DARWIN INITIATIVE FOR THE SURVIVAL OF SPECIES : APPLICATION FOR GRANT FOR ROUND 9 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 attached at the end of this form. Although you may reproduce this sheet in a reasonable font, you should not expand it beyond an A4 sheet (leaving the allocated space for DETR comments to be made) as additional information will not be taken into account.

1. Name and address of organisation

Sir Alister Hardy Foundation for Ocean Science, 1, Walker Terrace, The Hoe, Plymouth, England, PL1 3BN

2. Principals in project

Details	Project leader	Other UK personnel (if working more than 50% on project)	Main project partner or co-ordinator in host country
Surname	Lindley		Merino
Forename(s)	John Alistair		Sonia Elsy
Post held	Post Doctoral Researcher, Sir Alister Hardy Foundation for Ocean Science		Responsible for the Aquaculture Component at the Halieutic Resources Department, INDP-Fisheries Biology Research Institute, Mindelo Cape Verde
Institution (if different to the above)			
Department			
Telephone			
Fax			
Email			

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

3. Project title (not exceeding 10 words)

Phyllosoma larvae of the Cape Verde Islands

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

There is a commercial fishery for rock lobsters (Palinuridae) in the Cape Verde Archipelago. The phyllosoma larvae of palinurids of the area are poorly known and not definitively linked to adults. A summary of published information on phyllosomas from the area will be prepared. A course will be conducted with a representative of the Museo de Ciencias Naturales, Santa Cruz de Tenerife to introduce a researcher from the Cape Verde Republic to existing knowledge and to carry out studies on the phyllosomas in the plankton samples taken in the Cape Verde Islands by the Museum. A key to phyllosomas of the area will be produced. The objective is to improve the potential for INDP to conduct research relevant to the sustainability of the fishery.

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

October 2001- June 2002

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

SAHFOS is a registered charity that was set up in 1991. The principal acivity of the foundation is to provide and advance education and knowledge about the marine environment for the public benefit by disseminating information derived from the study of plankton populations in the oceans and coastal areas.

Activities

The Foundation was established primarily to ensure that the Continuous Plankton Recorder survey is maintained. SAHFOS participates in and encourages research, particularly on the effects on plankton of climate change, biodiversity and interactions with fisheries. The organisation is also active in raising public awareness of the work of the foundation on marine pelagic ecosystems through lectures and exhibitions and maintains an up-to-date page on the World Wide Web that contains information of general interest and scientific details useful for researchers. The staff includes qualified research scientists who carry out plankton analysis and conduct research using the large database of the results of analysis of over 200000 samples.

Achievements

SAHFOS has maintained the CPR survey from which the distributions, seasonal cycles and interannual variations of the plankton of the north Atlantic and adjacent seas have been described over a period of >50 years. Recent achievements have been initiation of sampling in the North Pacific, identifying changes in the plankton that can be related to climatic variation and description of relationships between fisheries and plankton.

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

No

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

Instiuto Nacional de Desenvolvimento das Pescas, (INDP) Mindelo, Cabo Verde.

A researcher from INDP will be trained in identification of phyllosoma larvae and will participate in examination and, where necessary, description of phyllosomas from the plankton samples in the collections of Museo de Ciencias Naturales, Santa Cruz de Tenerife.

Museo de Ciencias Naturales, OAM, Santa Cruz de Tenerife. Spain

The plankton samples taken in the Cape Verde Archipelago in the project Macaronesia 2000 will be used as material for the project and a member of staff will of attend the training course and participate in studies of the samples.

PROJECT DETAILS

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

The purpose of the project is to improve the potential for INDP to conduct research on the Palinuridae. Dispersal during the larval phase and recruitment to the benthic population have not yet been the subject of research in the area but will be needed to contribute to management of the resource in a highly diverse environment.

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

New

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?

Co-operation with the Museo de Ciencias Naturales on identification of the decapod larvae in their samples from the Cape Verde Islands led to contact with INDP. The commercial fishery for rock lobsters and the lack of information about the larval stages led to a focus on these as a field for further research.

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

It is important that high value resources such as the rock lobsters should be managed sustainably, which requires not only conservation of the benthic habitats, but ensuring that pelagic development and subsequent recruitment to the benthos is healthy. The proposal is an initial step towards developing the capacity to conduct the research necessary for determining policies to achieve this.

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

This project will contribute to the requirements of Article 12 of the UN Convention on Biodiversity to promote and encourage research, which contribute to conservation and sustainable use of diversity.

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?

The project will improve the information base on the Palinuridae. Four species are known in the Cape Verde Islands, *Palinurus charlestoni, Panulirus echinatus, Panulirus regius* and *Scyllarides latus* and two others, *Scyllarus caparti* and *Scyllarus pygmaeus* are known from the African continental coast at the same latitudes. The project focusses on the larval stages, a neglected area of research. The phyllosoma larvae described from the area have been assigned to genera but are not linked to species. Conservation of the stocks to ensure a sustainable fishery that provides export revenue for the Cape Verde Republic should be based on policies based on knowledge of all stages of the life cycle and protection of biodiversity in their habitats.

The Darwin logo would be used on the key to phyllosomas produced at the end of the project and the Darwin Initiative would be acknowledged in any publications resulting from the project.

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

October – December 2001. Literature review and preparation of material for training course (3- weeks work by UK participant).

January 2002 – March 2002. Training course at Museo de Ciencias Naturales, Santa Cruz de Tenerife (2-weeks duration) consisting of presentation of prepared material followed by joint research on phyllosomas* from the Macaronesia 2000 plankton samples. Training for one researcher from INDP Cape Verde (Output 6a) and to be attended also by one member of staff from Museo de Ciencias. Further examination of specimens as necessary after completion of the course. Start on preparation of publications and reports. (2 weeks at training course and additional 3 weeks work by each participant)

April – June 2002. Completion of Identification Guide to Phyllosomas of the Cape Verde Islands (Output 10). Submission of at least one paper to a peer reviewed journal (Output 11b). Final report on project to Department. (3 weeks work by each participant)

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

No

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.

Yes.

A member of INDP staff attend a 2-week training course which will involve tuition and supervised examination of material. If necessary mexamination and description of specimens will be continued after completion of the course. The performance of the researcher will be assessed through his/her contribution to preparing a paper for submission to a journal.

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

The trainee will be a member of ONDP staff . He/she will participate in research on the Macaronesia 2000 samples and will be expected to be prepared to participate in future proposals to develop future research.

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

It is intended that proposals will be prepared for submission to one or more of :- Darwin Initiative, European Union, Overseas Development Agency.

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?

The trainee from INDP will be working directly with the project leader during the training course and subsequent work will be on a joint basis. Expenditure will be controlled through SAHFOs administration and audited accounts. It is intended that at least one peer reviewed paper will be published.

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

Project summary	Measurable indicators	Means of verification	Important assumptions
Goal To improve the capacity of the Cape Verde Republic to carry out research to inform policy on sustainable management of marine resources.	Presence of a researched at INDP (Cape Verde Republic) with skills and literature to work on phyllosama.	Output of project	That sustainable management of the resources is identified with preservation of biodiversity.
Purpose To provide the basis for carrying out research on pelagic larval stages of Palinuridae.	As above	As above	Policies of the Cape Verde Republic will support development of research.
Outputs 1. Training of a member of staff on INDP in morph-ology and identification of phyllosomas. Output 6a 2. A provisional key to phyllosomas from Cape Verde waters to facilitate research at INDP. Output 10 3. At least one paper in a refereed journal. Output 11b	1. Assessment by project leader. 2. Publication of the key. 3. Acceptance of the paper.	1. Assessment by project leader of ability and contribution to joint research. 2. Hard copy to be part of project report. 3. Publication of the paper	3. That research on material in plankton samples will add to existing published knowledge.
Activities 1. Preparation of provisional key based on published literature. 2. Training course at Museo de Ciencias Naturales, Tenerife. 3. Research on phyllosomas from plankton collections at Museo de Ciencias Naturales, Tenerife. 4. Revision of provisional key to take account of results of research. 5. Preparation of journal paper(s) .			1. Access to literature (project leader). 3. That the researcher from INDP has attained an appropriate standard of expertise.