

Submit by 13 January 2006

**DARWIN INITIATIVE APPLICATION FOR GRANT ROUND 14 COMPETITION:STAGE 2**

Please read the Guidance Notes before completing this form. Applications will be considered on the basis of information submitted on this form and you should give a full answer to each question. Please do not cross-refer to information in separate documents except where invited on this form. The space provided indicates the level of detail required. Please do not reduce the font size below 11pt or alter the paragraph spacing.

**1. Name and address of organisation**

<b>Macaulay Institute</b>	<b>Craigiebuckler, Aberdeen, AB15 8QH. Scotland</b>
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**2. Project title (not exceeding 10 words)**

<b>Capacity building for temperate rainforest biodiversity conservation in Chile</b>
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**3. Project dates, duration and total Darwin Initiative Grant requested**

Proposed start date:		Duration of project:		End date:	
<b>Darwin funding requested</b>	<b>Total</b>	<b>2006/07</b>	<b>2007/08</b>	<b>2008/09</b>	<b>2009/2010</b>
	<b>£ 200,000</b>	<b>£ 78,774</b>	<b>£ 59,270</b>	<b>£ 61,956</b>	<b>£ 0</b>

**4. Define the purpose of the project in line with the logical framework**

<p>This multidisciplinary project will develop capacity for biodiversity conservation in the temperate rainforest region of southern Chile. A new field station will be established to provide facilities and focus for research and environmental education. The research will analyse the influence of fragmentation of primary forests on biodiversity and focus on the importance of the more threatened lower altitude habitats, currently <i>outside</i> the national protected area system, for endemic mammal and avian fauna. This will give important information on the dynamics of large-scale biodiversity threats, and provide a framework for prioritising future activities in support of the Convention on Biological Diversity. The Darwin Initiative will engage the private sector in sustainable forest management, through demonstration, training, and volunteer-driven actions, with the objective of improving habitat connectivity by expanding the existing protected area system, and engagement of local landowners in conservation management.</p>
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**5. Principals in project. Please provide a one page CV for each of these named individuals**

<b>Details</b>	<b>Project Leader</b>	<b>Other UK personnel (working more than 50% of their time on project)</b>	<b>Main project partner or co-ordinator in host country</b>
Surname	Hester	Laker	Bonacic
Forename (s)	Alison	Jerry	Cristian
Post held	Senior Scientist	Scientist	Professor
Institution	Macaulay Institute	Macaulay Institute	Catholic University of Chile
Department	Ecology	Ecology	Fauna Australis

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

Yes. Macaulay Institute ran a project in Round 8 of the Darwin Initiative - Sustainable Management of Large Mammals in the Khan Khenti, Mongolia. Ref. 9013 (Dates 01/06/2000 to 30/09/2004)  
The purpose of that project was to assist Mongolian authorities in implementing effective management of the large mammal resource in the Khan Khenti Protected Area and buffer zone through research to support a sustainable wildlife management policy. Macaulay Institute also had a scientific supervisory role in the Darwin Initiative project: The ecology of Huemul (*Hippocamelus bisculus*) in Chile 01-Aug-00 – 31-Jul-03.

**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 the UK (where there are partners in addition to the applicant organisation) and host country partners that will be involved in their project and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. What steps have been taken to ensure the benefits of the project will continue despite any staff changes in these organisations? Please provide written evidence of partnerships.**

**Macaulay Institute, Aberdeen**, is the project leader. We will develop and manage the research themes and their implementation, including scientific support for data analysis, and spatial statistics, writing and reviewing of scientific papers. One of the team will be based full-time at the Chilean study site, working directly with the host country partners.

**Wildlife Conservation Research Unit, University of Oxford**, will hold training courses in Chile for post graduates and project workers on wildlife monitoring and data analysis methods

**Rainforest Concern, London**, has been investing significantly in land acquisition for conservation in the area. They will support the Darwin Initiative by developing accommodation and field-work facilities at the main project study site.

**Quest Overseas, London**, will organise groups of UK university students and conservation volunteers to undertake wildlife tracking and monitoring work. Research work will be structured in such a way that the work by individual students will contribute to their university course work.

**Fauna Australis, Universidad Católica de Chile** is the host country coordinator, and will provide research services, experimental design, and scientific supervision for wildlife tracking and monitoring and habitat evaluation work. Fauna Australis will provide students to undertake research activities, pairing up with their UK counterparts.

**Parques para Chile, Pucón**, has 4 roles: To develop the field station; to undertake research in spatial ecology and GIS; to take on day-to-day project management (coordinating volunteers and students, and arranging logistics to undertake project tasks); and to organise training.

**Corporación Nacional Forestal (CONAF)**, the Chilean national parks and forestry service, is responsible for the management of many of the protected areas in which the fieldwork for this project will be carried out. Their ranger service will be a crucial support to the work, providing access, logistical support and local knowledge in the design and implementation of the

fieldwork.

### **Extent of involvement**

All members of the team have been closely involved in project development. A trial expedition for UK conservation volunteers was set up in July-August 2005 as a feasibility study for the main project. Quest Overseas sent 7 volunteers to work 5 weeks in Pucón with Parques para Chile, during which they carried out a simple rapid assessment programme, supported in the field by 2 Fauna Australis ecologists. This was an extremely valuable experience to test the strengths and limitations of this type of teamworking, and to identify priorities for improving next year. Macaulay Institute already has a field ecologist working in Chile and he has been making close working links on-site. In addition, the directors of Fauna Australis and Parques para Chile came to the UK in September 2005 where we held meetings in Macaulay Institute and WildCRU to discuss the project and establish an agreed work plan.

### **Staff involvement**

Macaulay Institute: 3 staff involved: Project Leader – 2 weeks per year; On-site ecologist/project manager - 12 months part-time per year; Research scientist in Aberdeen - specialist in spatial statistics – support for experimental design and analysis.

WildCRU: Will send a post-doctoral ecologist for 2 weeks per year to provide technical training in wildlife monitoring and data analysis.

Rainforest Concern: Supports the project through improving mountain hut accommodation and infrastructure necessary for carrying out fieldwork

Quest Overseas have 3 staff members who will organise groups throughout the project of 8 – 16 conservation volunteers and university students from the UK to work for 5 weeks each on wildlife monitoring and tracking. Quest will provide supervision and scientific support, liaising with UK universities to integrate the field work undertaken in Chile with university project requirements

Fauna Australis will dedicate 1 month per year of senior scientist time, including field visits to the project. Between 1 and 4 post-graduate research projects will be based around the project scientific objectives.

Parques para Chile has a project coordinator and a GIS-specialist, who will work in a research support role. One full-time scientific staff member will be employed to manage the field work, set up training events, provide information resources for the local community, and to support/supervise the visiting students/ volunteers.

CONAF has, as a result of the process of project development established two park rangers, in their hitherto unstaffed forest reserve (Reserva Forestal Villarica, Sector Quelembre), adjacent to the Parques para Chile Namoncahue reserve. The rangers will conduct periodic wildlife surveys in the reserve, and assist with volunteer groups working in the field.

### **Consequences of staff changes.**

The institutional collaborations proposed – Macaulay Institute with WildCRU and Fauna Australis, Parques para Chile with Rainforest Concern and Quest Overseas – are based on existing professional associations over several years. Every effort has been made to involve several staff members in each of the partner organisations, and it is hoped that this will mean that the project is not overly reliant on any particular individuals, and thus remains resistant to unforeseen staff changes. The foreseen benefits from this project will be manifested not only in personal development, but also in tangible products – papers on spatial/ population ecology, cartography on species distributions, species lists and the construction of a permanent field station – the Centre for Biodiversity. The project will make a strong contribution to the process of establishing the area as a biosphere reserve. While one can never plan for all eventualities, we have been impressed with the strength of the host country partners, and their commitment to this project, and have confidence in their ability to implement the proposed work programme.

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

The Darwin project has been developed in close collaboration with the local county government – the Municipalidad of de Pucón, whose ongoing project, “Pucón Sustentable”, is an initiative to improve the environmental sustainability of local development and planning, and will have a high level of synergy with our proposed work. A data sharing agreement has already been established that will secure access to extensive GIS resources held by the Municipality. This resource is included as co-financing in kind in this proposal. Parques para Chile and Macaulay Institute held a meeting in Temuco in July 2005 with CONAMA, the Chilean national governmental department of the environment, to ensure that our work will be well coordinated with other efforts to address CBD commitments. CONAF, the Chilean Park and Forestry Service is an important stakeholder, and one of Parques para Chile’s main partners in the project – regular meetings between them in the development of joint activities, including the Darwin project have led already to establishing a permanent ranger presence near our main study site. The British Embassy in Santiago has been kept informed through the development phase of this project, and has offered their support to this proposal (for details, contact FCO Political Secretary (Sarah Anderson) on +56 2 370 4114).

## PROJECT DETAILS

**10. Is this a new initiative or a development of existing work (funded through any source)? Are you aware of any other individuals/organisations carrying out similar work, or of any completed or existing Darwin Initiative projects relevant to your work? If so, please give details explaining similarities and differences and showing how results of your work will be additional to any similar work and what attempts have/will be made to co-operate with and learn lessons from such work for mutual benefits.**

This project is a development of existing work. A partnership between the Chilean conservation NGO, Parques para Chile, the British NGO Rainforest Concern, and local landowners has already begun a process to achieve a vital extension of the protected area system for Chilean temperate rainforests in the XI region. Achievements to date have been the acquiring of 20,000 ha of both primary and damaged forest that strategically links two government-owned forest reserves, as well as several management agreements with adjacent land-owners to dedicate their forest management to conservation and landscape objectives. This project aims to enhance this work by building capacity to undertake quality research on some of the key questions about faunal abundance and habitat use – what species are found where, and at what time of year? A local business has assisted Parques para Chile to acquire a 6 ha site as a base for a new field centre – the Centre for Biodiversity. We plan to use the Darwin Project to leverage local funding to improve research and accommodation facilities at the site. Young British conservation researchers, through Quest International, will live and work there, alongside Chilean counterparts, to carry out the proposed research. The Darwin Initiative project will enhance this next phase of the work by providing a framework within which to engage the UK conservation research community in Chilean temperate rainforest conservation.

Given the international importance of the temperate rainforest biome (a Conservation International Global Hotspot) its fauna has received attention in the past. The Darwin Initiative has supported studies on two important species – the Darwin fox in Chiloe Island, and the huemul deer in the Chilean XI Region. Both Anglo-Chilean management partnerships for these projects are well-known to the partners of the current project – Macaulay Institute and the Catholic University both played a scientific support role in the huemul project, and we have held meetings with the principal UK and Chilean scientists from the Darwin Fox project. This proposal has been developed in the light of the experience gained during both projects. It differs significantly from the others in its holistic multi-species approach to address broad biodiversity issues, rather than focus on specific elements of the ecosystem.

**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 work supports National Biodiversity Strategy objectives of the Republic of Chile, and relates to Articles 8 - *In-situ* Conservation (10%), 10 - Sustainable use of components of Biological Diversity (10%), 12 - Research and Training (15%), 17 - Exchange of information (5%) and 18 - Technical and scientific co-operation (10%) of the CBD. The themes of the CBD addressed by the project include: Ecosystems approach (5%), Forest Biodiversity (20%), Protected Areas (15%), and Public Education and Awareness (10%). Meetings have already been held with the CBD Focal Point, CONAMA in Temuco in 2005 to establish an official basis (*convenio*) for collaboration on coordinating implementation efforts.

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

National Chilean CBD policy is set out in the document: "*Plan de Acción de País para la Conservación y Uso Sostenible del Patrimonio Natural 2005-2015 para la Implementación de la Estrategia Nacional de Biodiversidad*", issued by the Department of the Environment (CONAMA). The 4<sup>th</sup> strategic objective of this Biodiversity Action Plan relates to integrated biodiversity management, and within this general heading, four main lines of action identify: public-private cooperation; environmental management research; the encouragement of international biodiversity conservation projects; and the development of new financial mechanisms for supporting environmental protection. The proposed programme of research addresses all four of these lines of action, with a strong emphasis on establishing real public-private partnerships to create a model example for other regions to follow.

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

The purpose of engaging the private sector in sustainable forest management is to create the will and the way to find new economic and social values for local communities from forest resources, that are compatible with wildlife conservation, are predominantly non-consumptive, and promote an interest on the part of local people to protect native biodiversity. The UNESCO biosphere reserve model appears to offer the most promising format for achieving the positive engagement of local communities in adopting appropriate forest management practices, by paying attention to zoning of activities, and creating real opportunities for realising economic value from positive environmental management practices. It is these management practices that will form the basis for a new generation of sustainable livelihoods based around ecoforestry principles, value adding, and ecotourism.

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

The Darwin funding is sought to finance the start-up of the science programme for the Centre for Biodiversity, Pucón. It will complement private sector investment and donations that we are already using for capital works, and help considerably in our aim to leverage further funding for the construction of a fully equipped field centre. The research will evaluate spatial-temporal changes in fauna abundance for key endemic species, identifying winter survival strategies and year-round habitat requirements; give conservation biology training for young Chilean and UK scientists; and develop local facilities for conservation research and training. This combination of outputs will support future conservation initiatives for Valdivian rainforest, including the creation of a Biosphere Reserve, and address poverty alleviation issues by developing non-exploitive management alternatives for forest users and owners, including local indigenous groups (Mapuche). The Centre for Biodiversity is planned to become an important attraction for the many summer visitors to the area, and will take on a valuable environmental education role, which, with a gift shop, restaurant, organic vegetables, horseback guided wildlife tours and tree nursery, will also have a solid economic basis to support its own continuance well beyond the end of the project. Research outcomes will be published in international and Chilean journals. We will produce illustrative publications, such as booklets and posters to inform the public about our work. A TV-quality video will explain the project and its objectives in the local and national media and for display in the Centre.

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

As explained in Section 14, the proposed field centre facilities will be a grassroots enterprise, involving support from local businesses. The Centre must necessarily become economically self-sufficient, earning revenue as a visitor centre, restaurant, and environmentally-orientated tourism activities. It is intended that this stability will enable the centre to provide the research and training facilities needed by future generations of post-graduate students from UK, Chile and elsewhere to work on local problems with global resonance. The science to be undertaken will help local conservation priorities to be better defined, and materially contribute to the expansion of private protected areas, including the possible future establishment of a UNESCO Biosphere Reserve. The Darwin project will provide a highly significant impetus to this initiative, and help to leverage this local investment in building construction and computing facilities. The legacy of this project will be:

1. A new field station for work on local biodiversity issues in a biodiversity hotspot, constructed with local funds leveraged by the Darwin grant.
2. Advances in knowledge on spatial ecology of several important endemic species
3. Training facilities improved for Chilean postgraduates in biodiversity issues
4. Greatly enhanced case for establishing a UNESCO-MAB biosphere reserve – including digital cartography, species lists, and field guides for the reserve area produced
5. Capacity building of local environmental educators and landowners in biodiversity issues and non-exploitive forest management

### **16. Please give details of a clear exit strategy and state what steps have been taken to identify and address potential problems in achieving impact and legacy.**

This project will aim to leave a small, self-sustaining research centre with an established track record in ecological studies on local mammals, birds and amphibians, staffed by host country scientists, and supported by the provision of research services to UK and other overseas universities. Parques para Chile is active in diversifying income sources for the Centre, establishing commercial facilities which will both increase the level of interaction with the local community, as well as help to buffer the inevitable cash flow fluctuations typical of research funding. The Darwin Initiative research will be used as a framework on which to build several more specific research projects with funding from other sources – for example to study individual temperate rainforest species (e.g. Darwin's Frog – *Rhinoderma darwinii*), thus expanding the research base for the centre in an organic and sustainable way.

The establishment of a Biosphere Reserve has been included amongst the objectives of this project. There are many uncertainties associated with this aim. Though the protection of the 22,000 ha of the Namoncahue range will be a core activity, the appropriate mechanism by which to achieve this may change during the course of the public consultation and debate that is central to the Biosphere Reserve philosophy. The legacy will be achieved, but the road may not be as predicted .

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

Association with the Darwin Initiative is seen as an important boost to leveraging funding from other sources, including charitable donations, specifically for construction of improved office/laboratory facilities at the Centre for Biodiversity. It is proposed to include the Darwin Initiative name and logo as part of the "branding" of products and services carried out at the centre. The logo will appear prominently in all publications, posters and correspondence, such as the field guide, web site, project letterhead, PowerPoint presentations, brochures, business cards etc.

**18. Will the project include training and development? Please indicate who the trainees will be and criteria for selection and that the level and content of training will be. 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?**

One of the principal roles of the Centre for Biodiversity is environmental education and training. Only certain specific training needs are being targeted for Darwin-funding, and these fall into a number of categories:

Chilean post-graduate research projects. Between 3 and 9 Chilean post-graduate students will be selected by Fauna Australis to establish projects, based around the Darwin research programme, and joint supervised by Fauna Australis and Macaulay Institute. Training outcomes will be evaluated by Fauna Australis.

UK undergraduate research projects. Through Quest Overseas it is expected that at least 10 UK undergraduates will undertake the research for their biological science honours projects based around the Darwin research programme. Quest will liaise with the UK university, and ensure that the appropriate requirements for accommodation, logistics and scientific supervision are met by the Chilean team. The UK universities will evaluate the projects undertaken.

Scientific training for Chilean postgraduates. Wildlife Conservation Research Unit will send one post-graduate per year to train groups of 10 Fauna Australis post-graduate ecologists in wildlife tracking and census, and statistical analysis. The course will involve at least 10 hours of contact time.

Training for environmental educators: Two courses per year will be run by Parques para Chile to provide training to local outdoor education specialists. The courses will involve approx.16 hours of contact time over two days, and include both classroom and fieldwork elements. The target groups for the course will be CONAF rangers, and ecotourism guides.

Local awareness meetings. As part of the process of expanding the protected area system, environmental education workshops will be arranged by Parques para Chile, involving other members of the team. The purpose of the meetings will be to raise awareness of the local environment and the options available for its sustainable management. Establishing a new conservation status for the 22,000 ha Namoncahue range will require a process of public consultation far beyond the scope of this project. However, it is important that information about the Darwin project, its aims and philosophy, and ongoing findings are shared with the local community, including the Mapuche, who have ancestral lands that would fall within the reserve area. An added result from these meetings would be to help identify early on the nature of any local resistance to the protected area, and to be in a position to alleviate fears and suspicions. Meetings will be arranged four times per year, locally advertised, and are expected to attract approximately 40 attendees.



## LOGICAL FRAMEWORK

19. 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.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p><b>Goal:</b> 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</p> <ul style="list-style-type: none"> <li>• the conservation of biological diversity,</li> <li>• the sustainable use of its components, and</li> <li>• the fair and equitable sharing of benefits arising out of the utilisation of genetic resources</li> </ul>			
<p><b>Purpose</b></p> <p>To establish new public-private partnerships for conservation, with a particular focus on securing habitat connectivity in the Valdivian temperate rainforest region of Chile. The work supports National Biodiversity Strategy objectives, and relates to Articles 8, 10, 12, 17 and 18 of the CBD.</p>	<ol style="list-style-type: none"> <li>1. New research and education field centre</li> <li>2. Information on habitat use by endemic mammals and birds.</li> <li>3. Education for Chilean and international post-graduates.</li> <li>4. Local capacity building for <i>campesinos</i> and indigenous groups.</li> <li>5. A plan for a UNESCO Biosphere Reserve to catalyse private sector involvement in forest conservation</li> </ol>	<ol style="list-style-type: none"> <li>1. Field centre commissioned and constructed.</li> <li>2. Scientific papers analysing spatial ecology of endemic fauna</li> <li>3. Formal collaboration agreements with universities.</li> <li>4. Course outlines and reports</li> <li>5. Nomination documents presented</li> </ol>	<ol style="list-style-type: none"> <li>1. Darwin grant succeeds in leveraging local financial resources.</li> <li>2. Successful management of fieldwork</li> <li>3. Facilities, funding, and supervision offered meets university requirements</li> <li>4. Sufficient local interest in courses</li> <li>5. Sufficient agreement between local stakeholders to support this initiative</li> </ol>
<p><b>Outputs</b></p> <ol style="list-style-type: none"> <li>1. A research and education facility for local biodiversity issues</li> <li>2. Knowledge on temporal-spatial use of habitats.</li> <li>3. 3-6 Chilean MSc research projects advancing project research objectives</li> <li>4. Workshops with <i>campesinos</i> on sustainable forest management</li> <li>5. Participatory consultative process for UNESCO Biosphere Reserve.</li> </ol>	<ol style="list-style-type: none"> <li>1. Facility constructed using co-financing from local businesses</li> <li>2. Scientific and popular publications</li> <li>3. MSc courses successfully completed, Work presented at appropriate conference and submitted to appropriate journals</li> <li>4. Workshop programme, report and course notes</li> <li>5. Nomination documentation and supporting information compiled.</li> </ol>	<ol style="list-style-type: none"> <li>1. Output presented to Darwin Initiative with project report</li> <li>2. Output presented to Darwin Initiative</li> <li>3. Copies of theses and conference abstracts presented to Darwin Initiative.</li> <li>4. PPC reports presented to Darwin Initiative</li> <li>5. Documentation presented to Darwin Initiative.</li> </ol>	<ol style="list-style-type: none"> <li>1. Local private sector funding can be leveraged using Darwin grant</li> <li>2. Successful collaboration of research partnership</li> <li>3. MSc. Students will select offered programme</li> <li>4. <i>Campesinos</i> receptive to sustainable development approach</li> <li>5. Evidence from output 2 supports Biosphere reserve as appropriate mechanism to engage private sector in conservation.</li> </ol>

Activities	Activity Milestones	Assumptions
<p><b>Research</b></p> <p>1. Identify spatio-temporal dynamics of key mammal and avian endemic fauna  2. Map habitat use  3. Define threats to biodiversity and incentives for conservation</p> <p><b>Capacity building</b></p> <p>4. Develop field centre for research and education in Pucón  5. Training in non-exploitive forest management.  6. WildCRU and MLURI scientists' supervision of Chilean MSc students.</p> <p><b>Dissemination</b></p> <p>7. Publications in both English-language and Chilean scientific press</p> <p><b>Project management</b></p> <p>8. Coordination meetings, periodic evaluation, quality standards, internal peer review, reporting.</p>	<p><b>Year 1.</b></p> <p>1. Start-up meeting, Pucón, July 2006.  2. Stakeholder workshop held with community leaders and sustainable development experts  3. Complete business plan and designs for research centre.  4. Establish wildlife monitoring transects, camera traps, and mist netting sites in study areas.</p> <p><b>Year 2</b></p> <p>5. Tracking key forest endangered species (e.g. Magellanic woodpecker, wild cat, native deer)  6. Strategy developed for Biosphere Reserve with stakeholder participation  7. Build and equip field centre</p> <p><b>Year 3</b></p> <p>8. Analysis of results from 4. Publish preliminary results  9. Policy report published on private sector conservation  10. Develop long-term international r&amp;d strategy for Centre  11. Publication of results from 4 and 5.  12. Biosphere Reserve nomination completed  13. Commission research centre building.</p> <p><b>Ongoing</b></p> <p>14. Host 2 MSc research projects in Pucón per year,  15. Wildlife monitoring by UK volunteers and Chilean research workers  16. Local training courses and workshops  17. Management meetings and reports to Darwin Initiative  18. Peer review of manuscripts by Macaulay Institute and Fauna Australis.</p>	<p>Proposed methods appropriate for field conditions</p> <p>Effective capture methods developed</p> <p>Local community support is secured.</p> <p>Stakeholders support biosphere concept</p> <p>Government continues to support CBD objectives</p> <p>Continued enthusiasm by local institutions</p> <p>Local financing leveraged by Darwin grant</p>

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

<b>Project implementation timetable</b>		
<b>Date</b>	<b>Financial year</b>	<b>Key milestones</b>
July 2006 Aug 2006 Aug 2006  Sep 2006 Oct 2006, Jan. 2007 Oct. 2006  Oct 2006, Jan 2007 Mar 2007 Mar 2007 Oct 2006, Jan 2007 Oct 2006 Nov 2006	Apr-Mar 2006/7	Year 1. 1.1. Start-up meeting, Pucón, 1.2. Two Chilean MSc research projects set up 1.3. Establish wildlife monitoring transects, camera traps, and mist netting sites in study areas 1.4. Weekend course for environmental educators 1.5a,b. Wildlife monitoring by UK volunteers and Chilean research workers 1.6. Complete business plan and designs for research centre. 1.7a,b. Local awareness meetings held with community  1.8. Complete field guide to rainforest fauna 1.9. Weekend courses for environmental educators 1.10a,b. Deliver periodic financial report  1.11. Deliver half-year report 1.12 Ecology and statistics course by WildCRU
Apr 2007 Apr 2007 Apr 2007  Jul, Oct 2007, Jan. 2008 Apr.2007 Sep 07 Sep 2007, Mar 2008 Oct 2007 Nov 2007 Dec 2007  Apr, Jul, Oct 2007, Jan 2008 Jul, Oct 2007, Jan 2008	Apr-Mar 2007/8	Year 1- 2 1.12. Project management meeting 1.13. Deliver Year 1 technical and financial reports 1.5c. Wildlife monitoring by UK volunteers and Chilean research workers  2.1a,b,c. Wildlife monitoring by UK volunteers and Chilean research workers 2.2. Two Chilean MSc research projects set up 2.3. Begin building work on field centre 2.4a,b. Weekend courses for environmental educators  2.5. Deliver half-year report 2.6. Ecology and statistics course by WildCRU 2.7. Strategy developed for Biosphere Reserve with stakeholder participation 2.8a,b,c,d. Local awareness meetings held with community. 2.9a,b,c. Deliver periodic financial report
Apr.2008 Apr 2008 Apr 2008  Jul, Oct 2008, Jan 2009 Apr 2008	Apr-Mar 2008/9	Year 2-3 2.10. Project management meeting 2.9d. Deliver Year 2 technical and financial reports 2.1d. Wildlife monitoring by UK volunteers and Chilean research workers  3.1a,b. Wildlife monitoring by UK volunteers and Chilean research workers 3.2. Two Chilean MSc research projects set up

<p>Sep 2008</p> <p>Sep 2007, Mar 2008</p> <p>Oct 2008</p> <p>Nov 2008</p> <p>Dec 2008</p> <p>Mar 2009</p> <p>Jul, Oct 2008, Jan 2009</p> <p>Apr, Jul, Oct 2008, Jan 2009</p>		<p>3.3. GIS compendium of species distributions and habitats</p> <p>3.4. Weekend courses for environmental educators</p> <p>3.5. Deliver half-year report</p> <p>3.6. Ecology and statistics course by WildCRU</p> <p>3.7. Commission research centre building</p> <p>3.8. Management plan for Namoncahue range (Policy report on private sector conservation)</p> <p>3.9 a,b,c. Deliver periodic financial report</p> <p>3.10a.b.c.d. Local awareness meetings held with community.</p>
<p>Apr 2009</p> <p>Apr 2009</p> <p>Apr 2009</p> <p>May 2009</p> <p>Jul 2009</p>	<p>Apr-Mar 2009/10</p>	<p>Year 3 (Final quarter)</p> <p>3.10. Project management meeting</p> <p>3.11. Focus workshop on habitat – fauna interactions</p> <p>3.9d. Deliver periodic financial report</p> <p>3.12. Biosphere Reserve nomination completed</p> <p>3.13 Deliver technical and financial final reports</p>

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

<b>PROJECT OUTPUTS</b>		
<b>Year/Month</b>	<b>Standard output number (see standard output list)</b>	<b>Description (include numbers of people involved, publications produced, days/weeks etc.)</b>
Apr. 2007 Apr 2008 Apr 2009	2	<b>1. Chilean MSc research projects advancing project research objectives</b>  MSc. Project completion MSc. Project completion MSc. Project completion
Jul 2007 Jul 2008 Jul 2009	4a	<b>2. Honours projects for UK students (Quest)</b>  5 Projects completed 5 Projects completed 5 Projects completed
Nov 2006 Nov 2007 Nov 2008	4c	<b>3. Ecology and statistics course by WildCRU</b>  Course held for Fauna Australis postgraduates Course held for Fauna Australis postgraduates Course held for Fauna Australis postgraduates
Sep 2006 Mar 2007 Oct 2007 Mar 2008 Oct 2008 Mar 2009	6	<b>4. Training for environmental educators</b>  Weekend course on local environment issues Weekend course on local environment issues Weekend course on local environment issues Weekend course on local environment issues Weekend course on local environment issues Weekend course on local environment issues
July. 2006  Mar 2007  Mar 2008  Mar 2008  Mar 2009	8	<b>5. Field visits by project staff</b>  1 week visit by project principal  1 week project evaluation and science development by principal  1 week project evaluation and science development by principal  1 week field visit by Macaulay ecological statistics expert 1 week project evaluation and science development by principal

Mar 2009		1 week field visit by Macaulay ecological statistics expert
Ongoing		Project manager for Macaulay on site >30 weeks per year
March 2009	9	<b>6. Management plan for Namoncahue range</b>
Mar 2007	10	<b>7. Field guide to the fauna of the Pucón area</b>
	11	<b>8. Knowledge on temporal-spatial use of habitats.</b>
May 2007		1 International, and 1 South American journal papers submitted for publication
May 2008		1 International, and 1 South American journal papers submitted for publication
May 2009		1 International, and 1 South American journal papers submitted for publication
Sep 2008	12A	<b>9. GIS compendium of species distributions and habitats for the Namoncahue range</b>
	14A	<b>10. Local awareness meetings.</b>
Oct 2006, Jan, Apr, Jul, Oct 2007, Jan, Apr. Jul, Oct 2008, Jan 2009.		Four meetings per year for 40 persons, approx. per meeting
Apr 2009		Focus workshop on habitat – fauna interactions
	15 A,B,C,D.	<b>11. Publicity management</b>
Jul 2006		Chilean and UK press releases - Informing aims and objectives
Jul 2007		Chilean and UK press releases - Preliminary results
Jul 2008		Chilean and UK press releases - Update
Jun2009		Chilean and UK press releases - Conclusions
Sep 2006	20	<b>12. Capital items</b> – Photo traps, tracking eqpt. To remain in host country – New value £ 17,000
Jun 2009	21	<b>13. Centre for Biodiversity</b> - Research and education facility for local biodiversity issues commissioned and run by Parques para Chile
Jun 2009	23	<b>14. Value of resources raised from other sources</b> Approx. £ 317,950
	Additional output	<b>15. Project web site established</b>

## PROJECT BASED MONITORING AND EVALUATION

**22. 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.**

A project management plan will be prepared in time for the start date, which will set out clear and explicit aims and objectives for each of the partners, co-financers, and other stakeholders. This management plan will be discussed, edited and agreed at the first workshop, planned for July 2006, in Pucón. The detailed list of tasks and deadlines, building on the agreed logical framework will be a key output of the workshop, and form the basis for the first year's work. On-going monitoring will refer back to this document, and ensure that the aims and objectives set out in the logical framework are adhered to. The Project Leader and host country coordinator will use periodic reports from the partners to evaluate progress as well as produce milestone plans for years two and three.

For each year of the project, the Project Leader will submit a half-yearly report by 31 October and an annual report by 30 April to the Darwin Initiative, based on reports supplied from the partners one month earlier. The final report will be submitted within 3 months of completion of the project.

Value for money will be ensured through stringent budgetary control by the Project Leader, who has a staff member working on-site in the host country, and will be in a position to be closely involved in monitoring expenditure. Quarterly financial statements from each of the organizations involved will enable any tendency to drift from agreed spending schedules to be picked up rapidly and addressed.

The host country partner, Parques para Chile, will employ a person to take on day to day project management duties, amongst which, the compilation and filing of progress indicators will be an important duty. It is anticipated that the main content of the technical reporting will be provided by Parques para Chile.

Results will be disseminated at three levels: i) project progress report distributed to stakeholders in the UK and Chile ii) Project web site, radio and TV and iii) academic journals.