Submit by 13 January 2006

DARWIN INITIATIVE: APPLICATION FOR POST-PROJECT FUNDING 2006

Please read the Guidance Notes before completing this form. Give a full answer to each section; applications will be considered on the basis of information submitted on this form and on the merit of your current / recently completed Darwin Initiative project. The space provided indicates the level of detail required. Please do not reduce the font size below 11pt or alter the paragraph spacing. Please note the additional information requirements (CVs and letters of support as detailed in the Guidance for Applicants).

1. Name and address of UK organisation

Earthwatch Institute (Europe)		**University of Leicester**
267 Banbury Road, Oxford OX2 7HT	and	**University Road, Leicester LE1 7RH**

2. Post-Project details

Project Title: Replicating biodiversity conservation management at key soda lakes in the Rift Valley.				
Proposed start date: September 2006			**Duration of project:** 18 months	
Darwin funding requested	**Total**	**2006/07**	**2007/08**	**2008/09**
	£103,669	**£37,221**	**£66,448**	**£Nil**

3. Original Project Title and Defra reference number

Flamingo conservation and Ramsar Site Management at Lake Bogoria, Kenya Ref. 162/10/005

4. Principals in project. Please provide a one page CV for each of these named individuals where different from the original project. Letters of support must also be provided from the host country partner(s) endorsing the partnership and value of the Post-Project funding.

Details	**Project leader**	**Other main UK personnel**	**Main project partner or co-ordinator in host country**
Surname	Harper		Mavuti
Forename(s)	David M		Kenneth M.
Post held	Senior Lecturer		Professor of Hydrobiology
Institution (if different to above)	University of Leicester		University of Nairobi
Department	Dept of Biology		Department of Zoology
Telephone			
Fax			
Email			

5. Define the purpose (main objective) of the Post-project in line with the logical framework. How is it linked to the objectives of the original Darwin project?

The Post-project will build on the outputs and success of the original Darwin project at Lake Bogoria, by expanding methods and techniques to all key soda lakes in the Rift Valley. The East African soda lakes are collectively a vital habitat for *Phoeniconaias Minor* (lesser flamingo) and many other species. The Post-project will enable lessons learnt at Lake Bogoria to be refined for local conservationists and communities throughout the Kenyan and Tanzanian Rift to build host country capacity for a coordinated trans-boundary programme of research, monitoring, and education, using *P. Minor* as a flagship species.

The activities of the Post-project are outlined in the logical framework. These ideas for Post-project work were included in the Second Annual Report of the original project, which received extremely positive feedback in the Report Review regarding potential for maximising impact across the Rift Valley.

6. What have been the main outcomes (achievements) of the original project to date?

The original project has:

1) Quantified the food web of Lake Bogoria and shown how the lake's high biodiversity value is maintained by planktonic spirulina grazing of *P. minor* and benthic spirulina decomposition through chironomid larvae (at enormous densities). It has quantified the temporal stability of that ecosystem.

2) Advanced our understanding of inter-lake movements of flamingos, their health and disease.

3) Contributed new biodiversity information about Lake Bogoria National Reserve for birds, plants, beetles, dragonflies and moths.

4) Added all the above information to the final draft Lake Bogoria Ramsar Management Plan and to articles in peer-reviewed science journals (more papers than originally predicted).

5) Funded formal conservation education for 3 Kenyans full-time and 6 Kenyans through distance-learning studies, within their contributions to the project.

6) Provided practical field training to over 120 young East African conservationists in 1-week themed workshops that followed Earthwatch research camps. These themes were Ecosystem Health, Taxonomy for Biodiversity Conservation, and The Scientific Basis for Management Plans.

7) Designed and produced conservation education material (leaflets, posters, workbooks) for the Reserve and for the 2 Secondary schools & 11 Primary schools surrounding it.

8) Filmed and edited 4 short films - 2 on conservation ('Water is Life' & 'Soda Lakes') & 2 on livelihoods ('Beekeeping' & 'Grass is Money') combining new footage with Brock Initiative-donated footage.

9) Written and produced 3 primary-level stories about flamingos.

10) Moved a science lab from Europe, donating 4 compound microscopes to the secondary schools so far.

11) Run one 16-day, research/training camp in April 2005, for 12 African Ramsar site staff in key aspects of ecology, monitoring & management at Lake Elementeita to the theme "Should Elementeita be a Ramsar site?"

7. What steps have been taken to ensure that project purpose and outputs will be achieved within the original project term?

All purposes of the original project have been achieved on the ground and only remain to be fully disseminated by the time of the end of project report (Dr Harper will be at Lake Bogoria in March-April 2006 to oversee the end of the original project).

The main outputs will be:

1) the remaining scientific papers (at least 2 more)

2) the final Ramsar Management Plan for Lake Bogoria

3) print runs of the Reserve information booklet and of the flamingo stories

4) multiple copies of the 4 educational films

5) donation of computers and further microscopes to the secondary schools from the lab

Additional output will be contributions to the new Ramsar Management Plan for Lake Elementeita from the April 2005 research/training team (Ramsar site declared Sept 2005).

8. Please list the overseas partner organisation(s) that will be involved in the Post-project and explain their role and responsibilities in this work and in the original project (if applicable).

New Post-project partners:

Tanzanian National Parks Authority (TANAPA) - The main new partner in Tanzania for the Post-project application. TANAPA manage Lake Manyara (within National Park); also Momella lakes in Arusha National Park and Embaki in Ngorogoro Conservation Area.

Sokoine University of Agriculture, Department of Wildlife Management, Morogoro, Tanzania - Sokoine will be the Post-project partner for limnology fieldwork as part of the research/training teams in 2007. Lecturer Nsajigwa Mbije is supervised by Dr David Harper for a PhD from 2006-9 on a Commonwealth Scholarship, split-site award.

Partners continuing from original project:

University of Nairobi – Professor Ken Mavuti was a key partner in original project and will become the main partner in the Post-project. In the original project Professor Mavuti participated in workshops and soda lake surveys. In the Post-project he will do the same but his role will now be to coordinate the participants in the two countries.

National Museum of Kenya (NMK) – Ornithology Dept (head now Dr Muchai Muchane). Department staff were the mainstay of the original project soda lake surveys and staff/interns were involved as both teachers and participants in the workshops. Department staff will train Tanzanian staff through joint participation in surveys in both countries as part of the Post-project.

9. Please provide written evidence of commitment and capability of overseas partner in achieving the purpose and outputs of this project. Are formal agreements in place for overseas partner responsibility in this project?

Agreements are in place with all host country partners involved in the Post-project. Faxed letters from the new Tanzanian partners are attached, together with a letter of support from the African Conservation Centre (ACC). Both the University of Nairobi and National Museum of Kenya were partners in the original project and have worked with Dr Harper for over 15 years. The benefits of the existing partnerships will continue in the Post-project, namely joint research activities leading to joint publications in peer-reviewed journals and education through practical field experience.

The new partners in Tanzania who will take part in the activities of the Post-project will enhance the capacity and training opportunities for soda lake conservation of host country organisations and authorities, whilst providing links to the Division of the Environment who hold responsibility for the implementation of the Convention on Biological Diversity in Tanzania.

10. What other consultation or co-operation will take place or has taken place already with other stakeholders such as local communities. Please include any contact with the government of the host country if not already provided.

In Kenya, the original project is working closely with Lake Bogoria National Reserve Senior Warden to complete the Ramsar Management Plan. Through him, we also work with the community around the lake through cooperation with 13 schools. Earthwatch "Lakes of the Rift Valley" teams will continue work at Bogoria twice a year to maintain contacts, add impact and ensure the continued success of the original project's achievements.

Since April 2005 we have started to repeat these partnerships at Lake Elementeita through Delamere Estates and the Lake Elementeita Eco-Tourism project and through these two, at further local schools.

Project work has also begun with the African Conservation Centre (ACC), which has a highly successful project along this Kenya-Tanzania Rift promoting sustainable biodiversity conservation through ecotourism involving Masaai group ranches (one of their key local staff attended our April 2005 research/training workshop at Lake Elementeita) at Shompole Ecotourism Camp, just north of Lake Natron. ACC's activity is focussed upon terrestrial and seasonal wetland ecology. The distinct role of the Post-project research will be to understand Lake Natron's and nearby Lake Magadi's ecology and conservation needs and to incorporate these into the overall strategic plan for the group ranches in this pristine trans-boundary area of the Rift.

The original project is working with WCK (Wildlife Clubs of Kenya), East African Wildlife Society (EAWLS) and Nature Kenya to promote the educational materials produced for Bogoria schools (films, story books, lake ecology booklet) nationally. Both have links with organisations in Tanzania (e.g. TANAPA) which will be used to help disseminate materials to new areas.

In Tanzania the two main partners have confirmed the feasibility of the Post-project objectives. Professor Mavuti, and Professor Ekkehard Vareschi, of Oldenburg University (funded by Frankfurt Zoological Society) began working alongside some Tanzanian communities at the new lakes in 2005 to begin engagement that will continue during the Post-project.

Consultations with host country governments have been made through KWS and TANAPA. Harper & Mavuti held a meeting in 2005 with KWS Deputy Directors of Research and of Wetlands in Nairobi to discuss achievements of the original project and appraise them of possibilities of Post-project. The proposals to extend the work to Tanzania were discussed in mid 2005 by Mavuti & Vareschi, at meetings with TANAPA and TAWIRI (Tanzania Wildlife Research Institute) in Arusha.

11. Are you aware of any other individuals/organisations carrying out similar work? Are there completed or existing Darwin Initiative projects (other than your original project) which are relevant to your work? Please give details, explaining the similarities and differences. Show how the outputs and outcomes of your work will be additional to any similar work, and what attempts have been/will be made to co-operate with and learn lessons from such work for mutual benefits.

Darwin has funded projects with RSPB concerned with establishing Important Bird Areas and with WWT concerned with capacity-building for national water bird censuses in Africa. Both of these involve soda lakes as a part of their overall objectives and have links to the original project. However, no projects from any source are concerned with the ecology and health of soda lakes linked with both education and the sustainable livelihoods of their surrounding communities in the Rift. However, the trans-national links which these two projects have achieved – both managed through the NMK and ACC – will be used to smooth the work of this Post-project. The Post-project will fit into an ongoing and long-term programme of conservation and engagement run by Earthwatch in East Africa.

12. How will the project assist the host country in its implementation of the Convention on Biological Diversity? Please make references to the relevant article(s), of the CBD thematic programmes and/or cross-cutting themes (see Annex 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 has assisted Kenya in the implementation of the CBD at Lake Bogoria through a programme of scientific research and local capacity-building, community education, and the creation of a Lake Management Plan. The Post-project will now do the same for Lake Elementeita, which was raised to Ramsar status in 2005 following the research/training team held in April.

Tanzania's Second National Report to the Conference of the Parties recognises inland wetland ecosystems as a key thematic work area, and highlights that there is an immediate need for implementation in this area but that current resources remain limited to do this.

The Post-project specifically focuses on the following articles of the CBD (ranked in order of relevance), which have been identified in Tanzania's Second National Report as being of high priority.

- Article 12 (Research & Training) – programme of research/training teams at Lake Natron, Lake Magadi & Lake Manyara, each lasting 16 days to enhance local capacity for conservation and wise use of wetlands through the sharing and consolidation of practical techniques and knowledge developed and accumulated during the original monitoring project – 60%
- Article 7 (Identification & Monitoring) – environmental research, monitoring and sampling of Lake Natron, Lake Magadi and Lake Manyara through Darwin research/training teams (see below), plus surveying of other regional soda lakes – 20%
- Article 13 (Public Education & Awareness) – community workshops (prior to and immediately following the research/training teams) to help local people understand the value of soda lake ecosystems and conservation education programmes at schools and villages surrounding the lakes using materials developed during the original project – 20%

The CBD national focal point for Tanzania is the Division of the Environment, who are advised on environmental issues and policy through the National Environment Management Council (NEMC). The vision of the NEMC is to provide technical leadership for the application of environmental practices for sustainable development. Both new partners for the Post-project (Tanzania National Parks Authority and Sokoine University of Agriculture) are advisory institutions on the Council, thus ensuring that the Post-project will be able to feed directly into the Government department with responsibility for the implementation of the CBD.

13. 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 the National Biodiversity Strategies or Environmental Action Plans, if applicable.

Through the Kenya Wildlife Service, the Kenyan Government has identified priorities for the implementation of the Convention on the Conservation of Migratory Species of Wild Animals, including the need for expanded monitoring of waterbirds to cover most wetland sites and more capacity building programmes for waterbird monitoring and information management.

The Division of the Environment in Tanzania has identified inland wetland ecosystems as a priority work theme for the implementation of the CBD, and mention specifically the Rift Valley Lake ecosystems, acknowledging that capacity to implement the Convention is currently limited. The Division developed a National Biodiversity Strategy in 2000 to provide a framework for biodiversity conservation, which again highlighted the need to build capacity for implementation in priority areas. The Post-project will help to address these needs through research, training and public education and will establish conservation monitoring programmes and networks that will have a lasting impact beyond the end of the project in March 2008.

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

The Post-project will help to raise awareness and understanding among people living around soda lakes of their high biodiversity value and potential for eco-tourism and other enterprises through the workshops. The workshops will be able to highlight how this approach has worked successfully at Lake Bogoria through the National Reserve.

By educating future generations about the natural value of soda lakes through the resources and materials produced as part of the original project, the Post-project will also be helping local children to appreciate at an early age the inter-dependence between people and wetland ecosystems at a variety of scales. Experience at Bogoria has shown us that local produce (e.g. honey, papyrus matting) can be very much more effectively marketed to tourists if linked to the flagship biodiversity species (flamingos; greater kudus). In contrast, the project has highlighted damaging land uses and the films promote sustainable practices. The Post-project will emphasise both positive and negative aspects in new locations and the link between science and sustainable livelihoods.

15. What will be the impact of the work and how will this be achieved? How will these help to strengthen the long-term impact and legacy of your original Darwin project? Please include details of how the results of the project will be disseminated and put into effect to achieve this impact.

The Post-project will ensure a lasting impact for the overall project by consolidating and refining research techniques developed at Lake Bogoria and enhancing host country capacity to replicate them elsewhere.

The ***local*** impact will be a greater 'ownership' of wetland resources by local people. This will be facilitated by the involvement of community members in the workshops. Our project experience at Lake Bogoria has shown that this is rarely provided by scientists of any nationality, but really makes a difference to the feeling of 'ownership' of biodiversity resources by the community. In particular, we have shown the making of films of local interest with the local people is highly effective in giving them pride in their environment and resources.

The ***national/regional*** impact will be to raise the importance of the whole soda lake complex. This will be achieved by the outputs from the quarterly soda-lake surveys, coupled with the intense training in soda lake ecology, monitoring & management of 36 key people in the two countries.

The ***international*** impact will be achieved by the uniqueness of the scientific objectives. Never before have soda lakes in the two countries been surveyed ecologically (water bird counts are the only survey output). The original project has shown that limnology can be used to explain the water bird distribution, by survey of the 3 key Kenyan soda lakes for the first time. The Post-project will double the number of lakes and countries directly involved, covering the major lakes of *P. minor*'s range.

Prior to the original project, Nakuru was the only East African soda lake whose limnology was understood, and that is from studies 30 years ago. The original project has shown Lake Bogoria is completely different from Lake Nakuru. We expect new differences to become clear from study of further lakes, which will drive the design and content of training for local conservation practitioners for monitoring.

16. Explain how gains from the Post-project work will be distinct and additional to those of the existing project. Show where possible how these gains require limited resources and could not be achieved without the funding.

The original project is showing Kenyan authorities (National Museum Kenya, Kenya Wildlife Service & Lake Bogoria National Reserve) how they can achieve considerable monitoring gains through simple cooperation of staff doing the same things in different places at the same time. It has enhanced training of staff and developed their experience by providing opportunities to undertake monitoring in different places with different partners.

The Post-project will multiply these gains in scale, by providing opportunities for staff from Kenya and Tanzania to work together at soda lakes in both countries and by running unique and currently unavailable, research/training teams where professionals from both countries can exchange experiences and learn from each other. It will additionally provide opportunities for local communities and organisations to understand the soda lake research and assume ownership of their conservation. Darwin's limited financial investment in building local capacity in new locations in Kenya and Tanzania, using lessons learnt from the original project at Lake Bogoria, will provide the knowledge, framework and impetus for an ongoing and lasting programme of lake monitoring and conservation, managed and led at a local level by host country professionals and communities.

The Post-project has been designed to ensure a lasting legacy of host country capacity for soda lake conservation and management. Without further funding, the potential for replication across the Rift Valley created by the outcomes of original project will be untapped. Opportunities to work with and train conservationists and communities from 2 host countries will be lost.

17. How will the work leave a lasting legacy in the host country or region?

The Post-project will build on the work of the original project at Lake Bogoria, to promote a regional, trans-boundary approach to the conservation and monitoring of soda lakes in the East African Rift Valley. The activities of the Post-project will provide opportunities for the methods and techniques developed at Lake Bogoria to be shared with conservation practitioners and local communities at other soda lakes, and will continue and expand an existing programme of ecological monitoring to be region-wide.

Hence the Post-project will consolidate the work of the original project to leave a lasting legacy of:

- Ongoing ecological monitoring of soda lakes in the Rift Valley in Kenya and Tanzania, led by host country government employees & conservationists trained by the Post-project
- Established links and networks of soda lake professionals throughout the region
- Replicable research techniques to support further scientific investigation of soda lake ecology
- Conservation education materials on soda lakes to be shown at schools at or near soda lakes throughout the region
- Enhanced scientific understanding (including peer-reviewed papers in relevant scientific journals) of soda lake ecology and biological diversity throughout the soda lakes of the Rift Valley
- 2 new laboratories – established at Lake Elementeita and Lake Manyara - containing the equipment necessary for future monitoring and research (using equipment sourced from the original project)

18. Please provide a clear exit strategy and describe what steps have been taken to identify and address potential problems in achieving impact and legacy

The exit strategy of the Post-project will be to:

- leave a simple, inexpensive set of protocols for monitoring lakes and flamingo health, together with trained individuals who can carry it out
- leave a sizable cadre of trained individuals, so that skills can be passed on to overcome the inevitable losses through job-changes
- leave laboratories equipped to sustain the above activities
- leave robust educational materials for schools and communities, through national educational charities
- annually review host country activities and community involvement in conservation beyond the Post-project duration through the re-visitation to the lake sites by Dr Harper through future Earthwatch Institute-funded research teams.
- feed scientific results to host country Government ministries to inform conservation strategies. Earthwatch has demonstrated an ability to do this by contributing data on Lake Naivasha and Lake Elementeita, resulting in their designation as Ramsar sites (in 1995 and 2005 respectively).

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

The Post-project will be advertised as a Darwin project by branding all 3 research/training teams as Darwin teams and informing all participants of the Initiative as part of the team. The Darwin name and logo will be used on all materials sent out as part of the teams (e.g. briefing materials and training curriculum) and on all press statements generated by Earthwatch and host country partners. The work of the Darwin Initiative will also be promoted to all project partners (including new partners in Tanzania), as they nominate appropriate staff to receive Darwin training and become leading soda lake professionals in the future.

All "Lakes of the Rift Valley" vehicles have Darwin logos on their sides and the project web-site (http://www.kenya-rift-lakes.org/) has full details of the project including its reports and its publications list. All scientific and popular articles arising from the original project contain acknowledgements and will continue to do so. All educational materials from the original project at Lake Bogoria National Reserve disseminated to schools contain the Darwin logo.

20. Will the Post-project include training and development? Please indicate who the trainees will be and criteria for selection indicating where they were involved in the original project. 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 training that the original project provided included formal education for 3 people at NMK. Two of these, Nicodemus Nalianya and Laban Njoroge, will have completed by the time of the Post-project so will directly contribute by leading the soda lake surveys and contributing to the research/training camps. Formal training for 3 staff members from host country partners will continue during the Post-project, through the University of Leicester's Distance-Learning programme in 'Global Ecology & Wildlife Management'.

The research/training camps will be the core of the Post-project training. They are based on the highly-successful April 2005 camp at Lake Elementeita, which itself was modelled on an Earthwatch research camp but filled with African Ramsar professionals ('Fellows'). Instead of being primarily a research camp, it was both a research camp and also trained the African Fellows in field ecology, monitoring and management by working them to a theme "Should Elementeita be Kenya's next Ramsar site?' On the final day of the camp the Fellows collectively made a presentation to the KWS Deputy Director for Wetlands.

The training was thought more effective than the 1-week workshops which the existing project has run for 120 East Africans because of the longer time (16 instead of 6 days) and smaller number of trainees (max 12 instead of max 36). The Post-project provides this format as a progression and will select the participants specifically from all soda lake communities and management agencies, in order to provide a core of expertise which will maintain the whole project's key objectives after its completion. Candidates will be selected through a process of nomination tried and tested by Earthwatch already through our long-standing African Fellowship Programme that has trained almost 900 young Africans in scientific field research techniques. The success of the training will be measures through participant evaluation forms, the expansion of the soda lake monitoring programme across the region, and the creation of a soda lake conservation network to be managed by the host country partners. The individuals trained will provide a lasting valuable resource with the capacity and knowledge to train colleagues in the future.

The original project's last workshop, in July 2005, involved the 36 trainees – mostly university graduates (34 Kenyan and 2 Tanzanian) – each spending 2 days interacting with the local community at Bogoria to find out their knowledge of, opinions about, and needs for, scientific research and management. We propose to link this proven value into the Post-project research/training camps, by holding a two-day community workshop (1 day prior to and 1-day following) in with each research/training team.

The three research/training teams will be:

1. Lake Elementeita – March 2007
2. Shompole Eco-Tourism Camp (Lakes Natron & Magadi) – August 2007
3. Lake Manyara – March 2008

LOGICAL FRAMEWORK

21. Please enter the details of your project onto the matrix using the note at Annex 1 of the Guidance Note.

Project summary	Measurable indicators	Means of verification	Important assumptions
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 • the conservation of biological diversity, • the sustainable use of its components, and • the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources			
Purpose • To offer practical training in soda lake conservation & management at 3 new soda lakes to provide scientific information and host country capacity for soda lake management and conservation across the Rift Valley	• Knowledge and understanding of techniques for soda lake conservation & management expanded at 3 new locations • Data and information gathered from expanded monitoring programme fed into existing or developing lake management plans and country biodiversity strategies • Enhanced community understanding of soda lake research	• Annual reports and recommendations • Darwin training programme • 3 host country staff complete Distance-Learning course • 1 Ramsar management plan (Lake Elementeita) • 5 recommendations to management plans at Lake Natron, Lake Magadi & Lake Manyara • 6 days of community workshops	• Current national political and economic conditions do not deteriorate to the extent that it is unsafe to work to Kenya or Tanzania • Project partners remain supportive of the Post-project objectives and purpose
Outputs • Host countries' capacity for soda lake conservation and management enhanced • Quarterly lake monitoring programme expanded across Rift Valley region and into a new country • Local communities feel enhanced 'ownership' of soda lakes • 3 more clusters of schools receive educational material • Improved scientific understanding of the variation in soda lake ecology in the Rift Valley	• 36 key staff members from lake management authorities, conservation organisations and local communities trained • Monitoring programme ongoing at 8 soda lakes in Kenya and Tanzania • 3 workshops of 2 days each, held at Lake Elementeita, Shompole and Lake Manyara. • 12 new schools receive 24 story books and 4 education films • 6 weeks of scientific research at 3 new soda lake locations	• Training curriculum • List of participants in training/research teams • List of trained professional and community lake monitors • 2 new equipped lake monitoring laboratories • List of workshop participants • Workshop reports • Education packs • At least 5 peer-reviewed journal articles published	• Lack of training opportunities in soda lake conservation in Kenya and Tanzania continues to be considered a priority to be addressed • Staffing levels of lake management authorities remain to carry out monitoring programme • Community interest in soda lakes remains

Activities	**Activity Milestones (Summary of Project Implementation Timetable)**
Research/Training teams	[November 2006 - 16-day team at Lake Bogoria, funded by Earthwatch, to follow up on work of original project. Research focus - microbial health of flamingos and lake past stability from sediment cores]. • March 2007 – 1st 16-day team at Lake Elementeita. Research focus - ecosystem structure and the alternative feeding strategies of flamingos on shallow water benthic diatoms. • August 2007 – 2nd 16-day team at Shompole (Lake Natron & Lake Magadi). Research focus - ecosystem structure in these most extreme saline lakes. • March 2008 – 3rd 16-day team at Lake Manyara. Research focus upon ecosystem dynamics in this shallow lake.
Soda lake monitoring programme	• October 2006 – End of Project (& beyond) – Quarterly soda lake monitoring ongoing
Community workshops & public education	• March 2007 - 2 day-long community workshops at Lake Elementeita • August 2007 - 2 day-long community workshops at Shompole (Lake Natron & Lake Magadi) • March 2008 - 2 day-long community workshops at Lake Manyara

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

Project implementation timetable		
Date	Financial Year	Key milestones
	Apr – Mar 2006/07	
September 06		Start-up meeting with the 4 main partners in Arusha, Tanzania
October 06		First simultaneous soda lake survey in both countries
November 06		Research camp at Lake Bogoria to trial community workshop funded by Earthwatch.
January 07		Report evaluating start-up meeting, first trans-boundary soda lake surveys & trial workshop
January 07		Second simultaneous soda lake survey in both countries
February 07		Draft manuscripts of state of microbial risk in *P. minor* populations (from original project plus Nov 2006 EWI research)
March 07		Draft manuscript of ecological stability and recent history of Bogoria (from original project plus Nov 2006 EWI research)
March 07		First Post-project Darwin research/training camp with community workshop at Lake Elementeita.
	Apr – Mar 2007/08	
April 07		Third simultaneous soda lake survey in both countries. This will include samples of all lake waters for cyanobacterial toxin analysis, to be taken fresh back to Europe by Dr Harper for analysis.

May 07		Report evaluating first Darwin research/training camp & workshop
July 07		Fourth simultaneous soda lake survey in both countries
August 07		Second research/training camp with community workshop at Shompole, focussing upon at Lake Natron and Magadi
October 07		Fifth simultaneous soda lake survey in both countries
November 07		Draft manuscript of *P. minor* feeding on benthic diatoms in shallow lakes and temporary wetlands.
December 07		Draft manuscript of biodiversity and ecosystem structure in extreme soda lakes.
January 08		Sixth simultaneous soda lake survey in both countries
February 08		Draft analysis/manuscript of variability of soda lake limnology in relation to *P. minor* movements over Rift Valley.
March 08		Third research/training camp with community workshop at Lake Manyara. This team will include samples of lake waters for cyanobacterial toxin analysis, to be taken back fresh to Europe by Dr Harper
		Final report submitted to Darwin, including draft manuscript of paper on health risk to *P. minor* from cyanobacterial toxins in the Rift Valley
		End of Post-project

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

PROJECT OUTPUTS		
Year/Month	**Standard output number**	**Description**
By March 2008	2	3 host country staff through University of Leicester Distance Learning scheme
March 2007, August 2007 & March 2008	4B	6 training weeks (2 full weeks at Lake Elementeita, Shompole & Lake Manyara respectively) for 36 people
March 2007, August 2007 & March 2008	7	Conservation education materials produced (copies of 4 films and 3 story books) and handed over to at least 12 local schools in 3 new clusters
March 2007, August 2007 & March 2008	8	10 weeks for research/training teams and community workshops (including administrative time)
By March 2008	9	1 Ramsar management plan – Lake Elementeita 2 recommendations for Lake Natron Ramsar Plan and Lake Magadi in context of group ranches strategic plan 3 recommendations for Lake Manyara in context of Lake Manyara National Park plan
By March 2008	11A	5+ papers published using research data gathered during Post-project
March 2007, August 2007 & March 2008	14A	6 day-long community workshops run (2 each at Lake Elementeita, Shompole & Lake Manyara)
March 2007 & March 2008	15B	2 local press releases in host countries by project partners
September 2006 & August 2007	15C	2 national press releases in the UK by Earthwatch
By March 2008	17A	Trans-boundary network of trained soda lake professionals established in the Rift Valley
By March 2008	20	Approx £30,000 (education materials and monitoring equipment)
Confirmed by September 2006	23	£109,350 including staff time contributions by Earthwatch, the University of Leicester and project partners and volunteer and corporate contributions raised for the 'Lakes of the Rift Valley' project.

MONITORING AND EVALUATION

24. 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 monitoring and evaluation.

The logical framework will provide the primary means for monitoring and evaluating the success of the Post-project. The purpose and outputs are clearly defined in the framework and reporting will be against them as indicated.

During the lifetime of the Post-project, delivery of outputs will be measured in the host country through participant evaluation of each research/training team and community workshop. This will ensure that not only do sufficient number of conservation staff and community members receive training and information, but also that this is of a high quality.

The reports generated from the research undertaken at Lake Elementeita, Shompole and Lake Manyara will be used to assess the scientific contribution of the Post-project to soda lake ecology in the Rift Valley, together with the successful preparation and submission of peer-reviewed papers in appropriate journals.

The achievement of the overall purpose of the Post-project will be evaluated by:

- the successful completion of the research/training teams and community workshops
- training of relevant lake authority staff continuing in the future by those trained as part of the Post-project
- a continuing expanded programme of trans-boundary soda lake monitoring well beyond March 2008, led by the host country project partners
- the dissemination of conservation education materials to schools in new areas (around Lake Elementeita, Shompole & Lake Manyara)

The host country partners will be included in monitoring and evaluation through communication with the UK partners via continuous electronic communication and face-to-face meetings during the project and direct involvement in gathering feedback from participants.

Continued Earthwatch funding of the ‘Lakes of the Rift Valley’ project, enabling research teams to return to the Post-project locations in 2008-10, will also help to ensure evaluation of successes and continuity.

FINANCIAL ASPECTS

25. Please state costs by financial year (April to March). Use current prices - do not include any allowance for assumed future inflation. For programmes of less than 2 years' duration, enter 'nil' as appropriate for future years. Show Darwin funded items separately from those funded from other sources.

Please note that although three financial years are shown here, funding will only be awarded for a maximum period of two calendar years

Table A: Staff time. List each member of the team; their role in the project rate and the percentage of time each would spend on the project each year.

	2006/2007%	2007/2008%	2008/2009%
Dr. Roger Mitchell, Earthwatch, Project Direction	3	5	Nil
Steve Gray, Earthwatch, Project Management	5	10	Nil
Catherine McKenna, Earthwatch, Project Coordinator (Research/Training Programme)	5	10	Nil
Dr David Harper, University of Leicester, Project Leader	20	30	Nil
Mrs Maureen Harper, Education Coordinator	10	10	Nil
Professor Ken Mavuti, University of Nairobi, Main Host-country project partner	5	15	Nil
Nicodemus Nalianya, NMK, Leader, Soda lake surveys	5	15	Nil
Emmanuel Gereta, TANAPA, facilitator logistics	5	10	Nil
N. Mbije, Sokoine University, scientific assistance	5	10	Nil
James Njoroge, fieldwork assistance	25	50	Nil
Reuben Ndolo, fieldwork assistance	25	50	Nil
John Kaba, fieldwork assistance	25	50	Nil

Table B: Salary costs. List the project team members and show their salary costs for the project, separating those costs to be funded by the Darwin Initiative from those to be funded from other sources.

Project team member	2006/2007		2007/2008		2008/2009	
	Darwin	Other	Darwin	Other	Darwin	Other
Dr. Roger Mitchell						
Steve Gray						
Catherine McKenna						
Dr David Harper						
Mrs Maureen Harper						
Professor Ken Mavuti						
Nicodemus Nalianya						
Emmanuel Gerata						
N. Mbije						
James Njoroge						
Reuben Ndolo						
John Kaba						
Total cost of salaries						

Table C. Total costs. Please separate Darwin funding from other funding sources for every budget line.

	2006/2007	2007/2008	2008/2009	£ TOTAL
Rents, rates, heating, lighting, cleaning,				
• Darwin funding				
• other funding				
Office costs eg postage,				
• Darwin funding				
• other funding				
Travel and subsistence				
• Darwin funding for soda lake surveys				
• other funding				
Printing and film production				
• Darwin funding				
• other funding				
Conferences, seminars etc				
• Darwin funding				
• other funding				
Equipment/logistics for Research/Training camps				
• Darwin funding				
Camp erection/dismantling				
Food & camp charges				
Tent maintenance				
Transport at camp				
Casual camp staff				
Per Diems/Travel Expenses of trainees				
Travel costs & per diems of tutors				
Analyses costs – stable isotope analyses; DNA sequencing and cyanobacteria toxin measurement				
• other funding				
Other costs (please specify and break down)				
• Darwin funding Travel & subsistence UK-Kenya for Project Leader				
Formal education of staff from partners (3 MSc on Distance Learning programme)				
In-country start up (Tanzania)				

Progress Meeting 2007				
Close-down meeting (Kenya)				
• other funding				
Salaries (from previous)				
• Darwin funding				
• other funding				
TOTAL PROJECT COSTS	**85,296**	**127,723**		**213,019**
TOTAL COSTS FUNDED FROM OTHER SOURCES	**48,075**	**61,275**		**109,350**
TOTAL DARWIN COSTS REQUESTED	**37,221**	**66,448**		**103,669**

25. Please provide a written justification of why alternative funding is not available from within your own organisation or from other sources.

The combination of research, capacity building and education activities will not be possible without funding from the Darwin Initiative and, due to the specific design of the Post-project to meet Darwin objectives, is unlikely to attract alternative investment.

Earthwatch can provide match-funding through paying volunteers, but does not have available funds to support a wider programme of activities.

The Post-project has been designed to lead on from the original project (which itself would not have been possible without funding from Darwin), and provide opportunities to greatly enhance impact and legacy in the host countries through its activities.

The Post-project will also be disseminating education materials that are already Darwin branded.

26. Will matched funding be provided? Provide details of all other funding sources that will be put towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity. Please include any additional funding the project will lever in to carry out additional work during or beyond the project lifetime. Indicate those funding sources that are confirmed.

Earthwatch will be providing match-funding through our participatory field research model. In addition to the Darwin-sponsored research/training teams in 2007, Dr Harper will receive funding for the 'Lakes of the Rift Valley' project through a number of other programmes managed by Earthwatch. This funding will come from paying volunteers and individuals sponsored to join the research project by their employers. Hence, the Post-project funding from Darwin of £103,669 will leverage a further £109,350 in cash or kind from volunteer contributions, Earthwatch, the University of Leicester and the corporate sector.

The estimated co-funding for the Post-project from Earthwatch, including volunteer contributions and contributions from existing corporate partnerships is approximately £51,700 (confirmed).

The estimated co-funding from the University of Leicester to the cover Dr Harper's salary costs is confirmed.

The in-kind value of Mrs Maureen Harper's involvement in the education work with schools (100% confirmed).

Other sources of income, and in kind support (e.g. from project partners and other institutions) is approximately £7,650 (100% confirmed).

Video footage developed through the Brock Initiative as part of the original project, and to which the Post-project has unrestricted access, is estimated at a value £30,000.

27. Please give details of any further funding resources sought from the host country partner institution(s) or others for this project that are not already detailed above. This will include donations in kind and un-costed support eg accommodation.

No further resources sought from host country institutions.

28. What was the amount of funding for the original Darwin Project?

	Total Project Costs £
Amount of original Darwin Initiative project funding	175,791
+ Funding/Income from other sources	270,494
= Total original project cost	446,285

FCO NOTIFICATION

Please check the box if you think that there are sensitivities that the Foreign and Commonwealth Office will need to be aware of should they want to publicise details of the Darwin Post-project and the resultant work in the UK or in the host country. ☐

CERTIFICATION 2006/7

On behalf of the Trustees of Earthwatch Institute (Europe)

I apply for a grant of £37,221 in respect of expenditure to be incurred in the financial year ending 31 March 2007 on the activities specified in the Logical Framework.

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

I enclose a copy of the CVs for project principals and letters of support.

Name (block capitals)	DR. ROGER MITCHELL
Position in the organisation	DIRECTOR OF RESEARCH & EDUCATION

Signed		**Date:**	

Please return this form by e-mail to ECTF at darwin-applications@ectf-ed.org.uk **by 13 January 2006**. Please put the title of the proposed project into the subject line of the e-mail. As much of the supporting documentation as possible should be sent along with the e-mailed application. However, if you are e-mailing supporting documentation separately please include in the subject line an indication of the number of e-mails you are sending (eg whether the e-mail is 1 of 2, 2 of 3 etc**). In addition**, hard copies of all applications and supporting documents should be submitted to the Darwin Applications Management Unit, c/o ECTF, Pentlands Science Park, Bush Loan, Penicuik EH26 0PH **postmarked not later than 13 January 2006**.

DATA PROTECTION ACT 1998: Applicants for grant funding must agree to any disclosure or exchange of information supplied on the application form (including the content of a declaration or undertaking) which the Department considers necessary for the administration, evaluation, monitoring and publicising of the Darwin Initiative. Application form data will also be held by contractors dealing with Darwin Initiative monitoring and evaluation. It is the responsibility of applicants to ensure that personal data can be supplied to the Department for the uses described in this paragraph. A completed application form will be taken as an agreement by the applicant and the grant/award recipient also to the following:- putting certain details (ie name, contact details and location of project work) on the Darwin Initiative and Defra websites(details relating to financial awards will not be put on the websites if requested in writing by the grant/award recipient); using personal data for the Darwin Initiative postal circulation list; and sending data to Foreign and Commonwealth Office posts outside the United Kingdom, including posts outside the European Economic Area. Confidential information relating to the project or its results and any personal data may be released on request, including under the Environmental Information Regulations, the code of Practice on Access to Government Information and the Freedom of Information Act 2000.