Darwin M & E Project: Annual Report 2002/2003 Review

Conserving the Critically Endangered Darwin's Fox on Chiloe Island, Chile

Reviewer: Dr. Martyn G. Murray
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Note: This annual report covers the period, 21 June 2002 – 30 April 2003

Project summary
Darwin's fox is the rarest and most geographically isolated fox in South America. It has been estimated that fewer than 500 individuals exist. The main threats to its future include viral diseases from domestic dogs, loss of forested habitat and human persecution. The need for research studies was considered urgent to provide information as a basis for conservation measures. It is anticipated that conservation of Darwin's fox would promote the conservation of its forested habitat and hence the biodiversity of the entire ecosystem. As specified in the Logical Framework, the purpose of the Darwin project is to assist Chile with the conservation of Darwin's fox by producing a management plan and providing capacity in conservation and research. The main objectives of the project have been stated most clearly in this annual report:

A. Research
(i) estimate fox density and distribution;
(ii) determine genetic structure of the population;
(iii) assess the risk of viral diseases transmitted by domestic dogs.

B. Training
(i) train Chilean scientists and conservation managers in conducting independent field research;
(ii) train Chilean scientists in using molecular genetic techniques for conserving biodiveristy;

C. Awareness Raising
(i) increase the awareness of local communities, land users, conservation managers and students in sustainable use of natural resources that leads to conservation of entire and functional forest ecosystems.

Comments and queries for Project Leader
Despite the slippage in training inputs, the project has made a good start. It appears to be overcoming the teething difficulties that can be expected in any project of this nature and should make good progress in its second year.

It is important to distinguish between monitoring at the ecological level (as in monitoring population size or antibody titre) and the project level where one is monitoring performance. The project would benefit from a more formal monitoring system of the latter type. Project personnel could be required to submit a written report on their progress at quarterly intervals, in which case a standard format should be applied. External monitoring would also be useful, for example through visits by senior ZSL staff, or by meetings of a project steering committee. The issue of writing the management plan should be discussed at a senior level at an early stage.

It would be helpful to know about the new nomenclature being used (*Pseudalopex fulvipes* rather than *Dusicyon fulvipes*).

General assessment for Darwin Secretariat
As can be expected in a project of this nature, there has been some slippage in delivery of the first year's inputs, particularly with respect to training. These are largely attributable to the delay in starting, which itself arose from time-consuming administrative procedures within local institutions. The project leader has demonstrated a willingness to find effective solutions to the problems encountered. Reporting standards are good and at this stage the project has every prospect of succeeding in its main aims. However, the issue of writing the management plan should be discussed at a senior level at an early stage.

Summary of progress
In its first year, the project has made satisfactory progress. It has initiated useful research into the density of Darwin's foxes. It has also made progress with training in field methodology and with its awareness-raising programme. It is somewhat behind in the training of molecular genetic techniques but this input has been rescheduled for the second year.

Scientific and technical assessment
A. Research
Despite the late start, fair progress has been made with delivery of technical inputs. The main slippage occurred in the training programme.

(i) Density
28 captures of 12 foxes were achieved in three study areas. Density was also estimated from visits to scent stations but this method proved to be unreliable in the prevailing weather conditions (rain and wind destroy animal signs). Camera traps have been ordered by the project as the basis of an alternative technique. Faecal density is being monitored to estimate the relative abundance of foxes and it will be compared with absolute abundance estimated from molecular genetic analysis.

Radio tracking of nine foxes was conducted. Eventually this information will be used for extrapolating fox density in different habitats. The GIS mapping of the island has progressed well.

(ii) Genetic Structure of Population
Scheduled to begin in year 2.

(iii) Viral diseases

Scheduled for year 3

B. Training
Although slippage occurred in the scheduled training in serological, epidemiological and molecular genetic analysis, progress was made in field research.

(i) independent field research;
Training was delivered in sample collection and fox density estimation techniques.

(ii) molecular genetic techniques;
Training was delivered in genetic analysis and conservation biology.

Partnerships
The project has good relations with its main partners but has encountered administrative problems at the Universidad de los Lagos. These appear to have been satisfactorily overcome. The project has also made links with CONAF, the forestry department, which administers the National Park on Chiloe Island and with a neighbouring project, the "Channel Island Fox Project".

Impact and Sustainability
It is too early to assess the likely impact and sustainability of the project, however the requests from Chileans wishing to volunteer their help and the project's emphasis on training and awareness raising bode well in this respect.

Outputs, Outcomes and Dissemination
Six project outputs are listed in the Logical Framework:
(1) determination of the abundance, distribution and threats to Darwin's fox;

Good progress has been made in these studies.

(2) establishment of a long-term mammal monitoring program that includes epidemiological methodology and molecular genetic techniques;

There has been some slippage in the initiation of these activities.

(3) establishment of a university teaching programme in conservation science;

(4) raising of awareness of the conservation threats posed by domestic animals amongst the managers and owners of domestic animals;

(5) development a constituency on Chile and abroad that will support conservation of Darwin's fox;

The project has made a good start in communicating the importance of conservation of Darwin's fox and its forested habitat, and in providing information about its aims and activities. It has addressed both local and national audiences through distribution of educational materials, a workshop presentation, a radio broadcast and its own web site.

(6) establishment of field and laboratory facilities.

After experiencing difficulties over the costs required to renovate a property proposed as a field station, the project obtained the use of an alternative building from a private landowner that requires only minor renovation.

Project Expenditure
The annual report tabulates the annual budget and the expenditure for the past year (the reporting period). The project expenditure is lower than expected (£15,654 vs £17,223) principally due to an underspend in salaries, arising from the slippage referred to above. The request that the balance be transferred to the next project year appears reasonable.

Monitoring, evaluation and learning
The project will use standard indices from the logical framework for monitoring. No details are given about monitoring of staff performance (for example through submission of quarterly internal reports), or of external monitoring (for instance through visits by senior ZSL staff).

General assessment
There has been some slippage in delivery of the first year's inputs, particularly with respect to training. These are largely attributable to the delay in starting, which itself arose from time-consuming administrative procedures within local institutions. The project leader has demonstrated a willingness to find effective solutions to the problems encountered. There is every prospect that good progress can be made in the second year. Early attention needs to be given about the procedure for preparing a management plan.