

Darwin Initiative for the Survival of Species

Half Year Report (due 31 October each year)

Project Ref. No.	13-016
Project Title	Endangered otter and invasive mink in Patagonia
Country(ies)	Patagonia
UK Organisation	University of Oxford
Collaborator(s)	PROFAUNA, University of Buenos Aires (UBA) and the Argentine Government's Administración de Parques Nacionales (APN)
Report date	31 st October
Report No. (HYR 1/2/3/4)	HYR1
Project website	www.wildcru.org/research/darwininitiative.htm www.profauna.org.ar/huillin.htm

1. Outline progress over the last 6 months (April – September) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up).

The project was initiated on 1st April 2004. Progress against all milestones planned for the last six months is described below:

1) Project planning: Dr. Marcelo Cassini performed the preliminary project planning. This involved: (a) **selection** of the field biologist (Lic. Laura Fasola, University of Buenos Aires) (as well as two undergraduate students (to conduct honours projects), and two undergraduate students (to gain field experience) - see below); (b) **sourcing and purchase of field equipment** (including 4x4 van, GPS, satellite telephone, camera, radio and camping equipment etc); (c) **preparation of lab facilities** for genetic studies, in collaboration with Dr. Centrón; and (d) **planning and organisation of four months of fieldwork**. This fieldwork will involve surveying more than 3,000 km of road and sampling around 100 water bodies. Three field teams have been established to cover different regions of Patagonia: Lic. Claudio Chéhebar and Gustavo Porro will survey the Nahuel Huapi National Park, Dr. Marcelo Cassini and Dra. Daniela Centrón will survey Tierra del Fuego, and Laura Fasola, Marcelo Bello and Leonardo Leggieri will conduct the most extensive survey, including three Argentinean states: Neuquén, Chubut and Santa Cruz. More detailed project planning took place between the three senior Argentinean project personnel (Lic. Chéhebar, Dra. Centrón and Dr. Cassini) at the Think Tank meeting at Bariloche (see below).

2) Project announcement: The project has been announced on both the **WildCRU** (www.wildcru.org/research/darwininitiative.htm) and **PROFAUNA** websites (www.profauna.org.ar/huillin.htm). These pages will be further developed as the project progresses.

3) Student selection & training: Four students were **selected and trained to do field-based or genetic studies**. Marcelo Bello and Leonardo Leggieri (both University of Lujan) will be involved in otter and mink surveys, Juan Muzio (Universidad of Comahue) will conduct his undergraduate thesis on local movements and behaviour of mink, and Virginia de La Torre (University of Buenos Aires) will conduct hers on the development of molecular markers in mink and otters. One or two more students will be trained between August and September 2006 for the second part of the project involving the more social aspects of our work.

4) Preliminary campaign, Think Tank meeting, & sample collection for technique development: We made a ten-day trip to Bariloche and the surrounding areas (northern study site), where the following activities took place: (a) an intensive **Think Tank meeting** was held at the local National Park Administration office between the three Argentinean project personnel (Lic. Claudio Chéhebar, Dra.

Daniela Centrón and Dr. Cassini). This meeting allowed intensive planning of project details; (b) a **preliminary campaign** to three lakes in the region, where **field methodologies were tested** and faecal **samples collected** for the development of genetic techniques; (c) two additional **meetings with local researchers**: Dr. Victor Cussac (University of Comahue, local institution) and Dr. Heber Bonino (INTA, National Institute of Agricultural Technology). Dr. Cussac is an expert in the fish and invertebrates of the Patagonian lakes, and we reached a **preliminary agreement regarding collaboration on the analysis of otter prey availability**. Dr. Bonino is specialised in mammalian invasions, and we discussed with him the past, current and planned projects by INTA on the impact and control of mink. INTA are not currently working on mink, Dr. Bonino **expressed great interest in collaborating with us**.

5) Testing & development of molecular techniques: We have successfully described a mtDNA sequence from *huillín* (otter) tissue. Dr. Centrón has also tested (unsuccessfully) two candidate protocols for DNA extraction using otter scats collected during the preliminary campaign, and we are now trialling a further two potential protocols, one of which was published recently by Hung *et al.* (2004).

6) Testing & development of diet techniques: We have completed preliminary scat analysis work for otters, and the techniques for analysing mink scats will be finalised during a meeting in Bariloche with Claudio Chéhebar at the beginning of December.

7) Characterisation of landscapes & habitats using satellite imaging, processing of maps & GIS: We have obtained from the Argentinean National Park Administration (through much constructive negotiation) already-digitised thematic layer data characterising landscapes and habitats. We are currently processing this information, and can readily accelerate this through collaboration with experts. In summary, we have a slight delay in this respect, but nothing that cannot be solved within a maximum of a couple of months.

8) Production of first 6-month report: Completed.

Reference: Hung *et al.* (2004) Faecal DNA typing to determine the abundance and spatial organization of otters (*Lutra lutra*) along two streams in Kinmen. *Animal Conservation* 7: 301-312).

2. Give details of any notable problems or unexpected developments that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities. **None**

Have any of these issues been discussed with the Darwin Secretariat and if so, have changes been made to the original agreement?

Discussed with the DI Secretariat: **No** / yes, in..... (month/yr)

Changes to the project schedule/workplan: **No** / yes, in.....(month/yr)

3. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures? **No**

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

Please note: Any planned modifications to your project schedule/workplan or budget should not be discussed in this report but raised with the Darwin Secretariat directly.

Please send your completed form by 31 October each year per email to Stefanie Halfmann, Darwin Initiative M&E Programme, stefanie.halfmann@ed.ac.uk . The report should be between 1-2 pages maximum. Please state your project reference number in the header of your email message.