DARWIN INITIATIVE PROJECT SCHEDULE ref: 162/08/144

Organisation name : Royal Holloway and Bedford New College

Name of project : River invertebrate biodiversity and water quality in the Dominican Republic

Project purpose : To use simple sampling and chromosomal taxonomy techniques to produce an inventory and key for lotic invertebrates in the Dominican Republic and to use the information on invertebrate distributions to monitor the quality of Dominican streams and rivers.

Project objectives : to provide an inventory of freshwater benthic invertebrate species in DR so that the level of biodiversity and endemism can be determined; to produce a key to these invertebrates suitable for use by local water pollution biologists; to use an artificial intelligence model to classify and identify the major anthropogenic sources of impact in DR rivers and aid local environmental regulators in producing catchment management plans for preventing further deterioration; to train local workers in DR and other Caribbean countries in practical techniques for monitoring and protecting rivers.

Length of project : September 1999 for two years

Total project cost : £162794

Darwin funding profile : 1999/2000 £28,331; 2000/2001 £43,307; 2001/2002 £23,960

Other sources of funding : £ contributed by Royal Holloway, CIBIMA and DIRENA covering staff time (£55396), accommodation costs (£4800), bench space (£6000), chemical analyses and consumables (£1000).

Expenditure profile : see Table A

Target outputs : see Table B

Implementation timetable with milestones : see Table C

Key staff inputs : see Table D

Reporting requirements :

31 October 1999	First report (1.9.1999 to 30.9.1999)
30 April 2000	Annual report (1.9.1999 to 31.3.2000)
31 October 2000	Six month report (1.4.2000 to 30.9.2000)
30 April 2001	Annual report (1.4.2000 to 31.3.2001)
31 October 2001	Six month report (1.4.2001 to 30.9.2001)
31 December 2001	Final report.

Arrangements for monitoring trainee outcomes : Trainees attending the workshop at the end of the project will be monitored on the final day of the workshop by questionnaire. A follow-up questionnaire one year later will gauge the extent to which the project has been taken up in different Caribbean countries. Research technician and local scientist training will be monitored by interview during visits by the British researchers.

Table A

PROJECT COST

Total Darwin Grant : £95,598

Annual Darwin Grant

- 1999/2000 £28,331
- 2000/2001 £43,307
- 2001/2002 £23,960

DARWIN GRANT : EXPENDITURE DETAILS

Expenditure details	**1999/2000**	**2000/01**	**2001/02**	**Total**
Rents, rates, heating, lighting, cleaning				
Postage, telephone, stationery				
Travel, subsistence				
Printing				
Conferences, seminars				
Capital items :Field vehicle PC & software				
Other:				
Salaries				

Table B

PROJECT OUTPUTS		
Year	**Output ref. no.**	**Details**
1999/2000		
Sept 1999	6A	Training of local scientist & research technician
Sept 1999	6B	Two training weeks for above
2000/2001		
April 2000	14B	Oral presentation at 1 local meeting.
Aug 2000	11B	One paper submitted to peer-reviewed journal.
April 2000	15A	Local press release.
Feb 2001	14B	Oral presentation at 1 local meeting.
2001/2002		
Aug 2001	5	Research technician completes two years of training in sampling, identifying, determining species differences and construction of a predictive model.
June 2001	13A	One reference collection set up.
Aug 2001	20	Vehicle and other equipment handed over. Value after depreciation ~ £1500.
July 2001	10	Publication of key to river invertebrates.
July 2001	7	Production and distribution of video describing techniques.
June 2001	9	Catchment management plans produced for 16 principal catchments.
Aug 2001	6A	Training workshop for up to 25 local scientists.
Aug 2001	6B	Three training days for above.
Aug 2001	14A	Oral presentations on project outputs at 3-day training workshop.
Nov 2001	14B	Oral presentation at 1 international meeting.
April 2001	11B	Two papers submitted to peer-reviewed journals.
May 2001	12A	Computer database of invertebrates made available to host country via RHUL website.
May 2001	15C	UK press release.
July 2001	18A	Local TV news item.
July 2001	19A	Local radio news item.

Table C

PROJECT IMPLEMENTATION TIMETABLE	
Date	**Key milestones**
1999/2000	
September 1999	Research technician starts work.
September 1999	Fieldwork starts in the Northern and Central provinces
September 1999	4 British experts each spend 4 weeks in the DR giving training
October 1999	Mr Stephen stays in DR to manage the project
January 2000	Predictive model constructed
September 1999	Identification of invertebrates starts
2000/2001	
July 2000	Fieldwork completed in the Northern and Central provinces
April 2000	Audit visit lasting two weeks takes place
August 2000	Morphological keys drawn up for all new species
September 2000	Fieldwork extended to rivers impacted by human activity
September 2000	Dr Crane visits for 2 weeks to monitor work
January 2000	Predictive model tested and refined
2001/2002	
March 2001	Final analysis of data starts
June 2001	Catchment management plans for 16 areas produced
June 2001	River macroinvertebrate key produced
July 2001	Training of personnel takes place
July 2001	Training workshop takes place
August 2001	Mr Stephen completes his management of the project in DR

Table D

KEY STAFF INPUTS

Name	**Grade/Position**
	Project director Project coordinator Scientific advisor Scientific advisor Scientific advisor Research technician [is it possible to give his/her name yet: not yet - we should be appointing in August] Scientific advisor Scientific advisor Scientific advisor Political advisor

STAFF TIME ALLOCATIONS (% of time spent on this work)

Name	**1999/2000**	**2000/2001**	**2001/2002**
Mark Crane	10	15	15
Ian Stephen	100	100	100
Robert Angus	10	15	5
Bill Whalley	10	10	5
Albania Grosso	5	10	10
	100	100	100
Gladis Rosado	10	10	15
Venecia Alvarez	10	10	10
Jose Terrero	10	10	10
Emperatriz Garcia	5	5	10