

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

Please read the accompanying Guidance Note before completing this form. Give a full answer to each section; applications will be considered on the basis of information submitted on this form. Applicants are asked not to use the form supplied to cross-refer to information in separate documents except where this is invited on the form. The space provided indicates the level of detail required but you may provide additional information on a separate sheet if necessary. Copies of this form are available on disk or by e-mail on request. You are asked also to complete the summary sheet. Although you may reproduce this sheet in a reasonable font, you should not expand it beyond an A4 sheet (leaving the allocated space for DEFRA comments to be made) as additional information will not be taken into account.

## 1. Name and address of organisation

**International Centre for Island Technology, Heriot-Watt University, The Old Academy, Stromness, Orkney Islands, Scotland, KW16 3AW**

## 2. Principals in project

Details	Project leader	Other UK personnel (if working more than 50% of their time on project)	Main project partner or co-ordinator in host country
<b>Surname</b>	Side	Hartnoll	Mow
<b>Forename(s)</b>	Jonathan	Richard	June Marie
<b>Post held</b>	Professor of Sustainability, Director ICIT	Senior Fellow	Director, CORALINA
<b>Institution (if different to above)</b>		Port Erin Marine Laboratory, University of Liverpool	CORALINA
<b>Department</b>			
<b>Telephone</b>			
<b>Fax</b>			
<b>Email</b>			

Please provide a one page CV for each of these named individuals.

## 3. Project title (not exceeding 10 words)

**Sustainable Management of the Black Land Crab (*Gecarcinus ruricola*), Colombia**

## 4. Abstract of study (in no more than 750 characters)

The Black Land Crab, *G. ruricola*, is overexploited, yet understudied in the Caribbean, particularly in San Andres, Colombia where it is a symbol of cultural identity as well as a major source of protein and economic subsistence. This project aims to conserve, recover and ensure sustainable use of this species, involving local community participation.

The project will collate biological/socio-economic information; train community members and CORALINA personnel in community based resource management; develop an economic feasibility study and action plan for terraculture of the species; produce a management plan for sustainable use; and enact necessary regulations.

The project will act as a regional model for management of the species.

**5. Timing. Give the proposed starting date and duration of the project.**

April 2002 for 3 years

**6. Describe briefly the aims, activities and achievements of your organisation. (Please note that this should describe your unit, institute or department within a university.)**

**Aims**

Established in 1989, ICIT has as its remit the development of research, teaching and professional practice relevant to the sustainable economic development of islands and peripheral maritime areas. It is based at the Orkney Campus of Heriot-Watt University.

**Activities**

Teaching of 3 MSc Courses (Marine Resource Management; Environmental Economics, Policy and Risk; Marine Resource Development and Protection) and 1 BSc Course (Sustainable Development and Environmental Management)

Scientific and Professional Diving Services and Training

Fisheries Management and Research

Coastal Zone Management and Marine Resource Valuation

Biotechnology and Bioresource Development

Conflict Resolution in Coastal and Marine Estates

Ecological Risk Assessment Methodology, Environmental Impact Assessment, Environmental Economics

**Achievements**

MSc Marine Resource Management accreditation by the Royal Institution of Chartered Surveyors (RICS); Postgraduate courses first to be offered in the Highlands and Islands of Scotland; First UK academic organisation to be recognised by the HSE for training of scientific and professional divers; BT University Development Award (effectiveness of videoconferencing in highly interactive teaching environments); 5 successful PhD students (6 ongoing) and throughput of 461 MSc students since 1989; 18 research contracts (total value, including partners, of £4,373,500) over 10 years, funding organisations including the European Union, oil and gas companies and related organisations, local councils, HMIPI, British Telecom, Scottish Natural Heritage, Darwin Initiative, and Health and Safety Executive. Interdisciplinary approach to research; Local community involvement (e.g. Orkney Science Festival, Local Biodiversity Action Plan Steering Group); Expert witness provision (Eurotunnel and Piper Alpha disaster).

**7. Has your organisation received funding under the Initiative before? If so, please give details.**

Yes. The taxonomy, life history and conservation of Malaysian holothurians. 1996-1999. (4th Round, 162/5/156)

**8. Which overseas institutions, if any, will be involved in the project? Please explain the responsibilities of these institutions.**

The Colombian government natural resource management agency CORALINA (Corporation for the Sustainable Development of the Archipelago of San Andres, Old Providence and Santa Catalina) is the principal overseas institution. CORALINA is one of seven Colombian regional sustainable development corporations with a mandate that combines responsibilities of conservation, planning, management and education. CORALINA's mission is to manage, protect and recover the Archipelago's environment by using appropriate technologies for renewable resource use and by promoting sustainable human development in consultation with the community, in order to improve quality of life through participation and agreement. Functions include planning and zoning, native community participation in sustainable resource management, promoting equitable benefits distribution, enacting environmental regulations and developing research projects with internal and external collaborative links. The agency has 33 permanent staff. CORALINA will be responsible for carrying out research jointly with ICIT, developing the management plan, enacting subsequent regulations, initiating a monitoring programme, producing educational materials, and carrying out stakeholder meetings. This agency will provide or contract project personnel including 2 marine biologists, an education specialist, an economist, 2 technicians (one with GIS specialisation), and a community promoter; 4 of whom will receive salary support from the project. CONTINUED ON SEPARATE SHEET.

## PROJECT DETAILS

### 9. Define the purpose (main objective) of the project in line with the logical framework.

The general objective of the project is to conserve, recover and ensure future sustainable exploitation of the black land crab by developing management initiatives and education tools in the San Andres Archipelago, providing a model for sustainable management of this resource for the Caribbean. Specific objectives occur in 4 key work areas: 1) Information gathering. The information base on *G.ruricola* will be improved, under the direction of the UK's leading land crab expert, by carrying out the biological and socio-economic research needed for management planning and to determine the validity of terraculture, including strengthening information management systems and developing an experimental terraculture site, if viable; 2) Management planning. A management plan to conserve and recover *G. ruricola* will be completed along with a socio-economic analysis that includes the feasibility of terraculture; 3) Implementation. Initiatives defined in the management plan will be put into place including strengthening of the policy and regulatory framework, initiation of a monitoring program for species conservation and recovery, establishment of a Black Crab Conservation Unit, and design of a model terraculture project, if proved viable; and 4) Training and education. CORALINA personnel/local community groups will be trained in resource management techniques, with the development of a public awareness campaign based on the habits, needs, and sustainable management of *G. ruricola*.

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

This is a new project.

### 11. What is the evidence for a demand or need for the work? How is the project related to conservation priorities in the host country(ies)? How would the project assist the host country with its obligations under the Biodiversity Convention?

#### How was the work identified?

In 1999 at a series of community meetings in the western Caribbean Archipelago of San Andres, Old Providence, and Santa Catalina (Colombia), participants were asked to rank 15 coastal and marine resources according to value. Over 60% ranked the black land crab (*G. ruricola*) first, over 90% placing it in the top five. Although these crabs are a major local food source, a figure in folklore, and a symbol of cultural identity (San Andres natives are known as 'black crabs', and sociologists have coined the term "crab antics" to define West Indian cultural behaviours), this ranking was not anticipated.

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

National environmental priorities in Colombia include developing management plans for sustainable exploitation of renewable resources, evaluating economic potential to ensure equitable use, legislative and institutional strengthening, technology transfer, and community training and participation. Emphasis is placed on developing programs that allow for community involvement in environmental conservation and sustainable resource management planning. Additionally, the National Constitution of 1991 gives the Archipelago's native islanders status as an ethnic minority with a social and cultural identity distinct from the dominant society, requiring that special programs be developed to preserve the environment and natural resources along with the islanders' cultural identity. The project is also based on two of the five general policies of the Archipelago Environment Plan (1998-2010) which are to guarantee natural resource sustainability through management planning and to build local capacity in environmental management (Plan Nacional Ambiental, 1999, and Plan de Ordenamiento Ambiental, 1998-2010).

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

The Colombian congress ratified the Convention on Biodiversity in Law 165 of 1994. The ensuing National Biodiversity Policy (1995) emphasises conservation, knowledge, and sustainable use. This Darwin project is based on specific actions recommended in the national policy such as conservation planning for significant species and those of limited distribution, increasing knowledge about these species and their uses, optimising social and economic benefits resulting from exploitation, and strengthening technical and management capacity of both the state and society. Priority activities include managing biodiversity information, collecting traditional knowledge, and combining traditional methods with new technologies to achieve sustainable use (Politica Nacional de Biodiversidad, 1995).

**12. In what ways can this project be considered a Darwin project? How does the project relate to the Darwin principles? How would the project be advertised as a Darwin project and in what ways would the Darwin name and logo be used?**

This project fulfills Darwin objectives by increasing scientific knowledge of biodiversity, implementing practical initiatives for conservation and sustainable use that mitigate poverty in the Colombian Caribbean, providing a regional model, undertaking training programmes using British expertise to build biodiversity management capacity, and applying sound science to management; all of which will help Colombia reach goals set by the Convention on Biodiversity. Actions are completed in principal Darwin areas such as institutional capacity building and training, research and management planning, and environmental education with the addition of such innovative activities as setting up an experimental site to study the viability of culturing black crab, collecting traditional information about this species including folklore and recipes, and producing a professional quality video to document the annual breeding migration - a striking phenomenon of gecarcinids (17 known species). The local community of the Archipelago will be involved in the project throughout its duration. Publications with the Darwin name and logo will include the species management plan, the economic feasibility study and action plan, terraculture study, collection of local lore (oral tradition, tales, folklore, recipes), documentary video, and resulting papers on *G. ruricola*. A banner with the Darwin name and logo will be displayed at all community meetings and training events in Colombia, and the experimental terraculture site will also carry the name and logo. Regular local and national press releases and radio interviews along with a community awareness campaign manifested in a pamphlet and educational poster will advertise the Darwin project and build awareness about this species. Given the traditional significance of the black crab to the island community, this species could be promoted as a symbol for the Archipelago, similar to the turtle in the Cayman Islands. Furthermore, this work will result in a management model for this species, especially on tropical islands where a land crab is often at the top of the energy pyramid rather than a vertebrate. Not only do these crabs play a significant role as a food source, but they are of particular interest to biological research because of the evolutionary adaptations that permit them to live on land yet remain dependent on the marine environment for the pelagic larval phase.

**13. Set out the proposed timetable for the work, including the programme's measurable outputs using the attached list of output measures.**

<b>PROJECT OUTPUTS</b>		
Year/Month (starting April)	Output Number (see standard output measures)	Description (include numbers of people involved, numbers of publications printed or produced and days/weeks where applicable)
18-30	2	1 Colombian/San Andean, 1 year
1-9 and 25-30	6A, 6b	12 Colombian/San Andean, 32 weeks
1-36	7	3: collection of black crab lore, posters and pamphlets
1-36	8	MB 9; JS 6; RH 11
18-30	9	1 management plan for conservation and recovery of the black land crab
18-30		1 economic feasibility study and action plan
30-36	10	1 on ecological and biological information for terraculture
30+	11b	3
13-36	12a	1
1-36	15a, 15b, 15c, 15d	2, 6, 2, 2
25-36	17a	The possibility of establishing a Caribbean network will be investigated
1-36	18a	1 documentary video
1-36	19a, 19b, 19c, 19d	2, 1, 6, 2
1-6	20	1 reference collection
30-36	21	Black Crab Conservation Unit
30-36	22	1 experimental terraculture site
24-36	Additional outputs	1 set of regulations

<b>Key Milestones</b>	
Year/Month (starting April)	Description (include travel dates, drafts and other processes that support the delivery of outputs)
1-6	1a) Develop a reference collection on land crab biology, exploitation, management and terraculture, which is an immediate priority for detailed planning
1-24	1b) Determine distribution, abundance and size frequency of existing populations; investigate growth rate and age structure; survey habitats, analyse ecological relationships and determine limiting factors on their distribution; produce spatial distribution maps for the San Andres archipelago
1-5 and 13-18	1c) Determine timing and intensity of the annual breeding migration and examine the influence of factors such as air temperature, rainfall and lunar phase; record timing and intensity of return of postlarvae to shore, evaluate methods of assay and collection, relate to factors of weather and lunar phase
1-30	1d) Explore the viability and potential for culturing black crab in co-operation with a local university, evaluating the options of larval rearing and capture of post-larvae, and testing methods of ongrowing juvenile crab
1-12	1e) Collect socio-economic information from stakeholders on users, markets, income, and harvesting patterns; gathering information on catch levels and composition, and catch per unit effort
1-18	1f) Complete the socio-economic research needed to design a terraculture project
13-36	1g) Develop information management systems to adequately store, apply, and ensure access to data
18-30	2a) Produce a management plan including policies and actions for conservation, recovery, sustainable use, continuing research, monitoring, education, and community participation
18-30	2b) Produce an economic feasibility study and action plan including sustainable strategies for exploitation, terraculture, and marketing
CONTINUED ON SEPARATE SHEET	

**14. Do you know of any other individual/organisation carrying out similar work? Give the details of the work, explaining the similarities and differences.**

<p>Limited ecological research has been undertaken on certain members of the Gecarcinidae in tropical America, W Africa, and the Indo-Pacific region (e.g. <i>Gecarcinus lateralis</i>). Little information exists, however, for <i>G. rucicola</i>, an important species in the Caribbean. This research, therefore, will not only break new ground in studying the population dynamics of this species, it will also act as a model for other Caribbean island communities (and elsewhere) in terms of developing a proactive and participatory approach to the sustainable management of land crab populations. Land crab terraculture is being discussed as a sustainable economic alternative with great potential for tropical regions, but field experiments to determine biological feasibility (larvae and juveniles) and recommend methodologies have yet to be carried out. There have been several trials of ongrowing in the coconut crab (<i>Birgus latro</i>), although these have been unsuccessful. CONTINUED ON SEPARATE SHEET.</p>
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**15. Will the project include training and development? Please indicate how many trainees will be involved, from which countries and what will be the criteria for selection. How will you measure the effectiveness of the training and will those trained then be able to train others? Where appropriate give the length of any training course.**

Training Activity	Dates	Who will participate, how many will participate and for how long?
Community based resource management and the collection and analysis of biological data	Months 1-9	2 Coralina personnel and 2 students in the joint CORALINA-Christian University natural resource management programme from the San Andres archipelago, Colombia (2 week course)
Land crab sustainable management and terraculture	Months 25-30	4 CORALINA personnel and 4 members of the Community NGOs or co-operatives from the San Andres archipelago, Colombia (3 week course)
MSc Marine Resource Management	Months 18-30	1 project researcher from CORALINA, from the San Andres archipelago, Colombia (1 year)
CONTINUED ON SEPARATE SHEET		

## 16. How will trainee outcomes/destinations be monitored after the end of the training?

The Black Crab Conservation Unit established in the last semester of the project will provide an institutionalised means for trainees to continue working after the project's conclusion; CORALINA, the Christian University and the Agriculture Secretariat will be members of this Unit responsible for its long-term functioning. Trainees will be involved with implementation of the management plan and follow-through on the model terraculture project, which will be overseen by CORALINA. Given that both the Christian University natural resource management course (professional and technical levels) and the CORALINA community outreach programme are ongoing and, as such, not project dependent, these programmes provide mechanisms to support and monitor training following project completion.

## 17. How is the work of the project expected to continue after the end of grant period? A clear exit strategy must be included.

With the completion of a management plan and the enacting of legislation with respect to black land crab exploitation, the project will ensure continued regulation after the Darwin period. In addition, the completion of the experimental terraculture phase along with the socio-economic analysis, and economic feasibility study and action plan will determine the viability and potential of this economic development alternative, forming the basis for a model project that is integrated with the principles of the management plan. This plan will include strategies that identify a clear pathway, over 3 years, for the transfer of training, implementation of full-scale sustainable use projects and introduction of immediate practical actions that result in species conservation and recovery. British expertise on land crabs, shared in the course of the project, will greatly improve the knowledge base and local capabilities for future long-term management of this species. An examination of funding opportunities, both within and outside Colombia, will be included. A Black Crab Conservation Unit with members from CORALINA, the Christian University, the Agriculture Secretariat, trainees and participating community organisations will be established to collaborate in development and long-term implementation of the management plan and terraculture project. Heriot-Watt University will continue to be involved in an advisory context. The management plan and results of the terraculture experiments will be distributed throughout the region, thus ensuring as wide a relevant audience as possible for this model approach to the sustainable management of land crab resources.

CONTINUED ON SEPARATE SHEET

## MONITORING AND EVALUATION

### 18. Describe how progress on the project would be monitored and evaluated in terms of achieving its aims and objectives, both during the lifetime of the project and at its conclusion. How would you ensure that it achieves value for money? What arrangements will be made for disseminating results? If applicable, how would you seek the views of clients/customers?

In addition to the measurable indicators set out in section 19, ICIT will have quality management procedures in place at all times. June Marie Mow and Elizabeth Taylor of CORALINA will co-ordinate and monitor the progress of the research in the archipelago. ICIT personnel will undertake periodic (every 4 months) progress reviews to monitor implementation of the programme of work within the stated timetable. The status of each identified task will be recorded on Task Assessment Forms (TAFs) as part of these reviews.

Results will be disseminated in the final project report, scientific literature (including journal publications), press releases, seminars, educational and publicity material and a documentary video. Results will also be distributed at regular intervals through the ongoing CORALINA outreach programme and the Christian University information services. Results will ultimately manifest themselves in the drafting/amendment of legislation regarding the exploitation of this species.

The training and capacity building element of the project will help ensure the continuation of scientific surveys and terraculture activities after project completion. The management plan and socio-economic study with resulting economic feasibility study and action plan will put in place strategies for ensuring that exploitation of the black land crab is sustainable. Regulations will be enacted to ensure that such strategies have the backing of law. If proven viable, the terraculture experiment will result in the design of a model project for which funding will be sought, providing project continuity and an additional practical alternative to alleviate regional poverty. The management plan will be designed to act as a regional model for the sustainable management of this species, and will be made available to other relevant Caribbean organisations, along with the documentary video. These multiplier effects built in to the project will help ensure continuation, thus achieving value for money.

**Logical framework. Please enter the details of your project onto the matrix using the note at Annex B of the Guidance Note.**

<b>Project summary</b>	<b>Measurable indicators</b>	<b>Means of verification</b>	<b>Important assumptions</b>
<p><b>Goal</b></p> <p><i>To assist countries rich in biodiversity but poor in resources with the conservation of biological diversity and implementation of the Biodiversity Convention</i></p>		<p>Research reports and database</p> <p>CORALINA environmental management reports: regulatory control and monitoring</p> <p>Research reports, stakeholder meeting records, management plan</p> <p>Economic Action Plan, Model Terraculture Project (if viable)</p>	<p>a) Political and institutional will exists for sustainable management</p> <p>b) SINA supported at national/departmental levels</p> <p>c) Migration to San Andres controlled in accord with existing legislation</p> <p>d) Traditional methods and cultural values respected</p> <p>e) Future financial backing</p>
<p><b>Purpose</b></p> <p>1. Conserve, recover and ensure future sustainable exploitation of the black land crab in the San Andres Archipelago by developing management initiatives, education tools, and studying the potential for terraculture of this species to help eliminate growing poverty, while serving as a model for regional action</p>	<p>1.1 Local, national, and regional information access</p> <p>1.2 Species management plan distributed</p> <p>1.3 Policies and regulations</p> <p>1.4 Terraculture project (1) designed and submitted for funding, if viable</p> <p>1.5 Resource managers and stakeholders applying training</p>	<p>1.1 Web site postings, records of contact with IOCARIBE, IRF, CCA, etc.</p> <p>1.2 File copies, mail log</p> <p>1.3 Regulation(s) enacted by CORALINA (legal registry)</p> <p>1.4 Project document, submission letters, mail log</p> <p>1.5 Reports of CORALINA, BCCU, and multiplier activities</p>	<p>f) Regional involvement</p> <p>g) Institutional stability and funding of CORALINA maintained</p> <p>h) Regulations enforced, police/authority support</p> <p>i) Local community interest in sustainable use and terraculture</p> <p>j) Trainees remain at local institutions in archipelago</p>
<p><b>Outputs</b></p> <p>1. Information base improved and research undertaken</p> <p>2. Management planning to conserve, recover, and promote sustainable species use completed</p> <p>3. Implementation of management initiatives</p> <p>4. Training and education of local resource managers and stakeholder groups</p>	<p>1. References, biological and socio-economic data, culture experiments, database set up</p> <p>2. Management plan, economic study</p> <p>3. Regulations, terraculture viability, monitoring</p> <p>4. Resource management and terraculture training, MSc qualification, education awareness materials</p>	<p>1. Catalogue, research reports, maps, experimental site report, database</p> <p>2. Minutes, study document</p> <p>3. Draft documents, reports, database records</p> <p>4. Certificates, reports, attendance records, degree certificate, dissertation, video, poster, collection of black crab lore, publicity items</p>	<p>k) Adequate baseline data</p> <p>l) CORALINA Board approves management plan</p> <p>m) Good relationship b/w CORALINA/stakeholders</p> <p>n) Training/MSc completed</p> <p>o) Education materials well distributed</p> <p>p) Interest in producing and airing video and publishing press releases</p>
<p><b>Activities</b></p> <p>1. Lit search, surveys, socio-economics, stakeholder consultation; database, experimental terraculture site</p> <p>2. Management and economic study/action plans</p> <p>3. Regulations, terraculture project, BCCU, monitoring program, regional contacts</p> <p>4. Training programmes; crab lore, documentary</p>	<p>1. Months 1-36</p> <p>2. Months 18-30</p> <p>3. Months 25-36</p> <p>4. Months 1-36</p> <p>Project Expenditure</p>	<p>1. Task assessment forms (TAFs), budget reports, annual project report</p> <p>2. Task assessment forms (TAFs), budget reports, annual project report</p> <p>3. Task assessment forms (TAFs), budget reports, annual project report</p> <p>4. Task assessment forms (TAFs), budget reports, annual project report</p>	<p>q) Sufficient/timely human and financial resources available to CORALINA</p> <p>l) Timely provision of information and data by relevant bodies</p> <p>m) Good communication between UK and Colombian organisations</p> <p>n) Prompt disbursement of funds and efficient procurement</p>

## FINANCIAL ASPECTS

20. Please state gross expenditure on the programme of work. Please work by financial year (defined as April to March) using 2001/2002 prices throughout - do not include any allowance for assumed future inflation. Indicate salary costs on Table A and total costs on Table B. For programmes of less than 3 years' duration, enter 'nil' as appropriate for future years. It would be helpful to highlight (by bold, italics or underlining) the areas for which Darwin funding is requested. Show Darwin funded items separately; do not include with other funding

Table A Salary costs

	2002/2003 (£)	2003/2004 (£)	2004/2005 (£)
List each member of the team and their role in the project			
a) UK			
(???) indicates donation in kind			
Professor Jonathan Side, HWU, Project Director			
Dr Mark Baine, HWU, Project Manager			
Mr Sandy Kerr, HWU, Economist			
Dr Richard Hartnoll, Independent Technical Advisor			
b) collaborators			
Ms June Marie Mow, CORALINA, Host Country Co-ordinator			
Ms Elizabeth Taylor and Ms Marion Howard, Advisors			
Ms Martha Ines Garcia, Marine Biologist			
Mr Ayin Connolly/Mr Robert Hodgson, Lawyer/Technician			
Mr Rixcie Newball/Mr jairo Lasso, Economist/Biologist			
Education Specialist and Community Promoter			
Technician			
Part-time Researcher (6 months)			
Ms Fanny Howard, Christian University, Co-ordinator			
Show the % of time each person would spend on this work			
JS			
MB			
SK			
RH			
JMM			
ET			
MH			
MIG			
AC			
RH			
RN			
JL			
Education Specialist			
Community Promoter			
Technician			
Part-time Researcher			
FH			
<b>Total cost of salaries</b>			



**Table B Other costs (Please highlight or underline the areas for which Darwin funding is requested)**

	2002/2003	2003/2004	2004/2005
Rents, rates, heating, lighting, cleaning or overheads			
Office costs eg. postage, telephone and stationery			
Travel and subsistence			
Printing			
Conferences, seminars etc			
Capital items/equipment (please specify)			
Other (please specify)			
<b>Sub-total</b>			
<b>Cost of salaries (from previous table)</b>			
<b>Total of spend*</b>			

\* Grants may be limited to a percentage of the total cost of the project. The Department will look for balancing income from non-public sources (eg. private sector funding, subscriptions, donations, fees).

**21. How is your organisation currently funded?**

For the year ended 31 July 2000: Scottish Higher Education Funding Council (SHEFC) £29, 304, 000, which was 40% of total income. Other sources of income include academic fees and support grants, research grants and contracts. See page 10 of the Annual Accounts for the year ended 31 July 2000.

**22. Please give details of resources you have sought from the host country partner institution(s) for this project. Include donations in kind eg. accommodation with these costed where possible. Indicate any income or donations which are confirmed.**

CORALINA's contribution to the project includes staff time at least equal to that funded in the project: in country co-ordinator, supervisor, international programme advisor, economist, marine biologist, administrative department (accounting, procurement, contracts, secretarial), juridicial department (regulation drafting), control and enforcement office (inspectors, legal procedures, EIA), education department (graphic design, publicity). Contribution also includes use of the physical plant (offices, meeting room, document centre, laboratory) and equipment (1. Office: computers, printers, photocopiers, fax, scanners, furnishings; 2. Fieldwork: 3 launches, 2 jeeps, 1 truck, motorcycles, diving equipment, GPS, video and still cameras, tape recorders; 3. Education and outreach: televisions, VCRs, overhead and slide projectors, tape players, datashow, crockery and utensils). Maps will be produced by the CORALINA geographic information system (GIS) which is one of the most comprehensive in the

**23. Please state all other sources of income and amounts to be put towards the costs of the project (including any income from other public bodies, private sponsorship, trusts, fees or trading activity).**

The Christian University of San Andres will support community education and training activities as well as the terraculture research by providing laboratory and field space for the experimental site, student research assistants, and use of classrooms and office facilities. Stakeholder groups will contribute volunteers to help collect data and organise community meetings.

**24. Please deduct any confirmed income or donations from elsewhere (where these may be costed) and indicate in Table C the amounts of grant requested under the Darwin Initiative.**

**Table C Darwin funding request**

	2002/2003	2003/2004	2004/2005
Income to be deducted	18448	21884	19284
Amount of Darwin Initiative funding requested	46610	59746	42037

**FCO NOTIFICATION**

25. 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 the project's success in the Darwin competition in the host country

**CERTIFICATION**

On behalf of the trustees/company (*delete as appropriate*) \_\_\_\_\_

I apply for a grant of £ \_\_\_\_\_ in respect of expenditure to be incurred in the financial year ending 31 March 2003 on the activities specified in paragraph 13.

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 enclose a copy of the organisation's most recent audited accounts and annual report.

Name (block capitals)	
Position in the organisation	

Signed

Date:

**Please return completed form to the Department for Environment, Food and Rural Affairs, 4/A2 Ashdown House, 123 Victoria Street London SW1E 6DE.**

Department for Environment, Food and Rural Affairs  
August 2001