



Submit by 21 January 2005

DARWIN INITIATIVE APPLICATION FOR GRANT ROUND 13 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. Keep within word limits.

1. Name and address of organisation

Name: Wildlife Conservation Research Unit (WildCRU)	Address: University of Oxford, Tubney House, Abingdon Rd, Tubney, Oxon OX13 5QL
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2. Project title (not exceeding 10 words)

Conservation of Puna's Andean cats across national borders
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3. Project dates, duration and total Darwin Initiative Grant requested

Proposed start date:		Duration of project:			
Darwin funding requested	Total	2005/06	2006/07	2007/08	2008/09
	£ 157,968	£ 53,384	£ 50,772	£ 53,812	£

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

<p>The Andean cat (<i>Oreailurus jacobita</i>) is the rarest South American felid, and second most endangered wild cat in the world. Endemic to the Central Andes Puna, this carnivore is the top predator in a specialist high altitude vertebrate community. Most recent Andean cat sightings have occurred around the triple frontier of Argentina, Bolivia and Chile, a relatively undisturbed region. We aim to achieve biodiversity conservation by promoting collaboration across national boundaries, using the Andean cat as a flagship species. We seek to improve the efficiency of existing protected areas in securing long-term conservation of the Puna vertebrate biodiversity, and to encourage more tolerance for wildlife outside them. The focus of our work will be to gather high quality data on vertebrate distribution, identify areas of key conservation value, train stakeholders, strengthen conservation networks, deliver community education to reduce pressure upon the Puna's fauna, and establish a mechanism for monitoring cat presence and prey availability.</p>

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

Details	Project Leader	Other UK personnel	Main project partner or co-ordinator in host country
Surname	Sillero-Zubiri	Marino	Lucherini
Forename (s)	Claudio	Jorgelina	Mauro
Post held	Research Fellow	Research Assistant	Executive Director
Institution	University of Oxford	University of Oxford	Universidad Nacional del Sur
Department	Zoology, Wildlife Conservation Research Unit	Zoology, Wildlife Conservation Research Unit	Mammal Behavioural Ecology Group (GECM)
Telephone			

Fax			
Email			

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

Yes: (1) Aquatic carnivores (ref.: 162/4/072); (2) Sanctuaries in Estonia and Belarus (162/7/137); (3) Big cat conservation and sustainable use in southern Africa (162/09/015); (4) Devising solutions to bushmeat exploitation in the Sanaga-Cross region (162/10/004); (5) Climate change and conservation of Galapagos endemic bird species (162/12/0118); (6) The role of tourism in the sustainable use of big cats (round 11); (7) Endangered otter and invasive mink in Patagonia (round 12); and (8) Establishment and management of Nantu National Park, Gorontalo Province, Sulawesi (round 12).

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 overseas 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.

i) **Andean Cat Alliance (AGA)**: was founded in 1999 to facilitate collaboration between individuals and institutions engaged in Andean cat research and conservation activities in all four range countries. Since then its members, including WildCRU's four national partner institutions in this project, have established firm working relationships with each other. Formal membership of AGA demonstrates our shared commitment to the proposed project, and has facilitated our working together on planning the project and preparing this application. We are confident that staff changes would not adversely affect the success of the proposed work. WildCRU has worked together with AGA partners to co-author the Andean Cat Action Plan (Villalba *et al.* 2004. *The Andean cat: conservation action plan*. Andean Cat Alliance, La Paz, Bolivia).

ii) **Mammal Behavioural Ecology Group**, Universidad Nacional del Sur (**GECM**, Argentina): The local coordinator of the proposed project, Dr Mauro Lucherini, is GECM Executive Director and a founder member of AGA. He contributes his ample experience on Andean cat research in Argentina and will coordinate all field and outreach activities, including preparation of reports, research activities across the three countries, standardization of methodologies and the organization of workshops and meetings. Maria Jose Merino will design the education programme, drawing on her previous education work in the Argentine Andes. She will produce education materials, organize teacher's workshops and coordinate campaigns.

iii) **Museo de Ciencias Naturales de Salta**, Universidad Nacional de Salta (**UNSa**, Argentina): Pablo Perovic has worked with Andean cats since 2000 in Reserva Provincial Lagunas de Vilama (RPLV) and the surrounding communities, where he has close contact with RPLV staff and community leaders. Perovic will be in charge of field work in Argentina. He will liaise with RPLV, organize PA and community workshops and disseminate outputs. An UNSa student will conduct studies on cat diet and vertebrate prey distribution.

iv) **Colección Boliviana de Fauna** (CBF, Bolivia): WildCRU and CBF have been research partners since 1998 in Reserva Nacional de Fauna Eduardo Avaroa (REA) supported by Wellcome Trust funds. Lilian Villalba, current Coordinator of AGA, obtained an MSc with WildCRU in 2002 as a result. Villalba will liaise with the REA staff (with whom CBF has a partnership); implement an education campaign; and undertake surveys in REA and the surrounding areas. A student will conduct an Andean cat ecology study.

v) **Fundacion Biodiversitas** (FB, Chile): is a new and active NGO, led by Agustin Iriarte, an experienced Chilean conservationist with several years of experience studying Andean cats and other High Andean wildlife. Iriarte will liaise with Reserva Nacional Los Flamencos (RNLF) staff; undertake field surveys in and around the Salar de Tara sector of RNLF and implement an education campaign.

Six letters of support from our partners confirm their commitment to this project.

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.

Extensive consultation has taken place with all participating AGA members. They have wide-ranging research experience in Puna and are actively involved with local communities and schools. National partners have initiated consultations with three protected areas (PAs) encompassed by the project: **Reserva Provincial Lagunas de Vilama** in Argentina, **Reserva Nacional de Fauna Eduardo Avaroa** in Bolivia and **Reserva Nacional Los Flamencos** in Chile. The **cross-border approach** underpinning this proposal was welcomed by the PAs' managers, when approached, each of whom expressed their commitment to building the capacity of their staff (a key project objective), and to participating in the proposed workshops, collaborative monitoring and conservation activities. The three reserves are listed as RAMSAR sites and a degree of collaboration already exists between them under stewardship of the **High Andes Flamingo Conservation Group** (GCFA), a regional initiative of biologists and resource managers of Argentina, Bolivia, Chile and Perú that has been working successfully on wetland conservation across borders since 1997. The GCFA approach is quite similar to the one we propose and we are discussing the possibility of making joint field surveys to share the logistics of accessing remote areas.

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 is a **new initiative** that will collect, integrate and analyse data on the natural and anthropogenic variables that affect the distribution of Andean cats and their vertebrate prey communities. However, several of our AGA partners have worked in the proposed project area before, and the proposed project builds on the **secure foundations** that they have built through their research and education activities here and elsewhere. We propose an **innovative cross-border approach** involving local communities, protected area staff and project managers from the three countries, to facilitate the exchange of ideas and the coordination of future monitoring and conservation activities. We will fortify trans-frontier conservation of biodiversity in the High Andes, and build the capacity of biologists and PA staff to monitor and conserve High Andes biodiversity in the long-term.

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 project falls under the **Mountain Biodiversity thematic programme**, and all three host countries are parties to the **CBD**. The project addresses problems specific to mountain biological diversity, particularly endemic and endangered species (i.e. Andean cat and the diversity of its high altitude prey, narrowly-distributed taxa in themselves) and the role of local communities and protected areas in the conservation and management of mountain biological diversity. Our project will help these countries to fulfil their obligations under the Convention by **identifying areas of key importance for vertebrate diversity** in the triple frontier and by **involving and training local stakeholders** - including hands-on practitioners, local community leaders and teachers, and future local scientists - to **develop the knowledge and tools** necessary for maintaining the **Puna's biodiversity, cultural and aesthetic values**. Central to the project is **cross-border cooperation** through the exchange of expertise via collaborative research and conservation of mountain biodiversity. In this regard the project will support the implementation by the Argentine, Bolivian and Chilean governments of Articles 5, 17 and 18 (**Co-operation**, 15%; **Exchange of information**, 15%; and **Technical and scientific co-operation**, 10%). The project focuses on **in-situ conservation** (Article 8, 20%) to prevent and mitigate the negative impacts of key threats to mountain biological diversity -in our case the consequences of the decline or disappearance of the Andean cat's main prey species, persecution by local communities and inappropriate mining practices. To help reduce the impacts of adverse practices the project

will work with local communities and schools, promoting educational and capacity-building systems tailored to the specific conditions of mountain ecosystems, such as workshops, courses, study tours and community exchanges (Article 13 - **Public education and awareness**, 20%). We will also identify priority areas for conservation (measuring the integrity of ecosystems by the presence of the top predator of a range of high altitude vertebrate prey), corridors (to facilitate migration), and minimal viable population sizes (Article 7 - **Identification and monitoring**, 20%). Liaison with the CBD national focal point in each country is planned at the onset of the project.

12. 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 National Biodiversity Strategies or Environmental Action Plans, if applicable.

All three host countries recently compiled their final **National Biodiversity Strategies** (Bolivia in 2002, Argentina and Chile in 2003). Overall, our project fulfils aspects of the following three main objectives in each country: (i) to **strengthen the national system of protected areas**; (ii) to **identify, protect, and recover endangered species**; and (iii) to **increase knowledge on biological diversity**. The high level of endemisms, together with the adaptation of the flora and fauna to altitude and extreme temperatures, qualifies the **Central Andes Puna** ecosystem (which is shared by the three countries) as a **biome of particular conservation concern**. This is specially important because these features are underrepresented in the various countries' protected area networks. Despite its fragility and vulnerability to degradation and fragmentation processes, the Puna ecosystem has failed to attract a fair share of research initiatives across the host countries. This project will certainly help to fill this gap with a concrete contribution to conservation efforts across boundaries.

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

The project will provide **training to local stakeholders**, including hands-on practitioners, local community leaders and teachers, and foster future scientists. Furthermore, the activities conducted will contribute towards sustainable livelihoods in an indirect but long-term way, by **raising awareness** of the potential worth of natural resources in the Puna (and encouraging their sustainable use), through the **education** of children at school, **meetings** with other members of the local communities, and **workshops** with PA staff. In general, the project promotes educational and capacity-building systems tailored to the specific conditions of a mountain ecosystem.

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 main impact of this work will be the **long-term preservation of the vertebrate diversity** of the Puna habitats across the triple frontier. This will be achieved, using the *Andean cat* as a **flagship species** and biotic indicator of the integrity of High Andes ecosystems, by: (1) developing **collaboration** among stakeholders (PA managers and staff, local communities and researchers); (2) guaranteeing the **quality of the scientific information** that will underpin the monitoring plans - this will involve surveys, mapping habitats and land-use using analogue and digital databases, and studies of Andean cat diet and distribution; (3) **training** PA staff in the skills necessary for the successful conservation of vertebrate diversity in their PAs; (4) **increasing public awareness and participation** in relation to mountain biological diversity; (5) establishing a **permanent scheme for monitoring** threatened vertebrates and the impact human land use; (6) influence policy-makers to consider **better enforcement and tighter regulation of environmental protection** in the High Andes (e.g., mining); and (7) **levering additional financial support for High Andes conservation**, from funding partner the Wildlife Conservation Network and other national and international agencies.

Extensive **dissemination** of the results of collaborative research, workshops and education materials, will ensure a real impact on Puna's biodiversity protection, at various levels from school and local communities, to PAs, national governments and international agencies from which we hope to lever future support. The monitoring plan that evolves from our workshops will be delivered back to PA managers as a manual including clear guidelines and a strategy for sharing information towards the creation of a common, long-term dataset on Andean cat distribution and trends, possibly extending to other species of conservation concern. A **network of schools, teachers and education officers** will be created to disseminate education materials. Scientific publications in international and national journals will ensure that the lessons learned are shared with scientists in other mountain areas (with similar environmental and socio-economic

characteristics), thus promoting new research initiatives based on our findings. The AGA website will be used for the dissemination of results; a leaflet announcing the project will be produced and distributed among the local communities; we will use national and local radio and newspapers to promote the project and disseminate results in all three countries and in the UK.

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 Andean cat populations**, providing a **flagship** for Puna biodiversity conservation. The project will also help to equip local people to take on responsibility for managing biodiversity in sensitive areas within the host countries. We will achieve this **lasting legacy** by the following main actions: (1) **providing fundamental information** necessary for the conservation of a threatened species and the reduction of threats affecting its survival; (2) decreasing the impact of local persecution through **community education**; (3) **producing guidelines and agreements** for collaborative efforts and **information-sharing across borders** and PAs; (4) establishing a **permanent monitoring programme** based on previous experiences elsewhere (e.g., WildCRU Ethiopian Wolf Conservation Programme), providing the basis for a **shared database**; (5) **training local scientists** and **building the capacity of scientific and conservation institutions** with a UK teaching expertise element, ensuring the continuing promotion of conservation, and sustainable use of High Andes biodiversity. An additional aspiration is to secure training in the UK for one or more local partners.

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.

We have taken a number of steps to identify and address potential problems in achieving impact and legacy:

- We have established a **highly skilled and experienced research team**, and the project partnership between WildCRU and our regional partners is proven and secure. The project will cement the existing synergy between members of the AGA and broaden its foundations for future activities concerning research and conservation of the Andean cat, and by extension, other key species of the High Andes ecosystem.
- WildCRU, GECM and our partners have been working for the last five years in various collaborative projects in the High Andes, and developed links with many of the agencies and projects active in the area.
- The **High Andes Flamingo Conservation Group**, which takes a similar **cross-border approach** at the frontier of Argentina, Bolivia and Chile, has demonstrated that the Protected Areas staff concerned support this regional approach, thus paving the way for our proposed work.
- Preliminary discussions with the agencies responsible for the three Protected Areas involved in the project have been extremely fruitful.
- We have already **tested our methodologies**, including survey and trapping techniques, DNA screening of carnivore faeces, and evaluation of education campaigns.
- Educational activities targeted at the inhabitants of the Puna will require dedicated personnel capable of working in isolated conditions, constrained by poor infrastructure and in schools that seldom receive adequate resources. Having foreseen these demanding circumstances, we have recruited an experienced professional teacher (Merino) who has much prior experience of the local Argentine Andes communities, and has developed and tested successful teaching methods.
- Our work will also **increase outside interest in Puna biodiversity**, and **leverage biodiversity conservation initiatives** from other government agencies and NGOs.

We have established a clear exit strategy:

- The findings of our primary ecological research will allow us to identify the most suitable sites for **establishing core Andean cat sanctuaries**, and recommend actions to reduce current threats.
- Our findings and recommendations will be presented to the agencies responsible for the three Protected Areas involved for **incorporation into their management strategies and plans for vertebrate conservation**.
- Furthermore, the Andean cat, previously little known among both managers and the public, is quickly becoming recognised as a prime conservation priority. Our project will therefore be timely, as well as perfectly positioned to help managers achieve their new and evolving management priorities by producing a **network of trained PA staff and local scientists** capable of executing the necessary efficient monitoring scheme.

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

A distinctive feature of this project is its **multi-pronged approach** (namely research, training, communication and participation) addressing the need to thoroughly integrate these elements for successful and sustainable biodiversity conservation. The recommendations derived from this project will **inform conservation strategies** in all three countries. Our project aims align closely with the philosophy of the Darwin Initiative in that: (1) the High Andes region is poor in economic resources and rich in biodiversity 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 all TV, radio, written media outputs produced by the project and it will be acknowledged in all peer reviewed papers, reports and manuals produced. The logo of the Darwin initiative will be featured conspicuously in all projects outputs, field equipment, in displays used during workshops and in any project webpages posted in the WildCRU and AGA websites.

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?

The project will train at least five graduate and undergraduate students (12 months each), a minimum of 30 PA staff (1 week each), three community education officers, and at least 15 primary school teachers (1 week each). All trainees will be from the range countries.

Students will be selected on the basis of academic qualifications from affiliated universities and will be trained by senior investigators on the project: Sillero, Marino, Lucherini, Villalba, Perovic and Iriarte. Students will collaborate with fieldwork and produce academic theses on Andean cat diet, prey distribution, habitat availability, attitude surveys and evaluation of education campaigns. Trained students will provide training to others during the workshops and may in the future go on to active conservation roles where they will be able to further use and pass on the skills acquired during this project. 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) number of days spent in the field; (3) submission of field reports; (4) report writing ability; (5) completion of thesis; and (6) submission of publications.

We will seek to train all PA staff currently based within the project area. If that is not feasible we will select suitable trainees jointly with PA managers. Training workshops will be coordinated by Sillero and Lucherini, and conducted with the assistance of Perovic (Argentina), Villalba (Bolivia), Iriarte (Chile) and students.

The project will train one community education officer in each country. Each will initially receive four weeks of intensive hands-on training and permanent follow-up. A minimum of 15 teachers will be trained in three education workshops (30 hours each) carried out by Merino, coordinated by Lucherini, and conducted with the assistance of Perovic (Argentina), Villalba (Bolivia) and Iriarte (Chile) and students. Outreach meetings to inform the local authorities and civil leaders will take place in the seat of local government closest to the PAs in each of the range countries. These will be coordinated by Sillero and Lucherini, and conducted with the assistance of Merino & Perovic (Argentina), Villalba (Bolivia) and Iriarte (Chile).

Trainee outcomes will be monitored at regular intervals after training is complete (PA staff by Perovic, Villalba and Iriarte; students by Sillero, Marino and Lucherini; education officers by Merino and Lucherini).

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>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</p> <ul style="list-style-type: none"> • the conservation of biological diversity, • the sustainable use of its components, and 			

• **the fair and equitable sharing of benefits arising out of the utilisation of genetic resources**

Purpose			
To facilitate long-term protection of the vertebrate biodiversity of the Central Andes Puna across national frontiers, through establishment of the Andean cat as a conservation flagship, local community participation and protected area (PA) staff training.	New knowledge on the distribution of Andean cats and prey and identification of key conservation sites for vertebrate species. Increased local environmental awareness. Increased capacity of scientists, practitioners and PA staff to implement conservation measures and train their successors to do the same.	Results of monitoring and GIS analysis of High Andes habitats, Andean cat & prey base distribution. Records of education campaign coverage and attitude surveys. Scientific papers, technical reports, research theses and conference abstracts. Copies of publications sent to DI.	Local population reacts to project by reducing hunting pressure on cats and other fauna. Local communities and PA management support project activities and are prepared to incorporate future management recommendations.
Outputs			
Key conservation areas for Andean fauna identified.	Basic understanding of cat / prey ecology by yr1. Mapping of Puna habitats & cat / prey distribution by yr3.	Field survey reports submitted. 3-5 theses submitted. Peer-reviewed papers submitted.	Andean cats limited mainly by the distribution of highland vertebrate prey. Andean cats suitable umbrella species for Puna biodiversity.
Enhancement of local community environmental awareness.	1 teacher training workshop and production of education materials by yr1. All relevant local communities & schools reached by yr 3.	Educational materials. Participant attendance and assessment records. Results of before-after awareness survey of education campaign. Reports from community monitors.	Local communities, particularly children, are receptive to environmental message
Training of future local conservation biologists.	In-country training of at least 6 project members from 4 partner institutions on survey techniques by yr 1.	Workshop report with monitoring guidelines booklet. Standardized field methodology applied across boundaries.	Biologists cooperate and mutually benefit from sharing previous Puna expertise.
Capacity for biodiversity conservation increased through trans-frontier cooperation between protected area staff and biologists in three countries.	3 PA management and guard's training workshops by yr 2. 1 tri-national PA meeting by yr3. Agreement on a framework for communication and collaboration across frontiers.	Participant workshop attendance and assessment record. Report of agreement between PA managers for continuous collaboration.	Existence of common problems and solutions for Puna conservation across countries. Existence of potential synergies to be achieved through cooperation. Local stake-holders and PA staff available and motivated for training and participation.
Guidelines for good practice for conservation of the Puna disseminated more widely.	Local media coverage (newspapers, radio & TV), 1 training manual by yr 2, 2 peer-reviewed publications by yr 3, 1 Andean cat monitoring plan in place by yr 3.	Records of media coverage. Records of the distribution of publications to all relevant stakeholders.	Trans-frontier cooperation triggers communication among stakeholders.
Activities	Milestones (Summary of Project Implementation Timetable)		

Project organisation	Yr1: Project planning (Oct-Dec05)
Workshops	Yr1: Teachers' training workshop and start implementation of education campaign (Jan-Feb06); Yr1: biologists workshop on habitat survey and monitoring skills, production of monitoring manual (Jan-Mar06); Yr2: PA staff workshops in-country (Mar-Sep06); Yr3: one tri-national workshop, agreements for future collaboration (Jan-Mar08?)
Field research programme	Yr1-3: Field surveys by students and biologists (Apr06–Mar08); Yr2-3; data analysis, production of maps, reports and publications; Yr3: Students submit thesis, long-term Andean cat monitoring plan accorded (May-Jun08)
Education programme	Yr1: Drafts of education material (Dec05-Jan06); Yr2: Distribution of education material (by Jan07); Yr1-3: Education campaign at local schools and community meetings
Dissemination/publicity material	At least 1 radio broadcast and newspaper article per year in each country; project results in local & international publications and conferences (various dates); 2-3 peer-reviewed publications by July 08

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

Project implementation timetable		
Date	Financial year	Key milestones
	Apr-Mar 2005/6	
Oct-Dec 05		Project planning, project announcement, liaison with partners
Dec 05		Research workshop. Standardisation of field methodologies
Dec 05-Jan 06		Drafts of education materials
Dec 05- Mar 06		Field surveys (Arg-Bol). Establish student projects
Jan-Mar 06		Identify Community education officer (Arg). Teacher's training workshop (Arg). Education campaign starts (Arg); attitude surveys
Jan-Feb 06		Community outreach meetings (Arg)
	Apr-Mar 2006/7	
Apr-Oct 06		Data processing. Diet analysis. Preliminary GIS analysis
May-Oct 06		Production & printing education materials
Jun-Oct 06		Training of sniffer dog to identify carnivore species from faeces
Sep 06		Annual report
Oct 06-Mar 07		Field surveys (Arg-Bol-Chi). Continue student projects
Oct 06-Mar 07		Education campaign and community outreach meetings continue in Arg. Identify community education officer (Bol-Chi). Expansion of programme to Bol-Chi
Oct 06-Jan 07		Protected area staff workshops (Arg-Bol)
Dec 06-Jan 07		GIS ground truthing. Habitat mapping (Arg)
	Apr-Mar 2007/8	
Apr-Oct 07		Data processing. Diet analysis. GIS habitat modelling
May-Oct 07		Education campaigns (Arg-Bol-Chi)
Sep 07		Annual report
Nov 07- Mar 08		Field surveys (Arg-Bol-Chi). Student projects.
Dec 07		Protected area staff workshops (Chi)
Dec 07 – Jan 08		GIS maps and monitoring manuals.
Mar 08		Tri-national PA workshop and dissemination of findings
	Apr-Sep 2008	
Apr-Sep 08		Data analysis and writing up
Apr-Sep 08		Production of monitoring plan; agreement with authorities.
Sep 08		Final report

21. 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 08	2 & 3	5 people to attain Master or other qualification (Licenciatura) (receiving 32 training weeks each)
Apr 06	4c & 4d	3 graduate students (receiving 12 week training weeks)
Apr 06 (Arg); Apr 07 (Bol-Chi)	5	3 local teachers to train as community education officers (full time)
Jan 07 (Arg-Bol); Jan 08 (Chi)	6a & 6b	a minimum of 30 PA staff (receiving 1 training week)
Mar 06 (Arg); Mar 07 (Bol-Chi)	6a & 6b	a minimum of 15 primary school teachers (receiving 1 training week)
Mar 06	7	2 items of training materials for teacher training, 2 items for school education campaign, 1 educational poster, 1 leaflet describing and announcing the project to the local community in host countries
Nov-Dec 05, 06, 07	8	12 weeks by project leader; 12 weeks by GIS ecologist
Sep 08	9	1 monitoring and management plan to PA agencies with recommendations for Andean cat conservation
Sep 07	10	1 field manual on monitoring techniques
Dec 08	11b	4 papers submitted for publication in peer-reviewed journal
Sep 08	12a	2 computer based databases established for monitoring of Andean cats & other vertebrates
Mar 08	14a	1 Tri-nation meeting and dissemination workshop with PA agencies and government; 3 local community stakeholder outreach meetings
Sep 08	14b	6 papers submitted for presentation at national and international conferences
Sep 08	15a, 15b, 15c, 18c, 19a, 19c, 19d	3 local and 1 national press release in host countries, 1 national press release in UK, 1 local TV programme in host countries, 3 national radio interviews in host countries, 1 local radio interview in UK
Sep 08	17b	1 dissemination network to be enhanced (AGA website and mail list)
Sep 08	20	£3k of computers, software, equipment, sniffer dog.

Sep 08	23	£90k from Wildlife Conservation Network, £12k in-kind contributions from project partners, £5k Wellcome Trust residual funds.
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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.

To determine whether the project and its components are being conducted as planned, WildCRU and partners 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, milestones and outputs according to the proposed timetable. Towards the end of each project year (Sep 06, Sep 07, Sep 08), an annual evaluation will take place to assess strengths and weaknesses and adapt the project activities as required for 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.

WildCRU and AGA have access to **specialists with diverse expertise** 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 Andena cats and Puna's vertebrate 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 the High Andes within the Andean Cat range.

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