

**DARWIN INITIATIVE FOR THE SURVIVAL OF SPECIES: APPLICATION FOR GRANT FOR ROUND 10 COMPETITION**

**1. Name and address of organisation**

**The Wildfowl & Wetlands Trust, Research Department, Slimbridge, Glos. GL2 7BT, UK.**

**2. Principals in project**

<b>Details</b>	<b>Project leader</b>	<b>Other UK personnel (if working more than 50% of their time on project)</b>	<b>Main project partner or co-ordinator in host country</b>
<b>Surname</b>	O'Connell		Owino
<b>Forename(s)</b>	Mark		Alfred
<b>Post held</b>	Head of Research		Research Scientist
<b>Institution (if different to above)</b>			National Museums of Kenya
<b>Department</b>	Research Department		Department of Ornithology
<b>Telephone</b>			
<b>Fax</b>			
<b>Email</b>			

**CV's attached.**

**3. Project title**

**Monitoring biodiversity for site management planning in eastern African wetlands**

**4. Abstract**

Wetlands are cradles of biodiversity, holding more than 40% of the world's species and providing essential functions and services for humans. In eastern Africa, socio-economic and land use changes have resulted in considerable loss and degradation of many wetlands, and numerous site, species and habitats are threatened. There is an urgent need for cross-sectoral site management plans to be developed to protect wetland biodiversity and functions. The production and long-term sustainability of such plans requires institutional capacity in developing plans, continuous input of up-to-date monitoring data, and capacity in relevant stakeholders to use data as part of the management plan process. This project will provide capacity in management planning and the use of biodiversity data, launch a regional wetland monitoring scheme, and produce nine site management plans.

## 5. Timing and duration.

May 2002 for 3 years

## 6. Aims, activities and achievements of organisation.

### WWT aims

WWT's research department mission is: 'To provide scientific solutions for the wise use and conservation of wetlands and the biodiversity they support.'

### WWT activities

- As the secretariat for the UK's national waterbird monitoring scheme (WeBS), we are responsible for the co-ordination and maintenance of 3000 volunteers, data input, database management, general administration and annual reporting of the scheme. Importantly, we also utilise WeBS data for a wide variety of UK national and international conservation objectives, including population estimates and trends, site designation, site management, assisting government with reporting requirements under agreements (CBD, Ramsar, EC Birds Directive, AEWA), underpinning species/habitat Biodiversity Action Plans, and writing site management plans.
- The department undertakes applied conservation research to investigate population changes and link these to changes in wetlands and land use.
- The department is currently monitoring biotic and abiotic components of wetland biodiversity at a number of sites, to better inform management practices and planning, and to understand how anthropogenic threats affect wetland ecosystems and the biodiversity they support.
- The transference of our knowledge and expertise, as well as training the next generation of conservation scientists, are central areas of our work. The department is also integrated into WWT's education programmes and has the public understanding of science as one of our strategic objectives.
- Staff in the department publish papers in scientific journals, disseminate the results of our work through reports and a variety of media (including TV and radio), and publish our own journal *Wildfowl*. Furthermore, a member of our staff is the editor of the journal *Bird Conservation International*.
- Department staff represent the Trust on a number of national and international committees, advisory and steering groups in relation to the wise use and conservation of wetlands and their biodiversity.

### WWT achievements in 2001

- WWT's research department successfully undertook ten key conservation research and monitoring programmes. From these, 20 peer-reviewed scientific papers and 10 reports were published.
- Staff taught on eight major conservation courses in the UK, including lecturing and curriculum development for an international course at the Durrell Institute of Conservation and Ecology (DICE) in Jersey.
- Staff supervised 6 PhD and 2 MSc studentships in 2001, and ran undergraduate courses at Slimbridge in collaboration with Bristol University. Over 2000 wetland scientists and conservationists worldwide received our own peer-reviewed journal *Wildfowl*.

## 7. Has your organisation received funding under the Initiative before?

No

## 8. Overseas institutions and responsibilities.

The **National Museums of Kenya** will be the host organisation and chair the regional steering committee for the project. They will also host the Darwin Project Officer (see below) when in Africa and liaise with the Kenyan Wildlife Service Training Institute (KWSTI) in relation to the use of their training facility at Naivasha. Regional emphasis in the training programme will also be enhanced by the use of training facilities at Khartoum (Sudan).

The other **regional partner** organisations are:

- Association Burundaise pour la Protection des Oiseaux (**Burundi**)
- Ministry of Fisheries (**Eritrea**)
- Ethiopian Wildlife & Natural History Society (**Ethiopia**)
- Nature Uganda (**Uganda**)
- Office National du Tourisme (**Djibouti**)
- Association pour la Conservation de la Nature au Rwanda (**Rwanda**)
- Wildlife Conservation Administration (**Sudan**)
- Tanzania Wildlife Research Institute (**Tanzania**)

These organisations are currently responsible for carrying out a range of wetland monitoring and conservation activities, as well as undertaking the African Waterbird Census (AfWC) in their respective countries. Their principal roles in the project will be:

1. Participating on the project steering and technical advisory groups.
2. Advising on curriculum and database development issues.
3. Identifying trainees for the training courses at Naivasha and Khartoum.
4. Undertaking the development, launch, administration and maintenance of the new east African wetland monitoring scheme.
5. Utilising existing wetlands data, the training and database tools provided by the project, and their contacts with stakeholder groups to identify 9 sites (1 per partner country) and develop cross-sectoral site management plans.

Further partnerships will be built during the implementation of the project, especially with other national government agencies, NGOs and the regional representations of international organisations such as BirdLife International and IUCN.

**Wetlands International** will provide the partnership with a range of support, particularly to ensure compatibility and integration of the regional monitoring scheme proposed in this project with African Waterbird Census data and survey methodology. They will also facilitate the launch of the regional monitoring scheme, and integrate knowledge gained in West Africa as part of the proposed curriculum development phase. They will also input considerable expertise and experience in the development, implementation and maintenance of management plans for protecting wetlands and their biodiversity.

## PROJECT DETAILS

### 9. Project purpose.

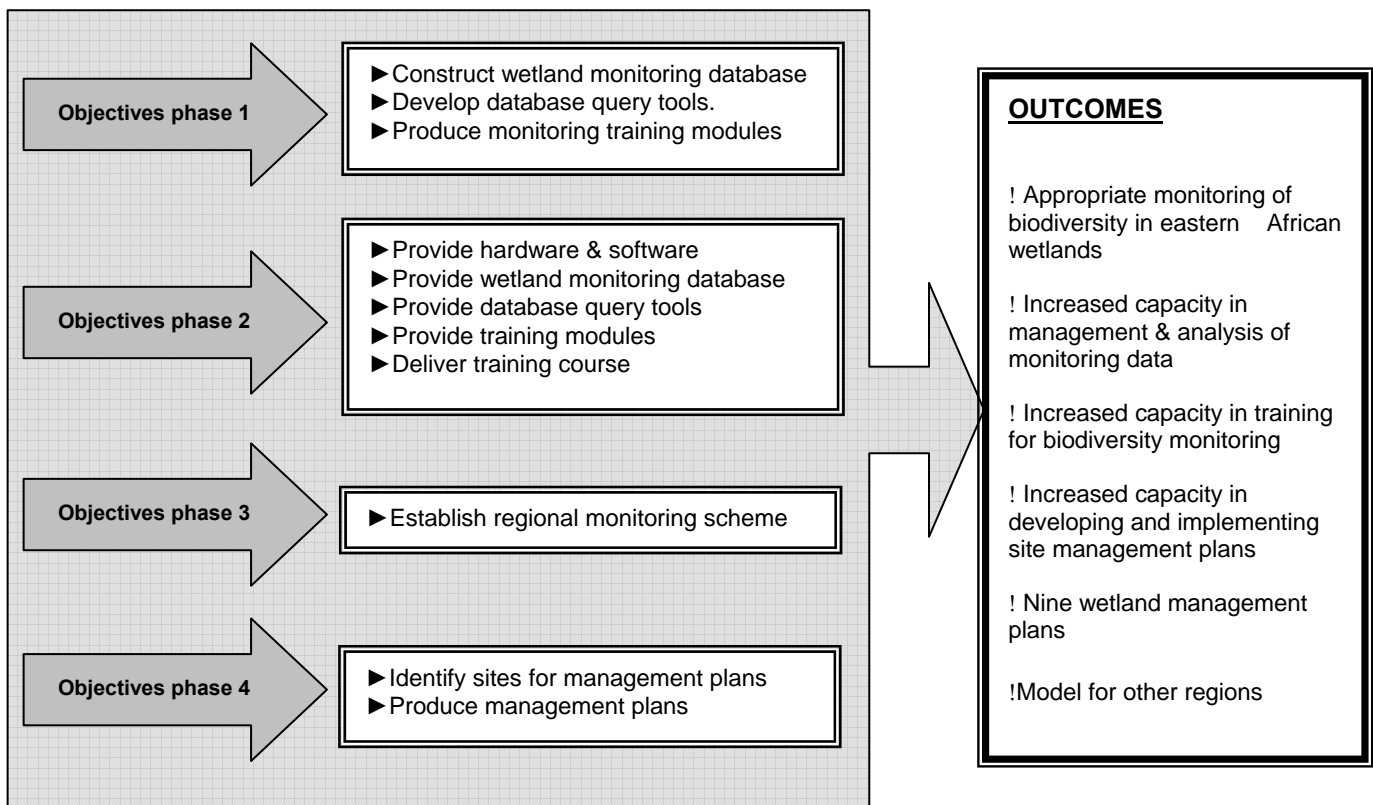
#### Project purpose:

To build and maintain capacity in the monitoring of wetland and waterbird biodiversity in eastern Africa, to provide information for the development of site management plans.

#### Project rationale:

- The production and implementation of management plans is an essential tool in the conservation of global biodiversity.
- Management plans are not technical or legal documents (although they may be supported by legislation), but are agreements that underpin the maintenance of biological diversity and productivity by engaging local stakeholders in the wise use of resources. As such they should integrate the objective to conserve biodiversity while at the same time benefit local communities and enhance the quality of their lives.
- Management planning is an ongoing and dynamic process, and must be based on up-to-date information about biotic and abiotic features at sites. This information must be obtained from standardised long-term monitoring schemes, which should be designed to provide appropriate feedback on management actions.
- The development and implementation of management plans requires local organisations and agencies to have capacity in three key areas: (1) collating and managing information in the form of a database, (2) querying and analysing databases to provide management relevant information, and (c) the ability to develop and implement effective and stakeholder relevant management plans.

#### Project objectives and outcomes:



#### Project phases:

The project will be overseen by a regional steering committee and a technical advisory group (WWT and Wetlands International). The purpose of the project will be fulfilled by achieving the key objectives delivered in four phases:

**1. Development.** The Darwin Project Officer will be appointed to spend a year at WWT Slimbridge and (with the aid of WWT staff and the regional steering group), will write modular training courses and produce accompanying training material. The modules will provide trainees with knowledge of: (a) how monitoring data and other information may be used to develop, write and implement site management plans to conserve biodiversity (following Ramsar Site Management Guidelines), (b) how to develop and maintain a regional monitoring scheme, (c) how to identify and assess key sites and populations sizes, and (d) how to use data to fulfil conservation and reporting obligations under international agreements. At the same time, a wetlands database will be constructed utilising technical expertise from WWT and Wetlands International. This will then be populated using African Waterbird Census (AWFC) data, and a wide range other biotic and abiotic data held by all the project partners. The database will also be designed to

'receive' data from a new monitoring scheme (see below). To facilitate the use of these monitoring data, a set of query tools will be developed for the database, and their use integrated with the training courses, training material and technical manuals.

**2. Training.** The new database, technical manuals, training material and appropriate hardware/software will be delivered to the African partners. A training course will then be delivered to demonstrate technical aspects of using, maintaining and updating the database, as well as delivering the curriculum modules developed in phase 1. The training will be delivered to trainees identified by the regional partners, and take place at the Kenyan Wildlife Service's facilities in Naivasha (Kenya) and the Wildlife Conservation Administration of Sudan's training facility in Khartoum (Sudan).

**3. Monitoring scheme.** Using (a) the new wetlands database, (b) the training delivered in phase 2, and (c) and support from WWT and Wetlands International, the African partners will establish a regional monitoring scheme for wetland biodiversity. The scheme will be called the Eastern African Wetlands Monitoring Scheme (EAWMS). Data from the annual African Waterbird Census (AfWC) will initially form the cornerstone of the new scheme, but importantly it will also allow the collation of non-bird wetland biodiversity data and site specific information that are currently held by the African partners, WWT, Wetlands International and other sources. The Darwin Project Officer (based at The National Museums of Kenya in years 2 and 3 of the project) will oversee the establishment of the scheme (launch, advertising, volunteer network development etc.), which has the full backing of the project's African partners (see also under exit strategy).

**4. Management planning.** As a corollary to the above work, the wetlands database/query tools and new capacity in management plan development; will be put into *action* in the final phase of the project. Using information and ecological performance indicators from the database, trained staff from each partner organisation will identify one major wetland site in their country which currently lacks a management plan but is important for threatened species, large populations, or which shows negative indicator trends. A management plan will then be developed for the site using the standards and guidelines presented in the training material from Phase 1, and following Ramsar and IUCN guidelines on stakeholder management planning. The process of developing these nine management plans will be supported and evaluated by WWT, Wetlands International and the project steering group. A workshop at the end of the project will be used to share and exchange experiences and consolidate a regional approach to management planning, and lay the foundation for using this capacity after the end of the Darwin project.

## 10. Is this a new project or the continuation of an existing one?

New

## 11. Identification, conservation priorities and CBD obligations

### How was the work identified?

The eastern Africa region supports a high level of biodiversity, and has benefited from considerable outside investment in training facilities focused on science-based nature/wildlife management. It also has a relatively extensive network of protected sites and a long history of inter-organisation collaborations for conservation. Despite this, wetland biodiversity is widely threatened, and national and local governments are under growing pressure to allow the exploitation, development and extensive drainage of wetland areas, principally for agriculture. The unregulated use of agrochemicals, introduced species and dam building have also resulted in considerable pressures on the biodiversity of many wetland sites. Additionally, most expertise arising from training in the region is related to the management of charismatic wildlife, rather than general wetland management for biodiversity. Although the nominal designation of a site as a 'protected' area is often a functional first stage in conserving biodiversity at a site, there is the additional need to engage local stakeholders and implement mutually beneficial *management plans*. Such plans should allow both the protection of biodiversity as well as increased quality of life for local people. These plans must be based on biodiversity data collected to common standards and designed to provide feedback to the management planning process.

During the 1990's there were a number of cornerstone meetings and programmes in Africa that clearly identified new capacity needs of African states in relation to management planning for wetlands, and how regional states might use these to fulfil requirements under international agreements. A number of summary reports from these meetings were produced by African statutory and non-statutory groups, including Wetlands International Africa. The IUCN Species Survival Commission also produced a comprehensive analysis of conservation needs in sub-Saharan Africa, as part of the Biodiversity Conservation Strategy Programme. The analysis considered critical sites, critical species, threats and an overview of conservation measures. The central elements within the proposed Darwin project directly address the recommendations in that report. Additionally, Wetlands International held a meeting in Dakar (Senegal) in 1998 (attended by WWT), which identified a number of convention specific requirements for wetland biodiversity conservation in Africa. WWT also attended the inaugural meeting of the African-Eurasian Migratory Waterbird Agreement (AEWA, Bonn Convention) in Cape Town in 1999, where specific regional needs were identified as part of the AEWA Action Plan. A concept note for the present proposed project was prepared by WWT in early 2000, and circulated to potential African partners and Wetlands International. Immediately prior to the 10th Pan-African Ornithological Congress 2000, WWT took part in four days of round table discussions with African NGO partners and statutory agencies in Kampala, Uganda, at a development workshop organised by the Wetlands International Africa

office. At that workshop, urgent needs in relation to wetland biodiversity monitoring were identified and discussed, and these were used to form the basis of WWT's proposed Darwin Initiative project. An interim steering committee of representatives from nine African nations was also established at this workshop to advise WWT on country- and region-specific issues within the proposed project.

### **How is the project related to conservation priorities in the host country?**

Wetlands are systems of extremely high biodiversity, and perform a wide range of essential socio-economic and hydrological functions. Economic, demographic and land use changes in eastern Africa have meant that wetlands and the biodiversity they support are now severely threatened. Additionally, the unsustainable exploitation of wetland resources is known to contribute to existing socio-economic problems. Whereas considerable conservation effort in Africa has focused on rangeland and mammal conservation, wetlands have been identified as being in urgent need of similar programmes. National CBD reports from the partner countries provide direct evidence that the conservation aims of this project meet key priorities, and the project is designed to address specific capacity building needs in relation to these priorities. In consultation with the African partners, and with reference to National CBD Reports, the proposed Darwin project addresses conservation priorities of the host countries in several ways: (1) the region is of international importance in terms of wetland biodiversity; (2) countries within the region are committed to actively promote bilateral and multilateral co-operation in management of shared resources and transboundary species; (3) they recognise the need for training of key personnel in biodiversity management and the need for strengthening capacity of biodiversity managers through improved training. The effectiveness of NGOs in playing their vital role in biodiversity conservation is constrained by lack of adequate technical and financial resources. A common objective therefore is the strengthening of national institutional capacity to collect, store, organise, assess and use data for information and decision making; (4) they recognise the lack of data on biodiversity as well as the need to strengthen research and monitoring activities by improving inventories, databases and documentation and are committed to the systematic collection and analysis of data to enable monitoring of wetland biodiversity; (5) they recognise the limitations of site designation and the need to implement management plans to ensure the wise and sustainable use of resources and the conservation of biodiversity.

As well as CBD, Kenya, Sudan, Tanzania and Uganda are signatories to the African-Eurasian Migratory Waterbird Agreement (AEWA), and as such have recognised the need for the biodiversity monitoring activities specified under this agreement. Kenya, Tanzania and Uganda are signatories to the Convention on Wetlands (Ramsar, 1971). Furthermore, the National Wetlands Strategy of Uganda (1995) identifies wetland monitoring, research and inventory as priorities for wetland biodiversity conservation and makes a commitment to participation in regional and international efforts to conserve wetlands.

### **How will the project assist the host country meet its obligations under the Biodiversity Convention?**

All partner countries are signatories to the CBD (year of accession in parentheses): Burundi (1997); Djibouti (1994); Eritrea (1996); Ethiopia (1994); Kenya (1994); Rwanda (1996); Sudan (1995); Tanzania (1996); and Uganda (1993). Participating countries would be assisted in meeting their obligations under the CBD by building capacity in management planning, monitoring, and the reporting and effective use of biodiversity and other data. This increased capacity will be targeted for both government and NGOs, in order to facilitate efficient and co-ordinated national reporting procedures. The evaluation of the project will also be reported to the CBD's Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), and the training manuals made freely available to them.

Six Articles within the CBD have been specifically addressed:

Article 7: (a) identify important biodiversity components; (b) monitor identified components; (c) identify activities likely to have adverse effects on biodiversity; (d) maintain & organise monitoring data.

Article 8: (a) establishment of protected areas; (b) development of guidelines for the selection, establishment and management of protected areas; (f) promotion of recovery of threatened species through development of species and habitat management plans; (k) development of necessary legislation to protect threatened species and populations.

Article 12: (a) establish & maintain programmes for scientific & technical education in measures for the identification, conservation & sustainable use of biodiversity; (b) promote & encourage research which contributes to the conservation & sustainable use of biodiversity; (c) promote & co-operate in the use of scientific advances in research in developing methods for the conservation & sustainable use of biodiversity.

Article 13: (b) Co-operate with other states and international organisations in developing educational and public awareness programmes.

Article 17: (a) facilitate exchange of information; (b) exchange information on technology, training in surveying programmes, specialised knowledge.

Article 18: (a) encourage and develop methods of co-operation for the use of technologies in pursuance of the convention's objectives; (b) promote co-operation in the training of personnel and exchange of experts.

## 12. Project: Darwin principles, advertisement and use of Darwin name/logo.

■ The host countries are rich in wetland biodiversity, between them supporting over 150 species of wetland birds alone, including internationally important populations of threatened species. Given the threats to wetlands identified, the host countries are, however, poor in resources needed for the conservation of this biodiversity. As a result of the social and economic importance of wetlands, their sustainable and wise use is fundamental to eliminating poverty within the region. The proposed project will facilitate the transference of British skills in an area of biodiversity conservation where needs have been clearly identified by host countries. A real and lasting impact will be achieved by building capacity in developing cross-sectoral site management plans, that utilise biodiversity information from a locally run monitoring scheme. The outcomes of the project will therefore directly impact on the ability of partner countries to meet their obligations under CBD. The project is highly collaborative, evidenced by the establishment of an interim steering committee and the involvement of ten organisations in nine countries within the Eastern African region. Furthermore all partners in this project are providing in-kind contributions to the project.

■ The project is innovative in that the host countries will receive a complete and ready to use database which will provide a technical foundation for the establishment of a distinctive monitoring scheme. Importantly, they will also receive training in how this can be utilised to fulfil international biodiversity related obligations from an organisation that has extensive experience and expertise in this area. The project is additional by building on existing conservation programmes within the whole region (nine countries). The project will establish a regional monitoring scheme for the entire Eastern African region, with a large number of volunteers collecting the data. It will ensure that those data already collected under the AfWC can be put to better use. It will provide hardware and software for this scheme, together with training and a curriculum, and will improve all nine host countries' ability to fulfil obligations under CBD and other conventions. It is also hoped that participation in this scheme will encourage those countries not yet signatories to the Convention on Wetlands (Ramsar Convention) and/or AEWA to sign up to these agreements. As such we believe the project offers excellent value for money. Sustainability is integrated in the programme through the training of trainers and capacity building in key sectors. Furthermore, the areas in which the project will act as a catalyst for future funding have been clearly identified, and an exit strategy proposed and discussed with our collaborative partners.

■ WWT has a proven track record of all of the elements needed for a successful Darwin project: fifty years of experience in international wetland and waterbird conservation and the implementation of management plans; forty years of experience in monitoring wetlands and the biodiversity they support; extensive practical experience of the workings of international biodiversity agreements; experience of managing large scale collaborative projects; relevant expertise needed to achieve the project aims in relation to database management and training; strong and established links with the partner countries and Wetlands International; and an awareness and understanding of potential problems and limitations associated with implementing conservation programmes in the host region.

■ In Africa, the project will be promoted through established Wetlands International Networks and publications such as the African newsletter Fadama, through the organisations of the regional African partners, and through local and regional conservation journals. The project aims to establish a discrete and badged monitoring scheme and this will have a major launch event during the three years of the Darwin Project. The Darwin Initiative logo would be used for this event and on all of the subsequent publications delivered under the monitoring scheme. Results of the project will also be reported at the 11th Pan African Ornithological Congress, and presentations of the project made at relevant wetland conservation meetings/workshops in Africa and elsewhere.

■ In the UK, the project would be advertised as a special edition of WWT's Action for Survival publications, and through WWT's magazine (sent to 90,000 members). News of the project's progress would also be produced as one of the numerous press releases that WWT makes through established media channels each year, and interpretation of the project would be established at all of our reserves and visitor centres (0.6 million visitors each year). We would also advertise the project on the websites of WWT and Wetlands International, and use our links with the Ramsar Bureau (UK Ramsar Committee) to disseminate progress of the project. In all of these, the Darwin name and logo would be prominently displayed.

### 13. Timetable, measurable outputs and output measures.

PROJECT OUTPUTS		
Year/Month	Output Number	Description
<b>YEAR 1</b>		
Apr 02	15A	Press release in each of 9 host countries.
Apr 02	15C	Press release in UK
Apr 02	17A	Establish E-mail discussion group
Apr 02	17A	Establish permanent regional steering committee
Apr 02	18A	National TV item in each of 9 host countries
Apr 02	18B	National TV item in UK
Apr 02	19A	National radio item in each of 9 host countries
Apr 02	19B	National radio item in UK
Apr 02-Mar 03	23	In-kind contributions - £28,134
May 02	5	Appointment of Darwin Project Officer (DPO)
May 02	Additional output	Memorandum of Agreement with Kenyan partner for hosting DPO
Sep 02	8	Two UK staff to attend steering committee meeting = total of 2 weeks
Feb 03	20	Delivery of computer hardware – value £20K
Feb 03	20	Delivery of computer software – value £2K
<b>YEAR 2</b>		
Apr 03-Mar 04	17B	Enhancement of AfWC volunteer network
Apr 03-Mar 04	23	In-kind contributions - £41,994
Apr 03	6A, 6B	Delivery of modular training course – Naivasha. Nine participants to attend four week training course
Apr 03	8	One UK staff to supervise training course = total of 4 weeks
Apr 03	7	Delivery of training materials. Nine modules, with student and teacher versions of each.
Apr 03	12A	Delivery of regional wetland and waterbird database
May 03	14A	Launch event for Eastern African Wetland and Waterbird Monitoring Scheme (EAWMS)
May 03	8	Two UK staff to attend launch event and steering committee meeting = total of 2 weeks
May 03	15A	Press release in each of 9 host countries.
May 03	15C	Press release in UK
May 03	18A	National TV item in each of 9 host countries
May 03	18B	National TV item in UK
May 03	19A	National radio item in each of 9 host countries
May 03	19B	National radio item in UK
Nov 03	6A, 6B	Delivery of modular training course – Khartoum. Nine participants to attend four week training course
Nov 03	8	One UK staff to supervise training course = total of 4 weeks
TBC	14B	Report given to African (wetlands) conference
<b>YEAR 3</b>		
Apr 04-Mar 05	6A, 6B	Delivery of modular training course in host countries: training by trainers. Minimum of three participants per country, covering nine weeks in total
Apr 04-Mar 05	21	First year of operation of EAWMS
Apr 04-Mar 05	23	In-kind contributions - £23,095
Jul 04-Mar 05	9	Development of nine management plans, one key site per partner country
Dec 04	8	Two UK staff to attend steering committee meeting and project evaluation workshop = total of 4 weeks
Dec 04	Additional output	Production of first annual report of EAWMS
Dec 04	15A	Press release in each of 9 host countries.
Dec 04	15C	Press release in UK
Dec 04	18A	National TV item in each of 9 host countries
Dec 04	18B	National TV item in UK
Dec 04	19A	National radio item in each of 9 host countries
Dec 04	19B	National radio item in UK
TBC	14B	Report given to African (wetlands) conference
Jan-Mar 05	Additional output	Agreements developed for continued management of regional monitoring scheme
Mar 05	Additional output	Final project reports submitted to Darwin Initiative



## Key Milestones

### YEAR 1

Apr-May 02

Construction and population of database, develop query tools.

Apr 02-Mar 03

Development of modular training course.

Apr 02-Mar 03

Development and publication of training materials.

Sep 02

Steering committee feedback and assessment meeting (in Kenya)

Jan 03

Co-ordinated gap-filling field survey

### YEAR 2

Apr 03

Transfer of Darwin Project officer to Kenya partner's office

May 03

Steering committee feedback and assessment meeting

Jan 04

Co-ordinated gap-filling field survey

### YEAR 3

Apr 04

Project officer integrated into Kenya partner staff

Apr 04

Identification of key wetland sites for each partner country

Dec 04

Steering committee feedback and assessment meeting and project evaluation workshop

Jan 05

Co-ordinated gap-filling field survey

## 14. Other individual/organisation carrying out similar work: similarities and differences.

### 1. Wetlands International (WI) African programmes.

WI has implemented a number of conservation programmes in Africa. These include capacity building in key areas and co-ordinating the annual African Waterbird Census (AfWC). About 30 sub-Saharan countries participate in this scheme every year, including countries in Eastern Africa. Data generated by the AfWC are held on a WI database in Dakar (Senegal), which is being developed for improved data application for conservation purposes. In support of the AfWC, the WI Africa office also co-ordinates a major sub-regional capacity-building programme for West Africa. The proposed Darwin project builds on these existing programmes, but is clearly different from them in the following ways:

- (a) In addition to important bird data, the scheme will also utilise site information and information non-avian biodiversity.
- (b) The establishment and regional administration of a specific and identifiable monitoring scheme will generate more efficient co-ordination and maintenance of networks of volunteer counters, and allow countries in the region to share knowledge of problems specific to Eastern African wetland and waterbird biodiversity. An identifiable and badged scheme will also improve the potential for attracting funding;
- (c) Importantly, the monitoring data will be held and utilised by countries within the region. The project will therefore build capacity within Eastern Africa by providing participating organisations with the hardware, database and associated technical expertise needed to maintain wetland biodiversity monitoring data;
- (d) The project will also build capacity by providing each country with training in relation to fully utilising their data for reporting under international agreements and for addressing biodiversity conservation issues at a variety of scales (sites, local, national, regional). Central to this will be training in identifying trends within these data, linking them to environmental changes, and methods for improving monitoring protocols.

The proposed project will address a need strongly advocated by this sub-region, which currently receives no support from Wetland International's West Africa capacity-building programme. In addition, both WWT and WI will ensure that there is an effective exchange of information and experience between these two vast sub-regions. Wetlands International is also developing a closer collaboration with the Kenya Wildlife Service Training Institute in collaboration with the RIZA Institute, geared to strengthening the capacity of KWSTI to plan and execute regional wetland management training. This initiative will complement the proposed Darwin project by ensuring this facility is available for current and future training events.

### 2. Global Environment Facility (GEF) projects.

A number of current and proposed *Biodiversity Africa* GEF funded programmes have relevance and synergy with the proposed Darwin project. These include (1) 'Conservation & sustainable use of biodiversity in the Eastern Rift Valley Lakes', which covers Ethiopia, Kenya and Tanzania. The main objectives are (a) to establish and strengthen systems of conservation areas, and (b) to promote multiple and sustainable use of Rift Valley lakes. (2) The Lake Victoria Environmental Management Programme (LVEMP) is another GEF funded project, which is involved in the following specific activities: (a) fisheries management; (b) management of lake pollution and water quality; (c) wetland management; and (d) management of land use within the catchment. (3) The Nile Basin Initiative, which *inter alia* includes action programmes in sustainable management of wetlands and biodiversity conservation. These programmes clearly do not overlap or compete with the activities of this project, and indeed would be enhanced and strengthened by utilising data from the monitoring scheme in the proposed Darwin project. (4) The African NGO-Government Partnership for Sustainable Biodiversity Action Project of BirdLife International focuses on Important Bird Areas (IBAs) in 10 African countries, including Ethiopia, Kenya and Tanzania. It includes the formation of site support groups at selected IBAs, some of which are wetlands. The local BirdLife partners will be closely involved in the proposed Darwin project, so that site data generated from the wetland IBAs will be input to the Darwin database.

### 3. RSPB Darwin new and previously funded proposal

We are aware that the RSPB are submitting a bid to the Darwin Initiative for monitoring, management and conservation action at Kenya's Important Bird Areas. A further RSPB project, to conserve globally threatened birds in Africa, was successful in the 9<sup>th</sup> round of Darwin Initiative funding. Our proposed project provides the basis for the monitoring of wetland biodiversity, whereas the new RSPB project will provide monitoring of additional terrestrial biodiversity where an IBA comprises both wetland and non-wetland components. Furthermore, our project will produce *site* management plans, rather than the species management plans resulting from the existing RSPB project. Should both our applications be successful we will continue to collaborate with RSPB to ensure that our efforts are complementary, and will combine resources if opportunities arise to make the best use of Darwin's resources.

**15. Number of trainees, countries, selection criteria, effectiveness and training of trainers.**

Training Activity	Dates	Who will participate, how many will participate and for how long?
<p><b>Training of Darwin Project Officer (DPO)</b> The DPO will receive training in the operation of the WeBS database managed by WWT, and, with other WWT staff, will develop a modular curriculum and produce appropriate training materials.</p> <p><b>Training of trainers</b> The regional training includes a module on training techniques, to ensure the effective conveyance of knowledge by the participants when they train others in their home countries (see below) Delivery of modular training course, consisting of nine modules: Sampling methodologies for wetland and waterbird monitoring Database design, set-up and management Analysing trends in wetland biodiversity Using wetland data for site designation in support of international conventions Data analysis and interpretation Waterbird population assessment Introduction to wetland management and wetland assessment Teacher training (How to set up and run a training course) Development of site management plans</p> <p><b>Training by trainers</b> Training by those trained in Year 2, to be carried out in their individual home countries. The training will be in the operation of a wetland and waterbird monitoring scheme, and the development of site management plans.</p>	<p>Jun 02-Mar 03</p> <p>Apr and Nov 03</p> <p>From Apr 04 to Mar 05</p>	<p>A national from one of the participating countries will spend 10 months based at WWT Slimbridge. They will be selected on advice from the regional steering committee, subject to interview. Criteria for selection will include: knowledge of eastern African wetlands and their conservation; computer literacy; dedication to the aim of wetland conservation in eastern Africa.</p> <p>Two participants will be selected from each participating country (total 18). These will be nominated by the National Co-ordinators of the AfWC for each participating country. Final selection will be made by the regional steering committee, based on CVs submitted. Criteria for selection will be an existing involvement in wetland conservation, and association with a national organisation (whether governmental or non-governmental) with wetland conservation responsibilities.</p> <p>Three per participating country (total 27). Trainees will be proposed by the AfWC National Co-ordinators and selected to ensure a good balance between the NGO and government sectors, and for gender.</p>

**16. Monitoring of trainee outcomes/destinations.**

Measurement of the project's effectiveness will comprise two elements. Firstly, how effective were the training modules in training trainers? This will be measured by feedback in the form of questionnaires to be completed by all trainees. Training of trainers will be monitored in the third year of the project by the East African Darwin Officer, who will oversee the training by the trainees in their home countries. Secondly, how effective was the training in improving capacity to fulfil national obligations under CBD? In the third year and beyond, WWT in collaboration with the regional steering committee and Wetlands International will continue to assess the effectiveness of the training in improving capacity to fulfil national obligations under CBD.

## 17. Exit strategy

The long-term sustainability of the proposed Darwin project has been built into the key project phases. At the end of the project, the stated purpose of the work will be sustained as a result of five key elements:

### 1. Database development and maintenance:

All partners will receive post-project technical support from both WWT and Wetlands International. This online support will provide information and help to maintain and develop their database and query tools. Additionally, free upgrades of the database software will be made available to the African partners as a result of earlier versions of programmes becoming 'freeware' as new releases become commercially available.

### 2. Monitoring scheme:

WWT's and Wetlands International's experience of running large scale monitoring schemes suggests that sustainability is considerably enhanced through four key factors. All of these will be addressed during the establishment of the new scheme, which will also benefit from the AfWC network, already established in the region. The four factors that will be addressed are:

- **Identity:** a sense of 'belonging' in the volunteer network. This includes having a specific name, logo and volunteer newsletter for the scheme.
- **Utility:** ability to use data from the scheme to underpin conservation action and develop management plans.
- **Reporting:** regular and widespread advertising of the scope, results and achievements of the scheme;
- **Data:** capacity to efficiently collate, manage, query and disseminate data from the scheme.

### 3. Training:

One of the project's key deliverables is the provision of training courses and training material. These will provide both direct capacity building in specific skills associated with the conservation of biodiversity, but also the capacity in relevant organisations to undertake continued training beyond the end of the proposed Darwin project. Importantly, Wetlands International's African Training Officer (Abdoulaye Ndiaye) is a full time trainer on the East African Wetland Management course run by the Kenyan Wildlife Service's Training Institute (KWSTI) at Naivasha. Through this established link, the deliverables from the Darwin Project will be provided as additional integrated material for this training course. Wetlands International are also co-supporting an evaluation workshop for the training course, and the outputs of this evaluation will be used by the African partners to:

- (a) tailor the proposed new monitoring scheme to the database and conservation needs of regional target groups,
- (b) provide a very cost effective way of reaching a selection of future trainees from the region, and
- (c) raise and maintain awareness of the proposed monitoring scheme in both the government agency and NGO sectors.

**4. Organisational direction and objectives:** The sustainability of the proposed project will benefit from a foundation of long-term organisational orientation and commitments by both WWT and Wetlands International. For example it builds on wetland programmes developed by Wetlands International utilising key staff and networks from existing organisations in the region. The AfWC network in Eastern Africa has existed since 1991, and has already gained a high level of acceptance by national agencies, ongoing integration into national plans and policies, and national networks of volunteers. The proposed project also dovetails with WWT's mission and conservation objectives in Africa and has received backing from WWT's Council. The African partner organisations have also committed to the long-term maintenance of the management planning, training and monitoring scheme elements of the project.

**17. Exit strategy** (continued)

**5. Funding:**

The organisational orientation described in the last section, involves a substantial commitment to continued in-kind financial contributions from the partners of the proposed project (see table below and section 20). In addition to the financial support provided by the *Darwin Initiative*, there is international action (including by the UK government) involved in identifying and supporting biodiversity conservation in Africa through its commitments under a number of international agreements. For example, regional training programmes, exchange of technical/scientific know-how, the publication of monitoring manuals, and surveys in remote areas are specific targets within the UK's Implementation Plan and the general Action Plan of the African Eurasian Waterbird Agreement (AEWA) under the Bonn Convention. Global Environment Facility (GEF) funding is currently being used to support the AEWA Action and Implementation plans, and both Wetlands International and WWT are involved in this process. Financial support will be sought from the facility to support the ongoing aims of the project deliverables.

The table below identifies the maintenance costs at the end of the proposed Darwin Project and the funding that has been committed and will be sought to meet these costs:

<b>MAINTENANCE REQUIREMENT</b>	<b>FUNDING &amp; CONTRIBUTIONS COMMITTED BY PARTNERS</b>	<b>NEW FUNDING BIDS</b>
Maintenance of database	Online support for database problems (WWT & Wetlands International). Free upgrades of database software.	New replacement computer hardware will be sought in five years time as a fund-raising activity by WWT.
General administration and reporting of new wetland monitoring scheme	Online assistance from WWT & Wetlands International. Museums of Kenya to provide office and staff for central administration of new scheme as an extension of current commitments to the AfWC. Similar commitments from other partners will also be maintained.	The regional steering committee for the project will be maintained after the end of Darwin funding, and will be used to identify additional administrative costs as the scheme progresses and develops. WWT use its fund-raising expertise to provide charitable and other funds to meet these costs.
Fieldwork and data collection for monitoring scheme	Wetlands international and the nine African partners have committed annual resources to field based data collection under the AfWC scheme, which is cost-effective through the use of a volunteer network and input from foreign birdwatchers. This setup would be used as the foundation for the new scheme.	Further field data collection needs will be identified through the site management planning process. Some of these needs can be met with the existing AfWC data collection, but additional needs will be funded through further bids to GEF as part of the AEWA Action Plan (see above), the Sophie Danforth Conservation Biology Fund, the World Nature Association fund and the Peter Scott Trust for Education & Research in Conservation.
Development and implementation of future site management plans	The nine African partners have committed to use existing resources to continue the management plan process as part of their remit. This will use the capacity developed as part of the Darwin project (supported by WWT and Wetlands International).	Where appropriate, for countries with small resource availability, additional support for the production of new management plans will be sought from the Darwin Initiative, the Wildlife Conservation Society, the Lindbergh-Morrow Foundation, and the Leverhulme Trust, with additional direct fund-raising initiatives through the work of WWT.

## MONITORING AND EVALUATION

### 18. Monitoring, evaluation, value and dissemination.

#### Monitoring & evaluation

Progress will be monitored using project management software at WWT. Project management will be co-ordinated at two levels. Firstly within WWT, project management structures already in place within the research department will be used to monitor progress during the lifetime of the project, and a specific Darwin Project Group will be established within the department to monitor three key elements: timetabled milestones, deliverables and budget flow. Second, progress of the project deliverables and objectives within the host countries will be monitored and evaluated through the regional steering committee. A clear exit strategy has been put in place to ensure the sustainability of the deliverables, and the logical framework (next page) identifies the measurable indicators and means of verification for the range of deliverables and objectives.

#### Value for money

This project will provide excellent value for money in that it provides training and increased capacity for nine organisations, it will lead to the establishment of a monitoring scheme, and its outcome will be to enhance the conservation of biodiversity over a large geographical area. The project also benefits from considerable in-kind contributions from WWT, Wetlands International, all partner organisations, and the provision of free training facilities at Khartoum, representing 35% of total costs.

#### Dissemination

The dissemination of information and knowledge is one of the functions of the CBD's *Clearing House Mechanism* (CHM), currently being developed through the worldwide web. This will be used to publicise and make material available information, skills and knowledge provided by this project. A second CHM website developed by the European Commission to achieve similar ends for biodiversity information and skills, will also be used.

Dissemination of information and data are central activities for WWT and all of the partner organisations. Within the partnership there is considerable expertise and existing structures to facilitate this element of the project. Project results will be disseminated through the following media: the monitoring scheme's annual report, volunteer network newsletters, WWT and WI websites, WWT and WI publications, e-mail discussion groups, presentations at conferences, press releases, TV and radio items. In the UK, the project would be advertised as a special edition of WWT's *Action for Survival* publications, and through WWT's magazine (sent to 90,000 members). News of the project's progress would also be produced as one of the numerous press releases that WWT makes through established media channels each year, and interpretation of the project would be established at all of our reserves and visitor centres (0.6 million visitors each year). We would also advertise the project on the websites of WWT and Wetlands International, and use our links with the Ramsar Bureau (UK Ramsar Committee) to disseminate progress, outcomes and evaluation. The project will be also advertised and disseminated advertised through the following groups and facilities with which WWT has close contact:

- *Subsidiary Body for Scientific Technical & Technological Advice* (SBSTTA) of the CBD.
- Wetland Link International (co-ordinated by WWT).
- The Council of Europe's Centre Naturopa.
- The World Conservation Monitoring Centre.
- Global Biodiversity Information Facility.

## Logical framework.

Project summary	Measurable indicators	Means of verification	Important assumptions
<p><b>Goal</b> To assist countries rich in biodiversity but poor in resources with the conservation of biological diversity and implementation of the Biodiversity Convention</p>		National reports to CBD and related conventions (Ramsar, AEWA)	Participant countries are signatories to CBD
<p><b>Purpose</b> To build and maintain capacity in the monitoring of wetland and waterbird biodiversity in Eastern Africa, to provide information for the development of site management plans.</p>	Establishment of the Eastern African Wetland and Waterbird Monitoring Scheme (EAWMS); trained personnel, site management plans	Launch of EAMWS (year 2); trainee questionnaires; steering committee feedback and project evaluation workshop; management plans lodged with management authority	Eastern African regional countries identify this as a priority need and have the human resources and desire to manage the scheme
<p><b>Outputs</b></p> <p>Regional steering committee</p> <p>Modular curriculum and related training materials</p> <p>Personnel trained to train others in home countries</p> <p>Personnel trained in database management and data use</p> <p>Database to organise and analyse wetlands monitoring data for the region</p> <p>East African Waterbird and Wetland Monitoring Scheme</p> <p>Management plans for one key site per participating country</p>	<p>Steering committee meetings</p> <p>Execution of training programme in the region</p> <p>Two trained personnel in appropriate institutions in each country (end of year 2)</p> <p>Two trained personnel in appropriate institutions in each country (end of year 2)</p> <p>Fully operative database in place by the end of year 2</p> <p>Scheme up and running</p> <p>Management plans completed</p>	<p>Steering committee minutes</p> <p>Training materials. Steering committee reports</p> <p>Steering committee feedback and project evaluation workshop</p> <p>Steering committee feedback and project evaluation workshop</p> <p>Steering committee feedback and project evaluation workshop</p> <p>Launch event, annual report</p> <p>Management plans lodged with relevant management authority</p>	<p>Sufficient members</p> <p>Training materials and trainers available. Demand.</p> <p>Sufficient personnel available</p> <p>Sufficient personnel available</p> <p>Computing facilities and trained staff available</p> <p>Data, National Co-ordinators and volunteers available</p> <p>Data to assess management needs. Staff trained in management planning process</p>
<p><b>Activities</b></p> <p>Recruit Project Officer</p> <p>Establish regional steering committee to integrate and co-ordinate training issues</p> <p>Develop a modular curriculum of wetland monitoring courses</p> <p>Produce material for the above courses for both trainers and trainees</p> <p>Deliver the training curriculum for identified trainees</p> <p>Train appropriate staff to deliver the curriculum after the end of the Darwin project</p> <p>Deliver a ready-to-use monitoring database with technical training</p> <p>Training in the multiple uses of the monitoring database in host countries</p> <p>Develop management plans for a key site in each participating country</p>	<p>Inputs: Advertising, interviewing</p> <p>Annual meetings of steering committee in the region</p> <p>Appointment and training of Darwin Project Officer</p> <p>Production of training materials for all modules</p> <p>Regional training courses</p> <p>Provision of training, hiring of training centre</p> <p>Provision of computers and software, training, hiring of training centre</p> <p>Provision of training, hiring of training centre</p> <p>Establish management boards, write management plans</p>	<p>Project Officer appointed</p> <p>Steering committee feedback and evaluation workshop</p> <p>Training materials produced, steering committee feedback</p> <p>Training materials given to National Co-ordinators; steering committee feedback</p> <p>Standard trainee questionnaire, reported to steering committee</p> <p>Standard trainee questionnaire. Steering committee feedback</p> <p>Publications produced using reporting protocols</p> <p>Standard trainee questionnaire. Steering committee feedback</p> <p>Plans lodged with management authorities</p>	<p>Candidates available</p> <p>Sufficient candidates for steering committee; able to meet on a regular basis</p> <p>Capacity to develop curriculum</p> <p>Curriculum completed</p> <p>Trainers available to deliver curriculum. Sufficient staff to receive training</p> <p>Sufficient staff to receive training</p> <p>Computing facilities provided</p> <p>Appropriate staff available</p> <p>Data for assessing needs, staff trained in management planning</p>