Capacity Building Fellowships in Southern Africa





DARWIN INITIATIVE FINAL REPORT 26/6/00 Project reference number 162/06/101

1 Basic Project Details

1.1 Project Title: Capacity Building Fellowships in Southern Africa

1.2 Contractor: Earthwatch Europe - Dr Robert Barrington

1.3 Host country collaborating institutes :

Earthwatch Darwin Partner organisations:

- 1. Ministry of Environment and Tourism, Namibia
- 2. National Botanical Research Institute, Namibia
- 3. Polytechnic of Namibia
- 4. University of Zambia
- 5. Zambia Wildlife Authority
- 6. The National Herbarium, Malawi
- 7. University of Malawi
- 8. Department of National Parks and Wildlife, Malawi

1.4 Grant Round: 5

1.5 Grant Value: £119,839

2 Project Expenditure

2.1 Total grant expenditure: £119,839

2.2 Breakdown of expenditure:

Staff costs
Rent, rates, etc.
Postage, telephone etc.
Travel and subsistence
Printing
Conferences etc.
Others (International Support Services)

Total

£119,839

2.3 Variations

See previous quarterly reports.

3 Project Background/Rationale

3.1 Why was the project needed?

The project was designed to meet the training needs identified by local partners among Southern African conservation organisations, by offering Earthwatch Darwin Fellowships. Training through Fellowships has also been identified as a need by Earthwatch in consultation with local organisations and international NGOs, in addition to article 12 of the Convention of Biological Diversity. The Fellowships aim to increase the scientific capability of selected individuals, as well as to strengthen the capacity and enhance the profile of partner organisations in Malawi, Namibia and Zambia.

3.2 Project Development

The project was developed with the backing of three Southern African organisations with plans to establish the additional partnerships (listed above) in Namibia, Malawi and Zambia. The model had been trialled with two former Darwin Initiative grants in different regions, which had established the required profile for local partner organisations and potential Fellows. In addition, due to an EU grant, Earthwatch had assessed suitable field projects for training placements.

3.3 Conservation priorities in the host country

A specific need for individual training in field research, as well as strengthened capacity within natural resource management and research organisations, has been identified in southern African countries (for example by the Namibian National Biodiversity Programme). Training in field research is also cited as an international and regional priority by the PARCS report.

3.4 Obligations under the Biodiversity Convention

The project was designed to assist the host countries to meet their obligations under article 12 of the Convention of Biological Diversity (CBD):

"The contracting parties, taking into account the special needs of developing countries, shall establish and maintain programmes for scientific and technical education and training in measures for the identification, conservation and sustainable use of biological diversity and its components and provide support for such education and training for the specific needs of developing countries."

3.5 End-user

The project was designed to enable the eight partner organisations in three southern African countries to offer Fellowships to national conservationists and to promote collaboration between these organisations.

4 Project Objectives

4.1 Objectives

The project objectives were:

1. To strengthen the capacity of conservation institutions in southern Africa – principally Namibia, Zambia and Malawi – through creating an easily-accessible, locally-administered award programme designed to meet the specifically identified need for training in field research.

2. To work closely with the local partners in the selection and follow-up of Fellows and to integrate such field placements within the partners' existing programmes so as to obtain the maximum institutional benefit.

3. To establish a collaborative network of conservation professionals in southern Africa.

4. To award two-week field placements (Fellowships) on British-led biodiversity field research projects supported by Earthwatch (N.B. occasionally projects may be led by Commonwealth developing country nationals with British support).

5. To train southern African scientists, park staff and other conservation professionals in current concepts and techniques in conservation and field research which are relevant to the maintenance of biodiversity.

6. For young scientists: to give the skills and confidence to engage in their own research programmes.

7. For park staff: to bridge the skills gap needed to enable them to understand and participate in data collection and processing

8. To put each Fellow through a professional development programme covering the methodologies and techniques of field research such as taxonomy, emphasising the close links between biodiversity research, conservation and management.

4.2 Were the project objectives revised?

No.

4.3 Have the objectives been achieved?

All the objectives have been achieved or exceeded.

4.4 How have the objectives been achieved?

- 1. The capacity of eight partner organisations in Namibia, Malawi and Zambia has been strengthened through:
- their nomination and administration of a total of 54 Fellowships
- their contact with Fellows from the other partner organisations as well as the partner organisations themselves

- these partner organisations remain Earthwatch partners
- 2. Relationships were established between Earthwatch and eight partner organisations by:
- in-country briefing visits
- working closely with each partner in the selection and follow-up of Fellows over the three year period
- these relationships are ongoing
- 3. Development of the Earthwatch African Fellowship Alumni Association has established a collaborative network of conservation professionals in southern African countries.
- Fifty-four Fellowships were awarded over three years on five British (or Commonwealth) led biodiversity field research projects supported by Earthwatch. This represents 20% more (nine Fellowships) than the projected 45 and was due to cost savings on 'Printing' and 'Other' budget lines.
- 5. Through two-week field placements 54 southern African conservation professionals, including scientists and park staff, have received training in current concepts and techniques of conservation and field research relevant to biodiversity management.
- 6. Thirty-four young scientists received Fellowship training to enhance their skills and confidence to engage in their own research programmes.
- 7. Twenty park staff received Fellowship training to bridge the skills gap needed to enable them to understand and participate in data collection and processing

8. Each of 54 Fellows received a full briefing prior to two weeks field training in methods, techniques and issues of research, conservation and management. Briefings gave full details of the project: project focus, background information on scientific leader/team, daily schedule, the Fellow's role within the team, health and safety on the project, rendezvous information and supplementary information such as research papers, background information on the country in which the project is held. Briefings also gave full details of the Earthwatch Fellowship Programme: background information, what is provided for Fellows and what is required of Fellows.

5 Project Outputs

5.1 What output targets were specified?

1997/1998

7	Two types of training material produced for use by host country
15C	National press release in UK
6A/B	15 students trained over three weeks in biodiversity studies
16A/B	Network material circulated to 250 relevant people
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16A/B	Network material circulated to 250 relevant people
17	Creation of a regional network
23	£19,900 of other funding attracted

5.2 Have these been achieved?

All output targets were met, apart from 15C. In years two and three, Earthwatch did not produce a press release, but instead advertised the programme when strategic opportunities arose. The Darwin Initiative logo appeared again with a description of the Fellowship Programme in the Earthwatch Annual Report (circulation 12,000) and also in advertisements in 'Developments' magazine.

Output 6A/B has been exceeded by 20%. Cost savings allowed nine extra Fellowship places to be awarded.

Output 16A/B has been exceeded in that 650 copies of a newsletter were printed and distributed to a pan-African conservation network, which by early 2000 had grown to over 500 conservationists.

5.3 Additional outputs

5.3.1 Generating additional grants for African field researchers

Henry Mwima, Acting Director of Operations and Research (while the National Parks and Wildlife Department becomes Zambian Wildlife Authority), was initially the contact person in a partner organisation nominating and administrateing Fellows. The close working relationship developed through the Darwin-funded Fellowships has led to the development of Henry Mwima's research project. This project has now been supported by Earthwatch funding and volunteers for the past two years, in addition to on-going African Fellowship teams (including Fellows from Namibia and Malawi).

5.3.2 Linking local NGOs

The Earthwatch Darwin Fellowships have promoted links between organisations, for example: 'the programme has provided the opportunity for collaboration between the Department of Biological Sciences of the University of Zambia and our institution (Zambia Wildlife Authority).' Henry Mwima, Zambia Wildlife Authority.

This partnership is in the form of a student exchange programme between with University and Kafue National Park and many less formal links have also been developed.

6 Project Operation/Management

Eight partner organisations were approached, visited, briefed and invited to become a partner in the Earthwatch Darwin Fellowship programme. Being a partner organisation involves nominating and administrating suitable candidates for the Fellowship places. In line with Earthwatch policy of local management allowing adaptation to meet local need, each partner organisation approaches its Fellowship selection in a slightly different manner. For example, some partner organisations take students on their own courses, some partners collaborate with other partners and some consult relevant non-partner organisations. Earthwatch also reviewed each nomination.

The Earthwatch projects (all fully peer-reviewed) which were used for Earthwatch Darwin Fellowships were:

1. Black Rhino, Zimbabwe: Behavioural and ecological data collection on black rhino in Zimbabwe's Sinamatella Intensive Protection Zone, led by Dr Sky

Alibhai of the University of London. Working with national park staff in Hwange, Fellows take part in gathering data on distribution and range of the black rhino, undertaking tasks such as observation of rhino behaviour, photography and use of GPS/navigation and data compilation.

2. Monitoring South African Wildlife: Census of large herbivores in South Africa's Hluhluwe-Umfolozi National Park, led by Natal Parks Board staff. A biannual census of 20 large herbivore species using line transect sampling. Fellows observe herds of the target species and record the observation angle, observation distance, species and size of herd. The information is then analysed using DISTANCE software to give a density estimate for each species in the park.

3. Old World Songbirds: Long term study of migrant passerine population trends in Tsavo West National Park, Kenya, led by Dr Leon Bennun, National Museums of Kenya and Dr Gabor Lovei, Danish Institute of Agricultural Sciences. Fellows erect mist nets, identify and ring birds, record body measurements (wing morphology, fat level variation, health state assessment, changes in body mass, length of stay and fat accumulation rates for major species), assist in blood sampling and enter all subsequent data on to a computer. The project aims to build a migratory bird database on population levels for monitoring purposes. Supplementary lectures cover all aspects of the research project.

4. Rare Plants of Kenya: Botanical survey in Kenya's Taita Hills, led by botanists from the National Museums of Kenya, aiming to obtain botanical information in the foothills of the Taita Hills, and information on the use of the flora by local communities. Orientation lectures and demonstrations at the East African Herbarium precede the field work, which includes spotting material, recording data, collecting, tagging and pressing and preparing specimens.

5. Zambia's Park Survey: Analysis of the vegetation and landscape of Kafue National Park (KNP), Zambia. In order to answer the questions: how much and

how fast has the habitat been changing in Zambia's oldest and largest national park? and what is the significance of this change? and what are the management implications, the project aims to prepare a vegetation and landscape map of KNP, quantifying habitat distribution and abundance and to build a GIS.

Issues or difficulties

- Maintaining constant communication between Earthwatch and African partner organisations.
- Cost variations between partner organisations. For example, to send a fax may be free to some partners and cost others £12.
- Bureaucracy of quarterly reporting to Darwin Initiative.
- It is Earthwatch's experience, after three Darwin Initiative grants, that a British NGO facilitating local transfers of expertise can be as valuable as transfers of British expertise and this may need reflection in the Darwin Initiative grant guidelines.

7 Project Impact

7.1 Methods

The Earthwatch Darwin Fellowships allowed 54 conservationists to expand and deepen their understanding of the methods, techniques and issues of scientific research in the management of biodiversity. The training involved direct and intensive involvement in ongoing field research projects, all of which focus on applied research. This applied nature of Earthwatch Darwin Fellowship projects made them directly relevant for increasing Fellow's capacity to undertake their own responsibilities in their roles in biodiversity research or management.

To assess the project impact a questionnaire was sent to the eight partner organisations. The questionnaire asked each recipient to complete 10 questions, grading them from 1 (strongly disagree) to 5 (strongly agree). The results are reported below.

7.2 Quantitative Results

7.2.1 Obligations under the Biodiversity Convention

100% of partners agree (four strongly) that through this project Fellows have gained experience or learnt skills useful for biodiversity conservation in Malawi, Zambia and Namibia.

Seven of the eight partners agree or strongly agree that the Earthwatch Darwin Fellowships have assisted conservation professionals to address conservation priorities in Malawi, Zambia and Namibia. One Namibian partner, the Ministry of Environment and Tourism did not agree.

7.2.2 Extent to which training has improved capacity

100% of partners agree or strongly agree that, for young scientists, the Fellowship has increased and encouraged skills and confidence in research work and, for park staff, the Fellowship has increased and encouraged understanding of and ability to participate in data collection.

100% of partners also agree (six of them strongly) that Fellows benefited from meeting conservation professionals from other African countries.

7.2.3 Extent to which training has addressed real skill needs

100% of partners agree (of which 88% strongly agree) that Fellows have been able to use the experience and skills gained on their Fellowship in their professional lives.

100% of partners strongly agree that Fellows benefited from the exposure to, or experience of, other African countries.

100% of partners agree or strongly agree that their organisation has or will benefit from the skills and experience gained by Fellows.

7.2.4 What is each student/trainee now doing?

See Annex 1.

7.2.5 Extent to which skills are being used in a positive way to promote biodiversity conservation

100% of partners agree (six strongly) that Fellows will continue to benefit from being part of a network of African conservation professionals, (receiving newsletters, contact lists and other information from Earthwatch).

100% of partners agree (five strongly) that conservation and research organisations in Namibia, Malawi and Zambia would benefit from more of their professionals receiving Earthwatch Fellowships.

7.3 Qualitative Results

7.3.1 Obligations under the Biodiversity Convention

'Fellows have gained a better understanding of conservation problems in Malawi and elsewhere.' University of Malawi.

'The sphere of your thoughts and the understanding of environmental problems are broadened on such a Fellowship and with this gained experience as background, it is easier to face environmental challenges.' National Botanical Research Institute, Namibia

7.3.2 Extent to which training has improved capacity

'Staff share the skills and knowledge gained through various expeditions and apply these during their work.' National Herbarium of Malawi.

'Fellows have gained confidence to undertake related field work with minimum supervision.' Zambia Wildlife Authority

7.3.3 Extent to which training has addressed real skill needs

'All the projects our Fellows have participated in have been very applied in nature making it easy for the Fellows to immediately put to use the experiences and skills gained.' Zambia Wildlife Authority.

'Fellows have learnt modern research techniques and the use of modern research equipment. They will be able to collect data using modern techniques. This way, they will be using techniques everybody is using. They will plan their activities based on these.' Department of National Parks and Wildlife, Malawi.

7.3.4 What is each student/trainee now doing?

See Annex 1

7.3.5 Extent to which skills are being used in a positive way to promote biodiversity conservation

The University of Malawi has noticed 'intensification of conservation efforts by Fellows.'

'[Fellows] have shared their experiences with their colleagues.' Zambia Wildlife Authority

'Earthwatch [African Fellowship] Newsletter keeps Fellows informed about various activities that are going on around the world which deepens one's understanding about how to handle biodiversity issues.' National Herbarium of Malawi.

7.4 Wider impacts

As mentioned above, one Zambian partner has become a project leader. Henry Mwima was also funded by Earthwatch (from other sources) to give a lecture at the Royal Geographical Society to Earthwatch members and members of the general public.

As a result of the Fellowships 'most [Fellows] have sought advice in the preparation of study/research proposals'. Zambia Wildlife Authority.

The Polytechnic of Namibia has developed 'closer working relationships with other organisations in Namibia through having collaborated in the selection of Fellows'.

'To work with other scientists on international programmes was of huge benefit and [although] the inputs from each Fellow was small, the experience gained is immeasurable'. National Botanical Research Institute, Namibia. 'Our Fellows are still very much in touch with other African Fellows from other countries.' University of Zambia.

Further funding has been obtained from three donors, which has allowed the programme to continue.

8. Sustainability

8.1 Host country contribution

All eight of the partner organisations contributed their time and effort in nominating and administrating Fellowships.

8.2 Was the Darwin project a catalyst?

Further funding has been obtained from Rhodes Trust and two major multinational corporate donors. This has allowed the Fellowship Programme to continue. Without Darwin funding it is considerably less likely these donations would have been secured since Darwin Initiative funding is an endorsement of project and institutional management capability.

8.3 Continuation in future

All partnerships are ongoing. Already seven partner organisations have taken up 10 Fellowship places awarded to them this year through other sources of funding.

8.4 Will the project be a catalyst for other project / initiatives

Yes. The great value of this for Earthwatch was that it enabled us to spread our training model to new countries and partners in Africa. This has proved transferable and so Earthwatch will consider using it in Latin America, Asia and Eastern Europe to address similar issues.

9 Outcomes in the Absence of Darwin funding

Without Darwin funding this project would not have proceeded.

10 Key Points

10.1 Key success factors

The programme has:

- Provided 54 Fellowships through eight partner organisations
- Exceeded the number of projected Fellowships by 20%
- Enhanced the profile and capacity of eight partner organisations
- Enhanced the capacity of 54 conservationists from three southern African countries
- Established partnerships between the eight partner organisations as well as between each partner and Earthwatch
- Established an on-going network of southern African conservation professionals

10.2 Main problems

The main difficulty was encountered with personnel changes in key positions in partner organisations. This meant communication was briefly interrupted, but had no overall effect on the programme.

10.3 Key Lessons

• Regular face to face project management meetings between Earthwatch and local partners cannot be replaced by other means of communication

- Local nomination and administration of Fellowships results in the most worthwhile allocation of awards
- Local nomination and administration also gives a degree of ownership resulting in tighter links between and among Earthwatch and the partner organisations

The experience of this project does not imply a need to review arrangements for developing and managing projects funded by the Darwin Initiative.

11 Project Contacts

11.1 UK Project Leaders

Julian Laird Earthwatch 57 Woodstock Road Oxford OX2 6HJ Dr Robert Barrington Earthwatch 57 Woodstock Road Oxford OX2 6HJ

11.2 Host-country project leaders / End users

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Gillian Maggs-Kolling (on maternity leave) National Botanical Research Institute Private Bag 13184 Windhoek Namibia Willem Jankowitz Polytechnic of Namibia School of Natural Resource Management & Tourism Private Bag 13388 Windhoek Namibia

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Humphrey Nzima/Roy Bhima Department of National Parks and Wildlife PO Box 30131 Lilongwe 3 Malawi

11.3 Project trainees/students

See Appendix 1

Please also see African Fellowship Programme Newsletter, sample briefing document cover and Earthwatch Annual Report (see page 7).

Appendix 1

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2. Mr Ole Friede Game Capture Ministry of Environment and Tourism PO Box 24119 Windhoek Namibia

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