 2 guards, and 2 managers receiving 8 training weeks each
Oct 2008	1 (12A) 1 (14B) 1 (14B)	3 students receiving 20 training weeks each 1 computer based databases to be established 1 Conference attendance
Feb 09	1 (9) 1 (16A) 1 (14A)	1 Conference attendance 1 draft of action plan prepared 1 internet newsletter
Apr 09	1 (9) 2 (15B)	1 stakeholder workshop organised 1 management plan (book) with the result of the international meeting
May 09	1 (9) 3 (11B) 3 (3)	2 local press releases in Argentina. 1 action plan (book) with the result of the stakeholder workshop 3 papers submitted to peer review journals 3 undergraduate theses defended

MONITORING AND EVALUATION

25. 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 monitoring and evaluation.

To determine whether the project and its components are being conducted as planned both WildCRU and PROFAUNA will carry out an internal project evaluation from commencement of, and throughout, the project. This progress evaluation will determine whether the project is meeting its stated purpose, objectives, outputs and milestones according to the proposed timetable. Towards the end of each project year (2007/8, 2008/9), a major evaluation will take place to assess strengths, weaknesses and implement corrective measures. We will also assess the cost-effectiveness of what has been accomplished, benefits to trainees and the effectiveness of components. International specialists with expertise in the field of this project will be recruited to act as evaluators. The evaluators will aim to determine how dissemination activities and outputs are providing feedback to inform decision-making. They will also examine how research and training have contributed to understanding of the key factors involved in the long-term conservation of otters and general biodiversity. Outcome indicators will serve as a baseline for measuring success. At the end of the project, we will evaluate whether the project is replicable, transportable and applicable to other parts of Argentina and beyond. We will also evaluate the realised potential of the Beagle Channel to become a flagship for Darwin's legacy and biodiversity conservation.

The main project activities, timetables and the staff responsible for the execution of the project will be included in the annual operational plans of PROFAUNA. These will be evaluated annually using standardised internal procedures already in place. We will apply the participatory principle by promoting the participation of all partners in the evaluation of the project. The Argentine universities involved will evaluate the proposed plans for the three theses to be conducted during the project.

26. FINANCIAL ASPECTS

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

Please note that although three financial years are shown here, <u>funding will only be awarded for a maximum period of two calendar years</u>

Table A: Staff time. List each member of the team; their role in the project rate and the percentage of time each would spend on the project each year.

	2007/2008 %	**2008/2009 %**	**2009/2010 %**
United Kingdom project team members and role			
Prof. David Macdonald (general coordinator)	6	7	1
Host country/ies project team members and role			
Dr. Marcelo H. Cassini (local coordinator)	67	80	13
Lic. Nora Loekemeyer (Planning Agency supervisor)	8	10	2
Student 1 (und. thesis on distribution and habitat use)	42	50	8
Student 2 (und. thesis on genetics)	17	50	8
Student 3 (und. thesis on diet and otter requirements)	17	50	8
Guard 1 (Field research collaborator in Tierra del Fuego National Park)	13	0	0
Guard 2 (Field research collaborator in Tierra del Fuego National Park)	13	0	0
Manager 1 (Field research collaborator in Península Mitre, isolated extreme of the Beagle Channel)	13	0	0
Manager 2 (Field research collaborator in Península Mitre, isolated extreme of the Beagle Channel)	13	0	0

Table B: Salary costs. List the project team members and show their salary costs for the project, separating those costs to be funded by the Darwin Initiative from those to be funded from other sources.

Project team member	2007/08		2008/09		2009/10	
	Darwin	**Other**	**Darwin**	**Other**	**Darwin**	**Other**
Dr. Marcelo H. Cassini						
Field assistant						
Technical assistant on molecular techniques						
Technical assistant on GIS techniques						
Technical assistant diet analysis						
Assistant on meeting organisation						
Total cost of salaries						

Table C. Total costs. Please separate Darwin funding from other funding sources for every budget line.

	2007/8	2008/9	2009/10	TOTAL
Rents, rates, heating, lighting, cleaning, overheads				
• Darwin funding				
• other funding				
Office costs eg postage, telephone, stationery				
• Darwin funding				
• other funding				
Travel and subsistence				
• Darwin funding				
• other funding				
Printing				
• Darwin funding				
• other funding				
Conferences, seminars etc				
• Darwin funding				
• other funding				
Capital items/ equipment (please break down)				
• Darwin funding				
• other funding				
4 x 4 Van				
Computational and GIS equipment				
Diet analysis laboratory				
Field work equipment				
Molecular biology laboratory				
Other costs (please specify and break down)				
• Darwin funding				

Consumables for genetic study				
Consumables for diet study				
• other funding				
Salaries (from previous table)				
• Darwin funding				
• other funding				
TOTAL PROJECT COSTS	75820	50620	5400	131840
TOTAL COSTS FUNDED FROM OTHER SOURCES	34000	4800	800	39600
TOTAL DARWIN COSTS REQUESTED	41820	45820	4600	92240

27. Please provide a written justification of why alternative funding is not available from within your own organisation or from other sources. (max 150 words)

The project is aiming to receive partial funding from the Argentinean Research Agency for office costs and services included in the budget. Equipment originally provided by different sources is also accounted for in the budget. However, PROFAUNA have no alternative funding for the other costs of the project. Additionally, although strongly supported by Oxford University, WildCRU does not receive funding and there is no core funding available for research, therefore projects have to obtain external funding on a case by case basis.

28. Provide details of all <u>confirmed</u> funding sources identified in Question 26 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:

We already have available a grant from the Argentinean Research Agency (Grant Code: PICT03 n°14173) to work on otters in Patagonia – this will be mostly used in 2007 to buy equipment and additional consumables for genetic work (total £29,900).

Every year, the GEMA group receives a grant from the University of Lujan to pay for office consumables, and other minor costs related to the maintenance of the offices and labs that will be used in this project (total £3,700).

WildCRU has secured the promise of £3,000 p.a. towards our search for *Lontra felina*, from the Peoples' Trust for Endangered Species (total £6,000 towards travel and subsistence), provided we are awarded the Darwin Initiative funding.

David Macdonald will be contributing 7% of his time to the Post-Project per annum. His post is funded through a Senior Research Fellowship from Lady Margaret Hall, University of Oxford.

Unconfirmed:

No other unconfirmed sources.

29. 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 Question 65. This will include donations in kind or un-costed support eg accommodation.

Financial resources:

Part of a grant from the National Agency for Science and Technology (Agencia Nacional de Promocion Cientifica y Tecnologica).

Part of an annual grant of the University of Lujan.

Funding in kind:

No other resources sought.

30. What was the amount of funding for the original Darwin Project?

	Total Project Costs £
Amount of original Darwin Initiative project funding	89664
+ Funding/Income from other sources	49400
= Total original project cost	**139064**

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 Post-project and the resultant work in the UK or in the host country. ☐

CERTIFICATION 2007/08

On behalf of the trustees/company *(delete as appropriate)*

I apply for a grant of £ 41,820 **in respect of expenditure to be incurred in the financial year ending 31 March 2008 on the activities specified in the Logical Framework.**

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 a copy of the CVs for project principals and letters of support.

Name (block capitals)	Barbara Murray
Position in the organisation	Deputy Head, Research Services Science Area Office, University of Oxford

Signed	Barbara Murray	**Date:**	19/12/06

Please return this form in Word format by e-mail to ECTF at darwin-applications@ectf-ed.org.uk **by 5 January 2007**. Please put the title of the proposed project into the subject line of the e-mail. As much of the supporting documentation as possible should be sent along with the e-mailed application. 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**, hard copies of all applications and supporting documents should be submitted to the Darwin Applications Management Unit, c/o ECTF, Pentlands Science Park, Bush Loan, Penicuik EH26 0PH **postmarked not later than 5 January 2007**.

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.