# Aztecs and Axolotls: Integrating Tourism and Conservation at Xochimilco, Mexico City

## 2nd Annual Report

1 April 2003 - 31 March 2004



Durrell Institute of Conservation and Ecology University of Kent Canterbury, Kent CT2 7NS







1

### Darwin Initiative for the Survival of Species

### Annual Report

#### 1. Darwin Project Information

| Project Ref. Number  | 162/11/018  |  |
|--|---|--|
| Project Title  | Aztecs and Axolotls: Integrating Tourism and Conservation at<br>Xochimilco, Mexico City   |  |
| Country(ies)   | Mexico and UK   |  |
| UK Contractor  | Durrell Institute of Conservation and Ecology, University of Kent, Canterbury, Kent CT2 7NS, UK   |  |
| Partner Organisation(s)  | Universidad Autonoma Metropolitana, Unidad Xochimilco (UAM), Mexico.  |  |
|  | Centro de Investigaciones Biologicas y Acuicolas de Cuemanco<br>(CIBAC)   |  |
|  | Comision Nacional para el Conocimiento y Uso de la<br>Biodiversidad (CONABIO - the National Commission for the<br>Knowledge and use of Biodiversity), Mexico. |  |
| Darwin Grant Value   | £96,332   |  |
| Start/End dates  | 1 <sup>st</sup> May 2002 – 31 <sup>st</sup> April 2005  |  |
| Reporting period (1 Apr<br>200x to 31 Mar 200y) and<br>report number (1,2,3) | 1 <sup>st</sup> April 2003 – 31 <sup>st</sup> May 2004<br>report no. 2  |  |
| Project website  | http://www.kent.ac.uk/anthropology/dice/research/<br>axolotl.html   |  |
| Author(s), date  | Dr R.A. Griffiths (Project Co-ordinator - UK)<br>Dr I. Bride (Project Officer)  |  |

#### 2. Project Background

The Mexican axolotl - an icon of Aztec heritage - is nearly extinct in its last habitat - the remnant canals of the once extensive Lake Xochimilco, in the south of Mexico City, where the traditional Aztec agricultural system (chinampas) is still practiced. This area suffers from unsustainable development pressure, pollution, poverty and unemployment, yet is a popular recreation destination both for local people and international tourists. The project seeks to increase the protection of this wetland and safeguard the wild axolotl population.

#### 3. Project Purpose and Outputs

To assist Mexico in the development of a sustainable programme to conserve the axolotl and other endemic fauna and flora of Xochimilco through the promotion of nature tourism using the axolotl as a flagship species. The following outputs were included in the logical framework.

a) Axolotl/Xochimilco ecology data;

b) Mexicans trained: MSc Tourism & Conservation (1); amphibian ecology (8); conservation education assessment and community appraisal (8);

c) Trajineros (boatmen) trained as nature guides (12); unemployed artisans trainedsouvenir production (4);

d) Axolotl Species/Habitat Action Plan;

e) Conservation education programme.

The number of persons trained and expected to be trained has increased during the project because greater numbers than expected have been able to be accommodated within the existing budget as a result of additional inputs from partner institutions .

#### 4. Progress

Progress over the first year (02/03) was excellent and on schedule. The number of students and local people trained was substantially larger than planned, and a significant expansion was stimulated by the Darwin project input. The team of "investigators", three or four undergraduate students employed part-time by the project following the first project workshop, was instructed in basic quantitative survey methodologies and conducted three questionnaire-based surveys, one of visitors to Xochimilco tourist destinations, one of visitors to the pleasure boat embarcation points (embarcaderos), and one of makers and sellers of souvenirs. These surveys gathered a wide range of socioeconomic data, including that on the constitution of the visitor groups, their spending patterns, their knowledge and understanding of the axolotl, other local wildlife, and the problems faced by the Xochimilco wetland system, as well as their interest in and willingness to pay for nature-guiding. The team has undertaken most of the practical work associated with subsequent project workshops, and has been a major factor contributing to their success. Moreover, the individuals concerned (so far 9 people) have gained considerable experience and confidence, and developed significant transferable and life skills (organisation, communication, facilitation, data-gathering, presentation) through their involvement with the project. The "Darwin Fellow"(Alejandro Meléndez) came to DICE in September 2002 and had successfully completed the taught component of the MSc in Tourism and Conservation by March 2003. Thereafter he conducted his survey-based dissertation research amongst the boatmen (remeros) on the potential for the development of nature guiding, and was awarded his MSc on schedule. His findings suggest that there is a significant potential market of nature-guiding and good opportunities to service this market. He is now back at UAM where he has been officially appointed to oversee the project activities (following the sad death of the previous project co-ordinator – see below) and has been taking an increasingly central role in the delivery of the Darwin workshops.

Workshops on Conservation Education Assessement/Community Appraisal (June 2002) and Amphibian Biology/Conservation Techniques (Jan. 2003) took place as planned, both being successful and both involving more participants than anticipated (17 instead of 8, and 28 instead of 8 respectively). Feedback from participants on these workshops was very positive. In the first instance the overall general workshop assessment score was 83 out of 85, and the content averaged 3.1 on a 5 point scale (1=too little, 5=too much). In the second instance, for the 25 responses recieved, the general assessment was 116 out of 125, and the content average 3.5.

#### During the past year:

The fact-sheet publication, initially delayed following the decision to develop it in the light of the survey results and workshop experiences, went ahead and resulted in a 'generic' publication that can be adapted to different needs with the application of

different stickers designed to promote souvenirs, nature-guiding or CIBAC. Similarly, the production of the guide brochure is also underway and should be completed over the summer, as will the sets of guiding materials (informed by the experience of the guide-training workshops and developed in collaboration with the boatmen - remeros - co-opted for this purpose at the first guide-training workshop), and the interpretation boards (developed in collaboration with UMBRAL). Five hundred project T-shirts have been produced and 1000 axolotl postcards are in production, which are being sold to raise additional project funds.

In June-July 2003 Dr Griffiths attended the ASIH Joint Meeting of Ichthyologists and Herpetologists in Manaus, Brazil, where he presented a poster on the project. This provided exposure of the project to what was probably the largest ever gathering of amphibian biologists in Latin America.

The website has been produced by Dr Bride (in English), following in-house training in web-authoring at Kent, and the Mexican partners are presently responding to it. It will be translated into Spanish, and will, it is hoped, be fully operational by the end of the summer. This website will be handed to UAM at the end of the project, and may form a major component of a planned CIBAC website; possibly the basis for an axolotl research group website (see below).

The souvenir production workshop (4<sup>th</sup>-10<sup>th</sup> Nov. 2003) successfully trained 15 local people (instead of the intended 4) in making "eco-regional" artisan handicrafts using sustainable local materials and themed around the axolotl and Xochimilco. The workshop was developed in collaboration with Dr Josephina Resendez and a team from UAM's Department of Design and Technology, whose contribution consisted of a major additional input into the project. Trainees, recruited through the District Community Centre, established a network amongst themselves that is linked to the Darwin Initiative team in Mexico, and is monitoring subsequent production activities and supporting the marketing of the souvenirs through CIBAC and Chapultepec and other zoos. The workshop included a weekend of selling souvenirs at a central embarcadero (embarkation point) and the local plant/flower market, which raised over  $\pounds 100$ , which was shared amongst the trainees. The workshop evaluation was extremely positive, with trainees giving an overall collective score of 74 out of 75. In May 2004, there will be a one-day follow-up at CIBAC, which will review the progress of the trainees and the souvenir production. This is being supported by UAM and by £100 of the Darwin project funds.

The first guide-training workshop was held 3<sup>rd</sup>-10<sup>th</sup> December 2003 with four boatmen completing the full programme and a further 17 boatmen attending components relevant to their needs. The group of four boatmen who completed the programme enthusiastically volunteered to join the project team to collaborate in the development of the second guide-training workshop, and to help us learn from the first. In order to maintain the momentum thereby established, and in response to considerable interest subsequently expressed by the District Director of Tourism, development of the second guide-training workshop was brought forward and it will now take place from 26<sup>th</sup> April - 6<sup>th</sup> May 2004. At the time of writing this workshop is in progress and it seems likely that some 15 remeros will complete it. A major additional benefit to derive from the process of development and delivery of these two guide-training workshops is the involvement of some highly experienced remeros (one who has worked his trajinera for 35 years) who have agreed to be subjected to indepth interviews, which are expected to provide useful project data. Furthermore, one of the participants owns several boats and has requested that the project runs a similar workshop for boat owners. This would be a significant development as it would target

those who are in direct contact with tourist offices and agents, and thus most able to promote the nature-guiding. Such a development, would however require additional funds.

In mid-February the project investigator team ran a one-day workshop about the axolotl and Xochimilco for students and teachers at the Collegio Madrid, a local school with which UAM has a long-standing relationship. A pre-workshop visit to the school was conducted with four groups of about 25 pre-school children, and a presentation was made to the secondary school groups (about 175 11/12 year olds). The workshop itself involved five integrated groups of the pre-school and secondary school children working together on a series of activities, with the older children helping the younger ones. The activities included a video show, a presentation about the axolotl and its biological cycle, taxonomic and identification exercises, a theatrical performance and a song competition. Copies of a 28-page axolotl information/activity booklet were subsequently presented to the teachers, and the feedback from them on all aspects of the programme was very complementary, particularly in respect to the way the groups of children worked together and their fascination with the axolotl, specimens of which were on display.

The project suffered a tragic loss in January 2004 with the death of Dr Virginia Graue, the Project Co-ordinator in Mexico, and the person who had initiated the original project idea. Dr Graue's expertise, dynamism, commitment and enthusiasm will be sadly missed, but the project team has resolved to successfully drive the project forward in her honour. The Directorship of CIBAC has been taken over by Prof. Fernando Arana, with whom DICE staff are meeting during the April 2004 visit, and Alejandro Meléndez, the Darwin Fellow, has taken on the project co-ordination on the Mexican side. These developments, coupled with a meeting between Dr Bride, Alejandro Meléndez, and Norberto Alvárez (Rector of UAM) has precipitated the process of developing a five-year management plan for CIBAC, something the DICE partners had been pressing for. The UK project team has been asked to participate in this process and those members currently in Mexico will shortly be attending a meeting for this purpose (29<sup>th</sup> April). This is an extremely encouraging development, for the management plan will integrate and consolidate important project elements and thereby provide a valuable component of the project exit strategy.

#### **Additional outputs**

An MSc dissertation undertaken by Jeanne McKay, a DICE MSc Conservation Biology student, who conducted her field work on axolotl population viability analysis, experimental testing of factors affecting axolotl growth and development, and the captive breeding of axolotls in Xochimilco (and was accommodated for seven weeks by UAM at its house in Tlalpan). Ms McKay has subsequently been involved in the project on a voluntary basis, and has proven immeasurably useful in assisting with the guide-training workshops.

The establishment of an axolotl research group (Grupo de Investigacion de Ajolote – GIA). This group consists of a core of axolotl researchers, surrounded by a network of relevant and interested individuals and organisations. Its establishment has brought in other key individuals and an additional institutional partner, Universidad Nacional Autonoma de México (UNAM). Dr Luis Zambrano of the Instituto de Biología, UNAM, is co-ordinating the group, and overseeing the production of a comprehensive axolotl bibliography and the bringing together of axolotl research data (by two of his students). He is also co-ordinating the group's design of experimental research to be

carried out by undergraduates (3 BSc projects already started), postgraduates (2 PhDs already started) and staff of CIBAC, UAM and UNAM, and researchers at other institutions (notably CORENA – in charge of nature reserves, Chapultepec Zoo and UMBRAL). Moreover, UNAM has decided to develop a MSc programme on the Restoration of Xochimilco, is seeking to establish a restoration site in the Xochimilco chinampas, and wants to collaborate with DICE, CIBAC and other partners in developing a reintroduction programme for the axolotl. This is a very exciting prospect because it would bring together all the partners in a commonly defined and executed project that will extend beyond the current Darwin project objectives and timeframe.

A meeting has been held between UK and Mexican project team members and Dr Erwin Stephan-Otto, Director of the Parque Ecológico, Xochimilco (PEX). Dr Stephan-Otto has declared an interest in retailing the souvenirs (recuerdos) produced by the artisan network established in the souvenir production workshop, and in sharing resources to produce interpretation boards at PEX. He has also encouraged Parque Ecológico remeros to attend the present nature guide-training workshop.

In February Xochimilco Delagación authorities invited the Mexico project team to participate in a traditional holiday called "Flor mas bella del Ejido", and to inform the public about the axolotl and the project. A stall was set up displaying project posters and materials, and visitors expressed considerable interest in both. Some two hundred project leaflets were given out in response to requests for further information about the axolotl and several T-shirts were sold. For the same festival one of our group of four remeros decided to decorate his carnival trajinera float with an axolotl theme. Amongst twelve competitors his float won overall second prize.

In November 2003 a student of the Université de Genéve, Amanda Steck, contacted us asking whether she could do her undergraduate dissertation fieldwork on the axolotl in Xochimilco under the umbrella of the Darwin Initiative project. She visited us at DICE, then went to México, met Dr Zambrano and the project team in Xochimilco, devised a project on plant (macrophyte) selection for ovoposition by the axolotl, and has now been granted approval from her supervisors at the Université de Genéve. She will be conducting her project fieldwork this summer.

As part of the implementation of the exit strategy, we are hopeful that the project will precipitate the award of a studentship in Conservation Education by the RARE Centre for Conservation, a U.S. based charity which funds conservation education projects ("Pride Campaigns") that promote habitat conservation by marketing conservation messages through the use of a flagship species. Through Dr Bride's involvement with the UK RARE Pride programme the project was invited to apply for the award (worth about US\$70,000) for participation in the programme recently set up in Guadalajara. Two members of the investigator team, Dulce Flores and Paty Sanchez have applied. The result of the application is expected in late May.

One of the investigator team, Luis Hildalgo, has joined the football team of remeros, based at the Cuemanco embarcadero, which is some 300 m from CIBAC. The team has expressed the wish to adopt the axolotl as its mascot and project staff are currently exploring the production costs of axolotl badges to be sewn on to the team shirts. More significantly, this development, together with the increasing public profile of the axolotl has led the management of the Cuemanco embarcadero to consider branding

the whole embarcadero with the axolotl symbol. This would be an important boost to the flagship status of the axolotl.

Overall, despite some minor delays and the major setback of losing the initiator of the whole programme, the project remains on track and is gaining momentum.

#### Achievements, methodologies and approaches

As the project activities outlined above demonstrate, the project involves a holistic combination of natural science (experimental ecology, population modelling) and social science approaches (questionnaires, semi-structured interviews, in-depth interviews and observation), together with practical elements in the form of training and the production of revenue-raising artifacts, publicity and educational activities and materials.

The main achievements over the past year have been the delivery and subsequent development of the nature-guiding workshop, and the expansion of project horizons, notably the setting up of the axolotl research group and supporting network. The project team firmly believes that given adequate support, both initiatives will provide an important legacy from the Darwin Initiative project.

#### **Design enhancement and exit strategy**

The exit strategy has become clearer as the project enters its final year and the different components have begun to work in unison. It is expected that the combination of the planned outputs, the additional outputs, and the major achievements outlined above, will both serve to substantially increase the profile of the axolotl in Xochimilco as a symbol of conservation, and consolidate and develop a research base that will have real practical outcomes in the form of the experimental process of restoration of the Xochimilco wetland system. In addition to the experimental work of the axolotl research group outlined above, other exit strategy components will be: an axolotl research network; an up-to-date comprehensive axolotl bibliography; an established database of axolotl research and data; a management plan for CIBAC that integrates axolotl captive breeding, research, education and training; a project website; an axolotl S/HAP; a substantial group of remero trained natureguides; an artisan network; education and interpretation materials and activities; and, a stock of saleable products to generate further revenue for axolotl conservation.

| <b>Workplan</b><br>2004 |   |
|-------------------------|---|
| July                    | Presentation of project research data by Jeanne McKay and                               |
|                         | Richard Griffiths at the Society of Conservation Biology                                |
|                         | Annual Conference, New York.  |
| End of summer           | Educational/interpretation materials completed.   |
| August/September        | Nature tour visitor surveys.  |
| November                | Review of souvenir production and marketing.  |
| December                | Project conference for production of S/HAP, project review.                             |
| 2005                    |   |
| Jan. Feb.               | Project evaluation, writing publications for peer-reviewed journals.                    |
| March                   | Publication of S/HAP, transfer of project web-site, completion of CIBAC management plan |

#### 5. Actions taken in response to previous reviews (if applicable)

The most significant actions have been the expansion of the project horizons and the development of a clearer exit strategy (see above), one that can be implemented whether or not post-project funding materialises.

#### 6. Partnerships

Despite the tragic death of the Mexico project co-ordinator, links with existing project partners have been maintained and new partners have been brought in. CONABIO has undergone major internal reorganisation and restructuring with the change of political directorship, and Dr Graue was previously our main link with this organisation. Dr Zambrano now fulfils this role, and through him we have been assured that they will be active participants in the forthcoming December conference. This will ensure that the project receives feedback from the organisation charged with implementing the Biodiversity Convention in Mexico.

In addition to the major new partnership with UNAM, significant links with other organisations have been made, most notably the Xochimilco Tourism Directorship, the Parque Ecologico, UNAM, and the RARE Center. These collaborations may respectively significantly boost opportunities for training, marketing, research and outreach education.

#### 7. Impact and Sustainability

The project is enjoying an increasingly high profile, mainly in the local district of Xochimilco. Two substantial articles have appeared in the UAM monthly Newsletter, an interview with Dr Bride, entitled "The axolotl, the hope of medicine and Xochimilco" was printed in the Society Section of the national newspaper El Independiate (14<sup>th</sup> Dec. 2003), and a live interview with Dr Bride and Alejandro Melendez took place on the one-hour Entrecruzamientos programme on Radio Education (BBC4 equivalent) at midday on 10<sup>th</sup> December 2003.

At the time of writing the British Embassy in Mexico has responded very positively to an invitation to be represented at the December 2004 workshop, and is offering to involve the national Mexican media in high-profile coverage of British involvement in conserving Mexico's natural resources through the Darwin Initiative project. We will take this opportunity to publicise the project objectives and promote the remero nature-guiding service.

In the UK there was a local and national press release following the article in Kent Bulletin, which resulted in some local media interest. There has been no national coverage in the UK but it is hoped that the publicity precipitated by the British Embassy in Mexico may interest the national UK media.

#### 8. Post-Project Follow up Activities (max 300 words)

Further guide-training workshops have been requested by the Department of Tourism, Xochimilco. This is particularly timely, given Xochimilco's recent designation as a RAMSAR site. Discussions with the Director of Tourism, who is interested in offering guide-training for many more boatmen, will be conducted during the April 2004 visit. It is hoped that a matched funding opportunity will arise under which a standard workshop format can be established, more local people trained to deliver the workshops, and the DICE project involvement gradually reduced step-wise over any extension period. This would result in a major capacity-building success, with trained nature-guides constituting a significant proportion of the remero population.

The axolotl research group and network would benefit greatly from our further expertise and some financial support. Given an extension the project would provide this support for a limited period during which intensive efforts would be made to obtain sponsorship from potential sponsors already identified, both in relation to maintaining the network, and developing the UNAM-led restoration project.

Further souvenir production training workshops, asked for by remeros attending nature-guiding workshops wishing to produce souvenirs whilst waiting for clients, could be provided at reasonable cost. The co-ordination and monitoring of the production and marketing of the souvenirs could also be usefully extended for an additional period until the 'industry' is more fully established.

The strong continuing personal commitment expressed by key individuals (the Rector of UAM, Dr Zambrano of UNAM, the Mexican Project team, Prof. Resendez of Dept. of Design and Technology (UAM), the Director of Tourism, and the group of trained remeros, would enable these follow-up activities to attract matched support in Mexico and consolidate the Darwin Project contribution.

#### 9. Outputs, Outcomes and Dissemination

All outputs scheduled in the timetable have been met, surpassed or are in process. Substantial, important additional outputs were achieved and are anticipated (see above), whilst the dissemination process is gaining significant momentum. The project activities and objectives have been widely publicised within UAM (which resulted in the involvement of Prof. Resendez and her team in the souvenir workshop) and have reached the Mexican national press and radio.

| Table 1. Project Outputs (According to Standard Output Measures) |                |   |  |
|--|----------------|---|--|
| Code No.   | Quantity       | Description   |  |
| 2  | 2              | Two students successfully completed MSc programme at DICE   |  |
| 4 A  | 9              | Training of project investigators in survey techniques and workshop organisation, facilitation  |  |
| 6 A  | 15 (4 planned) | Workshop 3 - local people trained in souvenir production  |  |
| 6 B  | 2              | Workshop 3  |  |
| 6 A  | 17(6 planned)  | Workshop 4 - training remeros (boatmen) in nature guiding   |  |
| 6 B  | 2              | Workshop 4  |  |
| 7  | 2<br>2         | Workshop 3 – instruction manual. Workshop 4 –<br>workshop pack  |  |
| 8  | 3              | 2 workshops, 1 DICE staff member at souvenir<br>workshop, 2 DICE staff members at Workshop 4  |  |
| 11B  | 1              | One article published in 'Axolotl News'.<br>One article about to be submitted to 'Herpetological<br>Bulletin'   |  |
| 14B  | 1              | Joint Meeting of Ichthyologists & Herpetologists,<br>Manaus, Brazil   |  |
| 15 A/B   | 2              | National and local press release in México publicising<br>Workshops 3 and 4   |  |
| 15 C/D   | 1              | National and local press release in UK publicising project developments thus far  |  |
| 17 <sup>a</sup>  | 1              | Axolotl research group support network  |  |
| 19 A   | 1              | Radio Education (BBC4 equivalent) at midday on 10 <sup>th</sup> December 2003   |  |
| 20   | 1000           | CIBAC trajinera   |  |
| 23   | 2636           | Accommodation for project team in Mexico supplied by<br>UAM; Books and journals donated by British<br>Herpetological Society; flight and project support grant<br>for MSc student from DICE; time spent by UAM Design<br>and Technology staff on workshop; time spent by UAM<br>Design and Technology students on workshop. |  |

• In Table 2, provide full details of all publications and material produced over the last year that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Details will be recorded on the Darwin Monitoring Website Publications Database. Mark (\*) all publications and other material that you have included with this report.

| Table 2: Pub                          | lications   |                       |                                    |        |
|---------------------------------------|---|-----------------------|------------------------------------|--------|
| Type *                                | Detail  | Publishers            | Available from                     | Cost £ |
| (e.g.<br>journals,<br>manual,<br>CDs) | (title, author, year)                                     | (name,<br>city)       | (e.g. contact<br>address, website) |        |
| Journal/<br>website                   | The axolotls of Lake<br>Xochimilco: the<br>evolution of a | Indiana<br>University | http:/www.indiana.ed<br>u/~axolotl |        |

#### Table 2: Publications

conservation programme By R.A. Griffiths, I.G. Bride, V. Graue Axolotl News 30: 12-18 (2003)

#### 10. Project Expenditure

• Please expand and complete Table 3.

## Table 3: Project expenditure during the reporting period (Defra Financial Year 01 April to 31 March)

| /    |  |             |         |
|------|--|-------------|---------|
| Item | Budget (please<br>indicate which<br>document you refer<br>to if other than your<br>project schedule) | Expenditure | Balance |
|      |  |             |         |

• Highlight any recently agreed changes to the budget and explain any variation in expenditure where this is +/- 10% of the budget.

#### 11. Monitoring, Evaluation and Lessons

The two planned workshops were successfully designed and delivered through a process of active collaboration between UK and Mexican partners. Their contribution in meeting the project aims were substantiated by the excellent responses obtained in the participant evaluation questionnaires.

The success of these workshops and their subsequent publicity has been reflected in the unsolicited request for further nature guide training workshops by the Director of Tourism.

The establishment of the axolotl research group and network attests to the fact that there is a growing recognition of the importance of the axolotl as a flagship species for the conservation of the Xochimilco wetland system.

The continued production and sale of souvenirs by the artisan network (and monitoring).

The fact that the four remeros who completed the first nature guide training workshop so enthusiastically participated in developing and delivering the subsequent guide training workshop.

Monthly reports were recieved from the Mexican project team.

#### Lessons learned

The principle lesson learnt in the past year has been the need to recruit respected local people who are convinced of the value of the project and its objectives and who are prepared to actively participate and comunicate with the fellow members of their community.

The importance of gaining the confidence and understanding of the partner institutions and collaborating individuals and of their relationships with other relevant organizations and individuals. On the basis of this understanding it becomes possible to encourage partners to work with these other organizations

# 12. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum)

- (1) The formation of the Axolotl Research Group, which has brought together organisations and individuals who were previously not communicating or collaborating with each other
- (2) The invitation by the Director of Tourism in Xochimilco to substantially expand the training programes for local boatmen.
- (3) The training of more personnel than anticipated at all levels as a result of additional contributions (i.e. staff, resources) in kind from institutions in Britain and México.

#### ■ I agree for ECTF and the Darwin Secretariat to publish the content of this section

In this section you have the chance to let us know about outstanding achievements of your project over the year that you consider worth highlighting to ECTF and the Darwin Secretariat. This could relate to achievements already mentioned in this report, on which you would like to expand further, or achievements that were in addition to the ones planned and deserve particular attention e.g. in terms of best practice. The idea is to use this section for various promotion and dissemination purposes, including e.g. publication in the Defra Annual Report, Darwin promotion material, or on the Darwin website. As we will not be able to ask projects on an individual basis for their consent to publish the content of this section, please note the above agreement clause.

| Project summary   | Measurable Indicators  | Progress and Achievements<br>April 2003-Mar 2004   | Actions required/planned for<br>next period   |
|---|--|--|---|
| <ul> <li>in resources to achieve</li> <li>The conservation of biological</li> <li>The sustainable use of its contract of the sustainable use of its contract.</li> </ul>  | -  |  | countries rich in biodiversity but poor   |
| <b>Purpose</b> (insert original project<br>purpose statement)<br>To assist Mexico in the development of a<br>sustainable programme to conserve the<br>axolotl and other endemic fauna and flora<br>of Xochimilco through the promotion of<br>nature tourism using the axolotl as a<br>flagship species. | <ul><li>(insert original purpose level indicators)</li><li>Existence of a sustainable programme to conserve the axolotl and other endemic fauna and flora of Xochimilco.</li></ul> | (report impacts and achievements<br>resulting from the project against<br>purpose indicators – if any)<br>Component activities successfully executed in<br>line with proposed output schedule and<br>milestones. | (report any lessons learned<br>resulting from the project & highlight<br>key actions planning for next<br>period)<br>Finalization of CIBAC management plan, and<br>consolidation of exit strategy by the integration<br>of Darwin Initiative project outputs into long-<br>term planning. |
| Outputs   |  |  |   |
| (insert original outputs – one per<br>line)   | (insert original output level indicators)  | (report completed activities and<br>outcomes that contribute toward<br>outputs and indicators)   | (report any lessons learned<br>resulting from the project & highlight<br>key actions planning for next<br>period)   |
| a) Axolotl/Xochimilco ecology data  | a) Existence of database on axolotl<br>population biology/ Xochimilco wildlife   | Database established by investigator team;<br>local MSc/PhD students continuing to<br>collect and analyse data; journal article in<br>preparation.   | If there is an appropriate local<br>infrastructure in place then projects can<br>overcome the loss of project team leader;<br>writing up of data for further publication.   |
| b) Mexicans trained: MSc Tourism &<br>Conservation; amphibian ecology;<br>conservation education assessment and<br>community appraisal  | b) Number of students, trajineros and<br>unemployed artisans successfully trained; +<br>data from assessments and appraisals   | More students, trajineros (romeros) and<br>artisans trained than in original proposal;<br>high scores on workshop questionnaire<br>feedback; souvenirs produced and on sale.                                     | Plan workshops well in advance and ensure<br>all local stakeholders are involved; monitor<br>penetration and effectiveness of training<br>through follow-up surveys.  |

#### Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2003/2004

| c) Trajineros trained as nature guides;<br>unemployed artisans trained-souvenir<br>production | c) Number of students, trajineros and<br>unemployed artisans successfully trained; +<br>data from assessments and appraisals. | More students, trajineros (romeros) and<br>artisans trained than in original proposal;<br>high scores on workshop questionnaire<br>feedback; souvenirs produced and on sale. | Plan workshops well in advance and ensure<br>all local stakeholders are involved; monitor<br>penetration and effectiveness of training<br>through follow-up surveys. |
|---|---|--|--|
| d) Species/ Habitat Action Plan   | d) Existence of SAP   | To be detailed at the December 2004 conference   |  |
| e) Conservation education programme.  | e) Increased public awareness of axolotl/<br>Xochimilco, involvement in CIBAC   | Increased number of local<br>individuals/organisations are contacting the<br>project for information and/or involvement.   | Ensure all interested parties are kept<br>involved and invited to December 2004<br>workshop.   |
|   |   |  |  |

Note: Please do NOT expand rows to include activities since their completion and outcomes should be reported under the column on progress and achievements at output and purpose levels.