



APP2 252

DARWIN INITIATIVE



APPLICATION FOR GRANT FOR ROUND 12 COMPETITION: STAGE 2

Please read the Guidance Notes before completing this form. Give a full answer to each section; applications will be considered on the basis of information submitted on this form. Please do not cross-refer to information in separate documents except where invited on the form. The space provided indicates the level of detail required but you may provide additional information on a separate A4 sheet if necessary. Do not reduce the font size below 12pt or alter the paragraph spacing.

Submit by 19 January 2004

Ref (*Defra only*):

1. Name and address of organisation

Wildlife Conservation Research Unit (WildCRU), Department of Zoology, University of Oxford, South Parks Road, Oxford, OX1 3PS

2. Project title (not exceeding 10 words)

Endangered otter and invasive mink in Patagonia

3. Principals in project. Please provide a one page CV for each of these named individuals.

Details	Project leader	Other UK personnel (if working more than 50% of their time on project)	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			

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

Aims

To achieve practical solutions to conservation problems by undertaking original research on aspects of fundamental biology relevant to wildlife conservation and environmental management. We aim to effect improvements in policy, increase awareness of conservation issues amongst a wide public, and train and develop conservation biologists of all nationalities.

Activities

Main activities: Fundamental research, species conservation and environmental management, education and outreach, training and development. Main areas of interest: endangered species, behavioural ecology, farming and wildlife, wildlife diseases and pests, and human/animal conflict resolution.

Achievements

Since 1992, WildCRU has completed more than 50 international projects with significant results, published over 300 refereed papers and species action plans, and trained 35 students to doctoral level. The research outputs demonstrate how a variety of research methods can bring a rigorous scientific background to conservation problems and have had a substantial impact on policy.

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

Yes: (1) 162/4/072 Aquatic carnivores; (2) 162/7/137 Sanctuaries in Estonia and Belarus; (3) 162/09/015 Big cat conservation and sustainable use in southern Africa; (4) 162/10/004 Devising solutions to bushmeat exploitation in the Sanaga-Cross region; (5) 162/12/0118 Climate Change and Conservation of Galapagos Endemic Bird Species; and (6) The role of tourism in the sustainable use of big cats (awarded 2003 - no reference number allocated yet).

6. Please list the overseas partners that will be involved in the project and explain their role and responsibilities in the project. The extent of their involvement at all stages in the project should be detailed, including in project development. Please provide written evidence of this partnership.

i) PROFAUNA Organisation: Since 1993, this non-profit making organisation has been researching wildlife conservation in the South Cone of South America, and acting 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 students recruited from universities 2) project implementation and coordination 3) communication, outreach and publicity 4) logistical support, accommodation, office space 5) GIS and diet analyses and 6) co-managing finances with WildCRU. PROFAUNA's President, Dr. Marcelo H. Cassini, will be responsible for coordination of the project in Argentina. Dr. Cassini has been closely involved in project design and will be heavily involved throughout the study.

ii) University of Buenos Aires (UBA). **Role:** UBA will host the genetic research. Dr. Daniela Centrón, an expert molecular biologist there, will be responsible for this work.

iii) Administración de Parques Nacionales (APN): The Argentine Government's National Parks authority (sites administered include our proposed study areas). **Role:** Lic. Claudio Chehébar, a senior member of APN's personnel, and a local expert on native otters, will be responsible for coordination of field logistics.

iv) 5 undergraduate students are yet to be designated.

7. What steps have been taken to (a) engage at all appropriate levels within the host country partner organisations to ensure full support for the project and its outcomes; and (b) ensure the benefits of the project continue despite staff changes in these organisations?

The Wildlife Conservation Research Unit and PROFAUNA have been research partners since 1996. Our previous collaborations in Argentina have been conducted with the strong support of the Administración de Parques Nacionales, which in turn demonstrates the consent of the Argentine Government. WildCRU, PROFAUNA and APN have worked together to co-author a number of papers based on this work (Previtali, A, Cassini MH, Macdonald D (1998) Habitat use and diet of mink in Argentine Patagonia; *J. Zoology* **246**: 482-486; Aued, MB, Chéhebar, C, Porro, G, Macdonald, D, Cassini, MH (2003) Environmental correlates of distribution of Southern River Otters (*Lutra provocax*) at different ecological scales. *Oryx*, **37**: 413-421).

The University of Buenos Aires and PROFAUNA began their research collaboration in 1998. At first, Dr. Cassini required Dr. Centrón's expertise in the application of molecular biology to ecological studies on coypu (*Myocastor coypus*), the most important species for Argentina's international commercial trade in wildlife. A second common research project was initiated between the two organisations two years ago with the aim of understanding the genetic links between populations of South American sea lions on the Atlantic coast of South America, and the application of this knowledge to the conservation of marine mammals in the region.

Links between various members of all partner organisations have since flourished and firm relationships are seen to have developed between the organisations themselves as a result. We are therefore confident that staff changes would not adversely affect the success of the proposed work.

8. What other consultation or co-operation will take place or has taken place already with other stakeholders such as local communities. Please include any contact with the government of the host country not already provided.

Letters of support from the three host country partners confirm their commitment to this project. In their letter of support, the Argentine Government (through the ACN) stresses both the importance of otter conservation in their National Parks, and their enthusiasm for implementing the findings of our work - to the biodiversity benefit of the region. Our output will include an action plan for the National Parks of the Andean Patagonian region, combining strategies for conserving the native Southern River Otter and for controlling the introduced mink. 200 newsletters announcing the project will be produced and distributed among the local community in April 2004. In June 2004, we will hold a Think Tank meeting and dissemination workshop to further involve stakeholders. Over the course of the project, we will train 20 local Parks wardens as well as producing 1 local and 1 national press release in Argentina, 1 national press release in the UK, 1 local TV programme in the UK, 1 national radio interview in Argentina and 1 local radio interview in the UK.

Professor Macdonald and Dr Cassini participated as Senior Scientists in an INCO-DEV Project (of the European Union) initiated in 2001. This project was called 'Sustainable economic utilization of wild South American Camelids' and involved working with local communities of the Puna region of Argentina.

PROJECT DETAILS

9. Define the purpose of the project in line with the logical framework.

We aim to protect vertebrate biodiversity in the Andean-Patagonian region of Argentina. We will do so by evaluating, and designing (and implementing) plans to reduce, the impact of invasive American Mink (*Mustela vison*) on local biodiversity (both native predators and native prey), using the endangered Southern River Otter (*Lontra provocax*), or *huillin*, as a flagship species. This purpose builds on (and is modelled on) our previous very successful Darwin Projects in Eastern Europe regarding American Mink there. Having established the worst impacts of this invasive species, our approach is two-pronged: to initiate steps a) to mitigate that impact and b) to foster the conservation of the affected local species in National Parks, of which the endangered native otter is an emblem. Appropriate strategies to achieve these aims will

be formalised in an Action Plan for the region. A goal, and a necessity, will be to involve National Park wardens, wildlife managers and local researchers and to advance their training to implement our emerging recommendations. **Please see attached 3 pages entitled ‘(9) Purpose of the project continued; Endangered otter and invasive mink in Patagonia’.**

10. Is this a new initiative or a development of existing work (funded through any source)?

This is a new initiative that will collect, integrate and analyse new data on natural and anthropogenic variables, with existing survey data collected by the APN.

11. How will the project assist the host country in its implementation of the Convention on Biological Diversity? Please make reference to the relevant article(s) of the CBD, thematic programmes and/or cross-cutting themes (see Annex C for list and worked example) and rank the relevance of the project to these by indicating percentages. Is any liaison proposed with the CBD national focal point in the host country? Further information about the CBD can be found on the Darwin website or CBD website.

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) to develop the knowledge and tools necessary, and to begin a permanent scheme, for restoring their Inland Waters Biodiversity. Inland waters are considered the most threatened ecosystem among the CBD’s 5 thematic programmes.

The project will support the Government’s implementation of Articles 5 (Co-operation) 5%, 7 (Identification and monitoring) (5%), 8 (In-situ conservation) (20%), 8h (Alien species) (15%), 12 (Research and training) (10%), 13 (Public education and awareness) (5%), 17 (Exchange of information) (5%) and 18 (Technical and scientific co-operation) (5%) of the Convention on Biological Diversity, with particular emphasis on the Inland Waters Biodiversity (15%) and Protected Areas (15%) themes.

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

Native otters (*huillín*) are almost extinct in Argentina. Introduced mink have spread rapidly throughout the Andean-Patagonian region, where they impact adversely on its vertebrate biodiversity and on otters in particular. Remaining otter populations are scarce, small and isolated as a result. Inland Waters Biodiversity is recognised as the the most urgent issue under the Convention of Biological Diversity. 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 relate specifically to Conservation and to 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.

13. If relevant, please explain how the work will contribute to sustainable livelihoods in the host country

This project, through involvement and training, will empower local people - including students (future scientists), and Park wardens (hands-on practitioners) - to work towards the strategic conservation of their own country’s biodiversity and aesthetic value. The project will help develop sustainable livelihoods for local people by allowing them to meet emerging conservation priorities while continuing to live and work in their own country / region (rather than these jobs going to others). Their capacity to train their successors will perpetuate these benefits for future generations.

14. What will be the impact of the work, and how will this be achieved? Please include details of how the project outputs will be disseminated and put into effect to achieve this impact.

The main impact of this work will be the long term preservation of the vertebrate diversity of the cold forests and other unique habitats of the mountainous region of Patagonia. This will be achieved, using the *hullin* as a flagship species, by: (1) developing a management plan and related publications that will be implemented by stakeholders (Protected Area managers, Park wardens and researchers); (2) guaranteeing the quality of the scientific information that will underpin the management plan - this will involve four approaches: field, genetic, diet and GIS studies; (3) training local stakeholders in the skills necessary for the successful conservation of vertebrate diversity in their National Parks; and (4) establishing a permanent organisation for monitoring the conservation status of endangered vertebrates and the impact of mink upon this.

15. How will the work leave a lasting legacy in the host country or region?

A chief legacy of this project will be the long-term persistence of otter populations, otters providing a flagship for biodiversity conservation in the area. The project will also help to equip local people to take over responsibility for the management of biodiversity in sensitive areas within the host country. We will achieve this lasting legacy by the following main actions: (1) providing fundamental information necessary for the conservation of an endangered species and the control of an invasive species; (2) producing an action plan for (i) increasing otter populations based on translocating individuals to optimal habitats and (ii) decreasing the impact of American mink by culling (and by the translocation of individuals from high to low risk areas where appropriate); (3) establishing a permanent monitoring programme based on previous experiences in target protected areas. An additional aspiration is to secure training in the UK for the Argentine field biologist, perhaps as part of a graduate programme – if the DI application is successful we would use this to approach the Rufford Foundation for funds to support this (they have a category of application precisely to provide such matching funds). This additional training would add to the legacy of experience created by the project.

16. What steps have been taken to identify and address potential problems in achieving impact or legacy?

WildCRU, PROFAUNA and the University of Buenos Aires (UBA) are well established with the necessary skills and experience. Potential technical problems are related mainly to the application of molecular techniques to genetic analysis. We have already tested our proposed method and have obtained (we are the first) a sequence of mitochondrial DNA for the Southern River Otter. We consider the agreements and relationships between WildCRU, PROFAUNA, UBA and the Argentine government (through the APN) to be secure. A potential political problem for the ultimate success of other projects requiring government involvement has sometimes been a lack of interest by the relevant authorities regarding ultimate implementation of action plans or monitoring programmes. The Argentine government has demonstrated its commitment to biodiversity through its National Strategy for Biodiversity, and our project themes are among the conservation priorities of the APN (Patagonian region) in particular. We have been working closely and successfully with Lic Chehebar, a key member of the APN, for several years, and the APN has expressed full support for this project and the implementation of its final recommendations in its covering letter.

17. How will the project be advertised as a Darwin project and in what ways would the Darwin name and logo be used?

This project is distinctive because, rather than focussing solely on either research, training, communication or participation, it addresses the need to thoroughly integrate these elements in order to achieve successful and sustainable biodiversity conservation. The recommendations derived from this work will inform government conservation strategies, through the APN's confirmed commitment to the project. The aims of the project align closely with the philosophy of the Darwin Initiative in that: (1) Argentina is poor in economic resources and rich in biodiversity (indeed, we address serious threats to the latter) and; (2) a central aim of the project is to strengthen the local community's capacity to safeguard the future of its own biodiversity. The Darwin Initiative will be mentioned 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.

18. Are you aware of any other individuals/organisations carrying out similar work? Are there completed or existing Darwin Initiative projects which are relevant to your work? Please give details, explaining the similarities and differences and how your work will be distinctive and innovative. Show how the outputs and outcomes of this work will be additional to any similar work, and what attempts have been/will be made to co-operate with such work for mutual benefits.

The circumstances of our proposed project parallel closely those that stimulated our **previous Darwin project** on American Mink in Belarus and Estonia (162/7/137 Sanctuaries in Estonia and Belarus, and we have built this proposal on the **lessons learned** from this earlier work. One of our host country partners (Lic. Chehebar, of APN) is conducting related work; this will be of **direct and immediate benefit to our work**. We know of no other researcher or institution carrying out similar work. However, Gonzalo Medina (Instituto de Ecología y Evolución, Universidad Austral de Chile), is conducting an ecological study of the same otter species **in Chile**, using a **different (radio-tracking) approach**. The Chilean study is a **perfect complement** to ours.

19. Will the project include training and development? Please indicate who the trainees will be and criteria for selection. How many will be involved, and from which countries? How will you measure the effectiveness of the training and will those trained then be able to train others? Where appropriate give the length and dates (if known) of any training course. How will trainee outcomes be monitored after the end of the training?

The project will train 7 students (8 or 32 weeks each) and 20 National Park wardens (20 weeks each). All trainees will be from Argentina. Undergraduate students will be selected on the basis of academic qualifications; 5 will produce theses and 2 will collaborate with fieldwork. Undergraduate theses will concern GIS, diet, and prey distribution, and the organisation and development of workshops. Students will come from 3 Argentine Universities: Comahue, Lujan and Buenos Aires. They will be trained by senior investigators on the project: Macdonald, Cassini, Centrón and Chéhebar. Park wardens will be selected by Lic. Chéhebar. Training workshops will be coordinated by Cassini and Chéhebar, and conducted by Cassini, Chéhebar and the 2 field students. The effectiveness of the training and trainee outcomes will be measured in terms of the following performance criteria: (1) high quality data collection and analysis; (2) report writing; (3) number of hours spent in the field; (4) quality of field reports submitted; (5) completion of thesis; and (6) submission of publications. Trained Park wardens will take on the training of other APN wardens and trained students will provide training to others during the workshops and may go on to active conservation roles where they will be able to further use and pass on the skills acquired during this work. Trainee outcomes will be monitored at regular intervals after training is complete (Park wardens by Chehebar, and students by Cassini, Centrón and Chéhebar).

20. How are the benefits and/or work of the project expected to continue after the end of grant period? Please provide a clear exit strategy.

The results of the research programme will be presented to the National Parks Administration for incorporation into their own management strategies and plans concerning otters and mink in the Parks. Our ecological and genetic research will allow us to detect optimal sites for the translocation of otters. As a consequence, we will be able to suggest an effective exit strategy of otter conservation. The action plan will include methods for otter translocation, the control and translocation of mink and permanent monitoring of the status of endangered species. We have been working for the last 8 years in collaboration with Dr Chéhebar, an influential member of NPA in the Patagonia region. He has overseen their otter and mink surveys for the last 25 years. Financial and organisational difficulties have proved problematic during that time, but our project will facilitate the delivery of more frequent and systematic surveys. We will establish a monitoring programme in collaboration with Chéhebar and other members of the NPA; this will be based on a robust scientific background as well as taking account of the political and financial context. One key outcome is that we will form a network of trained Park wardens that will then be able to execute an efficient monitoring scheme.

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

Project implementation timetable			
Date	Financial year:	Key milestones	
Apr 2004	Apr-Mar 2004/5	Project planning and project announcement	
May 2004		Training students	
Jun 2004		Preliminary campaign, Think Tank meeting, sample collection for technique development	
Jul-Sep 2004		Testing and development of molecular and diet techniques, characterisation of landscapes and habitats using satellite imaging, processing of maps and GIS	
Oct 2004		Six month report	
Nov-Dec 2004		Survey in Nahuel Huapi and Lanin National Parks	
Jan-Feb 2005		Survey in Tierra del Fuego Park	
Mar 2005		Data processing	
Apr 2005		Apr-Mar 2005/6	Annual report
May-Sep 2005			Diet, GIS and molecular analyses
Oct 2005	Six month report		
Nov 2005- Jan 2006	Diet, GIS and molecular analyses		
Feb-Mar 2006	Data processing, stakeholder workshop, additional training		
Apr 2006	Apr-Mar 2006/7		Annual report
May-Jun 2006		Training students, organisation of wardens' workshop	

Jul-Dec 2006	Wardens' workshops and dissemination of findings
Jan-Mar 2007	Production of Action Plan, agreement with authorities, definition of management programme
Apr 2007	Annual report

22. How will the most significant outputs contribute towards achieving the purpose of the project? (This should be summarised in the Log Frame as Indicators at Purpose level)

The purpose of this project is to protect vertebrate biodiversity in the Andean-Patagonian region of Argentina by reducing the impact of invasive American mink and by facilitating the range expansion of endangered native otters in National Parks.

Academic output, action plans and other research products will be significant outputs that will contribute towards the generation of **new knowledge** regarding which factors limit otter population expansion and how mink impact on vertebrate diversity, the first indicator of Purpose achievement. This knowledge is needed to underpin the otter's recovery.

Training of future Argentine biologists, managers and wardens, education of stakeholders and policymakers, several methods of result dissemination and the organisation of a permanent monitoring scheme will be significant outputs for **building capacity**, the second indicator of Purpose achievement. These trained personnel will therefore be available to implement plans based on the aforementioned new knowledge.

The ultimate measure of success will be improved conservation status of the otters, and the semi-aquatic ecosystem of which they are a part. More practically, our success will be judged by the steps taken, scientific and administrative, towards actions fostering the **expansion of otter population numbers and distribution range** and concomitant **reduction of mink**, i.e. the third indicator of Purpose achievement. The major outputs of this project will be scientifically-based plans that national authorities such as National Parks will implement; their adoption of our plans will itself be a measure of our success, and when they do so it will be possible to measure the success of each milestone they reach against our predictions.

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

PROJECT OUTPUTS		
Year/Month (starting April)	Standard Output Number (see standard output list)	Description (include numbers of people involved, publications produced, days/weeks etc)
Apr 2004	7 & 16	4 items of training materials for student training, 200 newsletters describing and announcing the project to the local community in the host country
May-Oct 2004	4b & 4d	Training of 5 students (receiving 32 training weeks)
Jun 2004	14a	Think Tank meeting and dissemination workshop with stakeholders
Feb-Mar 2006	10 & 12	1 field guide on monitoring techniques, 3 computer based databases established for mink, otters and prey distribution
May-Jun 2006	4b, 3, 11, 14	Training of 2 students (receiving 8 training weeks), 3 undergraduate theses send for evaluation at universities in host country, 3 papers submitted for publication in peer-reviewed journals, 3 papers submitted for presentation at international conferences
Jul-Dec 2006	6a, 6b, 15, 18, 19	Training of 20 NPA wardens (receiving 20 training weeks), 1 local and 1 national press release in host country, 1 national press release in UK, 1 local TV programme in UK, 1 national radio interview in host country, 1 local radio interview in UK
Jan-Mar 2007	9, 3, 11, 14	2 action plans on otter conservation and mink control and 2 undergraduate theses submitted to universities in host country, 4 papers submitted for publication in peer-reviewed journal, 4 papers submitted for presentation at national and international conferences.

MONITORING AND EVALUATION

24. Describe how the progress of the project, including towards delivery of outputs, will be monitored and evaluated in terms of achieving its overall purpose. This should be both during the lifetime of the project and at its conclusion. Please make reference to the indicators described in the Logical Framework.

To determine whether the project and its components are being conducted as planned, WildCRU and PROFAUNA will carry out an internal project implementation evaluation, from the project start-up and throughout the project lifetime. 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 (2004/5, 2005/6, 2006/7), a major evaluation will take place to assess strengths and weaknesses and take corrective measures for the remainder of the project. We will also assess the cost-effectiveness of what has been accomplished, benefits to trainees participating in the project and the components that were most effective. Internally, we have several specialists with expertise in the field of this project who we will recruit, along with external colleagues, to act as evaluators. The evaluators will aim to determine how dissemination activities and outputs are providing feedback to inform decision-making and how research and training have contributed to understanding the key factors in the long-term conservation of biodiversity, and otters in particular. 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 of the world.

25. How will host country partners be involved in monitoring and evaluation of the project?

The main project activities, timetables and the staff responsible for their execution will be included in the annual operational plans of PROFAUNA and the National Parks Administration and 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 five theses to be conducted during the project.

26. How will you ensure that the project achieves value for money?

We have conducted previous studies, developed monitoring techniques and tested methodologies that are cost-effective and efficient. An interdisciplinary team will be constantly evaluating progress (as part of the internal project implementation evaluation) to identify potential economies and improvements whenever opportunities arise. We will not need to purchase costly equipment because all equipment will be provided by host institutions (UBA and APN). Free accommodation will be provided by local authorities for use by personnel during fieldwork.

27. Reporting Requirements. All projects must submit six monthly reports (by 31 October each year) and annual reports (by 30 April each year). Please check the box for all reports that you will be submitting, dependent on the term of your project. You must ensure that you cover the full term of your project.

Report type	Period covered	Due date	REQUIRED?
Six month report	1 April 2004 – 30 September 2004	31 October 2004	Yes
Annual report	1 April 2004 – 31 March 2005	30 April 2005	Yes
Six month report	1 April 2005 – 30 September 2005	31 October 2005	Yes
Annual report	1 April 2005 – 31 March 2006	30 April 2006	Yes
Six month report	1 April 2006 – 30 September 2006	31 October 2006	Yes
Annual report	1 April 2006– 31 March 2007	30 April 2007	Yes

Six month report	1 April 2007 – 30 September 2007	31 October 2007	No
Final report	1 April 2004 – project end date	3 months after project completion	Yes

LOGICAL FRAMEWORK

28. Please enter the details of your project onto the matrix using the note at Annex B of the Guidance Note. This should not have substantially changed from the Logical Framework submitted with your Stage 1 application. Please highlight any changes.

<i>Project summary</i>	<i>Measurable indicators</i>	<i>Means of verification</i>	<i>Important assumptions</i>
<p>Goal: To draw on expertise relevant to biodiversity conservation from within the United Kingdom and to work with local partners in countries rich in biodiversity but poor in the resources necessary to achieve its conservation</p> <ul style="list-style-type: none"> • conservation of biological diversity, • sustainable use of its components, and • fair and equitable sharing of the benefits arising from the utilisation of genetic resources 			
<p>Purpose To protect the vertebrate biodiversity of Argentina's Andean-Patagonian region by reducing the impact of invasive American mink and by facilitating the range expansion of endangered native otters in National Parks.</p>	<p>New knowledge regarding which factors limit otter population expansion and how mink impact on vertebrate diversity. Identification of key sites for otter reintroductions and mink removal by yr 2.</p> <p>Increased capacity for researchers, wildlife managers and Park wardens to implement effectively otter reintroductions and mink removal. Permanent monitoring of otter status and mink impact by yr 3.</p> <p>Ultimately, expansion of otter population numbers and distribution range and concomitant reduction of mink.</p>	<p>Publication of theses, papers accepted by peer reviewed journals, technical reports produced by National Park and partner organisations.</p> <p>Management plans, training & implementation guides, computer databases, fieldwork reports, workshop records, and formal agreements with National Park Administration.</p> <p>Adoption by National Parks authorities of our recommendations, and subsequent successful implementation by them of each stage as outlined in our plans. Of course, stages to be adapted as conditional on unfolding developments.</p>	<p>National Park authorities maintain their present support for our research activities and continue to be prepared to incorporate our new management proposals.</p>

<p>Outputs</p> <p>Training of future Argentine biologists and managers and wardens of National Parks of Patagonia. Education of stakeholders, policy makers via workshops/Think Tanks.</p> <p>Action plans and other research products for the conservation of vertebrate biodiversity in Patagonia.</p> <p>Academic output.</p> <p>Several methods of result dissemination.</p> <p>Organisation of a permanent monitoring scheme.</p>	<p>5 (3, undergraduate theses), 8 (4a&c) receiving 32 (4b&d). 4 (7), workshops with 20 (6A) receiving 20 (6B).</p> <p>2 (9) on otter conservation & mink control, 1 (10) on monitoring, 3 (12) on mink, otter and prey distribution.</p> <p>7 (11), 7 (14).</p> <p>3 (15), 1 (16), 1 (18), 2 (19).</p> <p>1 (20) on mink impact and otter distribution.</p>	<p>5 undergraduate theses submitted/ defended, student performance reports, workshop and Think Tank participant records.</p> <p>Management plans, field implementation & training guides and computer databases sent to DI.</p> <p>Papers and conference abstracts sent to DI.</p> <p>Copies of all publications and records sent to DI.</p> <p>Agreement with Argentine National Park managers.</p>	<p>Students, National Park managers, stakeholders available and motivated for training and application of new skills.</p> <p>Field and laboratory techniques appropriate for data collection and processing</p> <p>Journal editors/ conference organisers accept papers.</p> <p>Newspaper, radio and TV producers interested.</p> <p>National Park Administration interested.</p>
<p>Activities</p> <p>Apr-Sep 2004</p> <p>Oct-Dec 2004</p> <p>Jan-Feb 2005</p> <p>Mar-Apr 2005</p> <p>May 2005-Jan 2006</p> <p>Feb-Apr 2006</p> <p>May-Jun 2006</p> <p>Jul-Dec 2006</p> <p>Jan-Apr 2007</p>	<p>Activity Milestones (Summary of Project Implementation Timetable)</p> <p>Project organisation. Training workshops. Conservation agency Think Tank meeting. Preliminary campaign, testing techniques and landscape characterisation.</p> <p>Six month report and survey in two Parks.</p> <p>Survey in Tierra del Fuego Park.</p> <p>Data processing and annual report.</p> <p>Diet, Genetic and GIS studies and six month report.</p> <p>Data processing, stakeholder workshop, additional training, annual report.</p> <p>Training students, organisation of wardens' workshop, dissemination.</p> <p>Wardens' workshops and dissemination of findings.</p> <p>Production of Action Plan, agreement with authorities, definition of management programme, annual report.</p>		