



<http://www.darwin.gov.uk>

DARWIN INITIATIVE FOR THE SURVIVAL OF SPECIES

**Project Reference: 162/8/204
Formerly 162/8/113**

*Collection and Cataloguing of Algae for the
Natural History Museum of Oman*

Annual Report 2002/03

**HTS Development Ltd
Thamesfield House
Boundary Way
Hemel Hempstead
Hertfordshire
HP2 7SR**



ABBREVIATIONS

BNHM: British Natural History Museum

HTS: HTS Development Limited

HUM: Herbarium of the University of Michigan

MRMEWR: Ministry of Regional Municipalities, Environment and Water Resources

ONHM: Oman Natural History Museum



Darwin Initiative for the Survival of Species

Annual Report

1. Darwin Project Information

<i>Project title</i>	Collection and Cataloguing of Algae for the Natural History Museum of Oman
<i>Country(ies)</i>	Sultanate of Oman
<i>Contractor</i>	HTS Development Limited
<i>Project Reference No.</i>	162/8/204 formerly 162/8/113
<i>Grant Value</i>	£167,973
<i>Start/Finishing dates</i>	June 1999 – April 2002 (extended to 2003/4 by Darwin Initiative)
<i>Reporting period</i>	April 2002 – March 2003

2. Project Background

The coastal waters off Oman are home to diverse macroalgal communities which until now have received little attention from taxonomists and are therefore relatively poorly understood. The macroalgae are an important natural resource that has considerable potential for commercial exploitation. Broadly the aim of the project is to identify and catalogue this marine plant diversity and establish fully referenced collections as important research and educational resources. Through a variety of media the project will also raise public awareness both nationally and internationally of the conservation value of this important ecosystem whilst training local staff in curation techniques and the management of biodiversity information.

To date the project has focused on the stretch of coastline between Salalah and Sadh in Southern Oman. It was anticipated that the information collected would feed into plans for the in-situ conservation of Oman's unique macroalgal communities but this was not considered necessary in the light of other initiatives.

3. Project Objectives

3.1 Purpose and Objectives

No logical framework was produced for the project. Key objectives for the project are to:-

- Establish a fully referenced algal collection at the Oman Natural History Museum (ONHM) with a parallel collection at the British Natural History Museum (BNHM).
- Develop an informative museum display illustrating the importance of the macroalgal communities and raising awareness of Oman's unique coastal ecology.
- Develop a website for the ONHM and disseminate project findings through it.
- Transfer knowledge to Omani museum staff in collection and curation techniques and the management of biodiversity information.
- Contribute to science through the publication of journal papers on Oman's macroalgae.
- Promote increased awareness of the importance of Oman's marine plants through a popular publication and poster.
- Develop a plan for the in-situ conservation of Oman's macroalgal communities.

4. Progress

4.1 Brief history over last year

Approval by Darwin to extend the Project to August 2002 was received on April 22nd 2002, to March 2003 in October 2002 and to financial year 2004 on 14th March 2003. Darwin confirmed that the Final Report must be submitted by end November 2003 on 21st May 2003. Approval was based on the reasons behind the project delay and the fact that all the project deliverables can be achieved within the existing budget.

No fieldwork was undertaken in the last year. Substantive handover, labelling and archiving of specimens has been undertaken by the Herbarium at the University of Michigan (HUM), the British Natural History Museum (BNHM) and the Oman Natural History Museum (ONHM). Five papers were published during the reporting period, with an additional 2 in press and 3 submitted. 5 new species (3 published, 1 in press and 1 submitted) have been identified.

There was a visit to Oman by the UK Project Co-ordinator and web designer in March 2003. All products, except for a poster of the Museum display, had been submitted in draft form in July-September 2002 and again in March 2003 but are still awaiting approval. The British Embassy is facilitating this approval and a formal launch/hand-over of products.

4.2 Summary of Progress

- **Establish a fully referenced algae collection at the Oman Natural History Museum with a parallel collection at the British Natural History Museum.**

Due March 01 - 95% achieved April 2002: The duplicate collection was handed over from HTS to the BNHM in London on 31st July 2002 and acknowledged on the 16th October 2002 (Appendix 1b). The ONHM, BNHM and HUM continue to communicate concerning the collections (Appendix 1c,d).



Duplicate specimens continue to be handed over as they are identified for example:-

05 Aug 02 – 7 seaweeds (4 dried, 3 slides) – 05 Aug 02 acceded to ONHM

18 Feb 03 – 5 seaweeds, unmounted – 18 Feb 03 acceded to ONHH

A count of specimens on 18th March 2003 indicated 650 specimens in the ONHM collection. 643 specimens were on the ONHM accessions list versus 788 on the database. The balance of “missing” specimens is 138. These specimens may have been lost. Some will be with the HUM pending identification and handover.

All specimens handed over to the BNHM have been entered into the Microsoft Access database. This database was given to the ONHM in March 2003. Training in updating the database and printing out of labels was given. ONHM is confirming the specimens in their collection and adding the BMNH accession codes to the database for ease of communication/reference. With respect to the BMNH collection:

1. Total collection (in excess) of 500 dried herbarium specimens and microscope slides have been sorted and labels attached (some problems of label mismatch still prevent completion of sorting).
2. 290 specimens allotted an individual (bar-code) number with label data entered onto Museum accessions data-base.
3. 250 specimens laid out (i.e. prepared and mounted onto Museum herbarium sheets, ready for incorporation into the collections).
4. 180 sheets incorporated into the Museum's collections.

This work was carried out with the help of a volunteer and a school student on work experience and probably took a total of 12 full (wo)man days (5% of time).

ONHM has allocated 20% of the time of a technician to catalogue the collection.

HUM has allocated 5% of the time of a technician to handle the collection and Prof. Mike Wynne is allocating 40-50% of his time to taxonomic identification.

- **Develop an informative Museum display illustrating the importance of the macroalgal communities and raising awareness of Oman's unique coastal ecology.**

Due August 2000 - 95% achieved April 2002. A revised version of the Museum display was submitted to ONHM in July 2002 (Appendix 1a). The display was finalised during the visit in March 2003 (Appendix 1e,1g). The display is presently being finished. An earlier version can be seen on the project web site.

- **Develop a website for the Oman Natural History Museum and disseminate project findings through it (80% achieved).**

Due July 1999 - 95% achieved April 2002. An earlier draft of the website was approved in September 2001 (Appendix 1a). Following this approval further work was undertaken to make edits recommended by ONHM and to add more ONHM information and expand the macroalgal section. A draft password-protected web site <http://www.htsdevelopment.com/oman> (password is Oman and hp27sr) has been up and running since July 31st 2002. During the visit in March, ONHM indicated



that they did not wish to have the Darwin Project provide a wider Museum web site. An alternative site was presented. This site was confirmed on May 11th (Appendix 1 g). HTS has agreed to host the web site for the next 6 months whilst the ONHM site is prepared.

- **Transfer knowledge to Omani museum staff in collection and curation techniques and the management of biodiversity information.**

Due March 02 - 75% achieved April 2002. An Omani counterpart was trained in collection techniques in 2001 but unfortunately could not learn to dive because of ear problems.

An expatriate technician, Anna Clyde, is employed in the herbarium of the ONHM and is presently spending about 20% of her time on the Oman algal collection including the Darwin collection. She works with an Omani counterpart. Both have an understanding of curation techniques. HTS provided training to Anna in the use of the database in March 2003.

- **Contribute to science through the publication of journal papers on Oman's macroalgae.**

Due March 01 - 100% achieved March 2001. Table 2 Section 8 lists publications in/submitted to refereed Journals in the reporting period. These include 5 published papers, together with 2 in press and 3 submitted.

- **Promote increased awareness of the importance of Oman's marine plants through a popular publication and poster.**

Due March 01 (August 2000 for Poster and Display). 95% achieved April 2002. No popular publication has been produced during the current reporting period and none is planned. It is expected that the Web Site, Museum display and handbook will provide this publicity. In addition it is proposed that a poster be made of the Museum display once the display has been finalised.

A letter acknowledging (Appendix 1a) and approving (Appendix 1g) the Display and Handbook has been obtained. It has been suggested to the Darwin Project Partners that the handover of these materials might be a public communications opportunity. This suggestion is presently under consideration by the Omani Darwin Project Partners with support from the British Embassy (Appendix 1f, 1g).

- **Develop a plan for the in-situ conservation of Oman's macroalgal communities.**

Due February 01 - 0% achieved April 2002. No proposals had been made for the in-situ conservation of Oman's macroalgal communities at the time when the present Co-ordinator took over the Project in December 2001. In subsequent discussions with the Ministry responsible for conservation it was indicated that developing such plans was not appropriate within the present framework of activities. It was indicated that this framework was already stretching the available resources. This framework is specified in a report on the status of coastal zone management activities within the Sultanate of Oman prepared by Mr Ali Amer Al-Kiyumi as requested by the present Project Co-ordinator and delivered in early 2002.

A meeting was held on 17th March 2003 with Saddiqa Ramdhan – Supervisor of ONHM and representatives for MRMEWR. These included Salem Afsadhi: Director of Biodiversity; Nasser Issa Al Maskari: Acting Director of Planning for Nature Conservation Department; Mohamed Al-Sheryani: Director of Wildlife Protection. The issue of the management plan was raised but not resolved pending the return of Mr Ali Amer Al-Kiyumi. There has been no subsequent communication from MRMEWR on this subject.



4.3 Project Research

Prof. Wynne continues to identify and report on the collection. Five papers were published during the reporting period, with an additional 2 in press and 3 submitted. 5 new species (3 published, 1 in press and 1 submitted) have been identified (see references). In April 2003 Prof. Wynne received an email from Giovanni Funari in Sicily to whom he had "farmed out" many of the *Laurencias*. He and his colleagues had identified those that had been sent "wet" but not the pressed specimens. There are some interesting new records, including one comb. nov. *Laurencia*. The *Laurencia* complex (now that there are *Osmundea* and *Chondrophyucus*) is a very large and difficult group, now requiring fertile stages and close inspection of numbers of pericentral cells at the apex.

Training in use of the algal database has been provided to the botanical technician at the ONHM.

4.4 Significant Difficulties

There has been great difficulty in getting approval for production and dissemination of the Web Site, Algal Handbook and Museum Display. It was not possible to get permission to visit Oman between September 2002 and February 2003 to resolve these difficulties. A visit was made in March 2003 and approval for the products was forthcoming. However, the Omani signature on the handbook foreword is still pending. The handbook can only be printed and disseminated once the signature has been provided.

4.5 Project Design Enhancement

The Web Site and Algal Handbook have been revised to reflect developments in the Project and feedback from project partners. Discussions were held with the British Embassy in March 2003 and the Deputy Head of Mission has visited the ONHM to push the Project forward (Appendix 1f).

4.6 Workplan

The key activities in the workplan are to print and disseminate the products through a Project launch. Printing is conditional on provision of a signature for the Omani foreword to the handbook.

Activity	2003									2004		
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Finalisation/printing (Web site, Museum Display, Booklet)	██████████											
Handover/launch (Web site, Museum Display, Booklet)							██████████					
Reporting Annual (02-03) Completion		██████████						██████████				

5. Partnerships

There has been ongoing technical collaboration between ONHM, BNHM (Appendix 1b, 1c, 1d) and HUM over the last year and a commitment to continuing collaboration in the longer term. There is also informal collaboration with other Institutions and individuals working on marine algal collections. However, "political" support for the public communications component of the project has not been strong but is being encouraged through active involvement of the British Embassy.

6. Impact and Sustainability

The profile of the Project within the country remains low partly because there has only been limited opportunity for HTS to have a “presence” within Oman. Efforts are being made to raise the profile of the Project through a “launch” to hand over the “Handbook”, “Museum Display”, “Posters” and “Web Site” to the ONHM. The British Embassy is trying to facilitate this.

The BMNH and MUH are committed to continuing to work with the ONHM on the collection. The ONHM has a technician working on the Oman algal collection, including the Darwin Collection. The ONHM is keen to ensure that the collection is adequately conserved. However, there is no evidence for increasing interest and capacity for biodiversity directly resulting from the Darwin project.

The exit strategy exists in the form of: (a) commitment by ONHM to continuing technician support for conserving the collection; (b) conservation of the duplicate collection in the BNMH and commitment to collaborate with ONHM on the conservation of the duplicate collection; (c) conservation of the duplicate collection in the MUH and commitment by MUH to continue identifying the collection and notifying the other partners of this identification.

7. Post-Project Follow up Activities (max 300 words)

No request is being made for post-project funding.

8. Outputs, Outcomes and Dissemination

8.1 Project Outputs

Table 1: Project Outputs (According to Standard Output Measures)

Code No.	Quantity	Description
6a	1	Expatriate technician employed by ONHM.
6b	3 days	3 days training on use of database.
7	1	Draft poster. 200 posters to be printed.
7	1	1 Museum display approved. Being finalised(Appendix 1e,g)
8	2 weeks	10 working days spent in Oman finalising public education materials and providing training in use of database.
9	0	Management plan not required by responsible Ministry
10	1	Handbook designed and approved (Appendix 1e,g) and on website. 150 copies to be printed pending signature on Omani foreword
11a	5	5 papers published, 2 in press, 3 submitted.
12a	1	Handed over March 2003 (Appendix 1e)
13a	3	ONHM (Appendix 1e), BNHM (Appendix 1b). HUM.
17a	1	Web site approved (Appendix 1g)
20	0	Equipment/books handed over in 1999.Checked in March 2003 and present. Computer in good condition but not being used.
22	0	5 proposed in project design but not installed due to lack of opportunity/perceived need and local capacity.
23	17,500	Staff time: Technician at BNHM (5% = £1,000), Technician at HUM (5% = £1,000), Technician at ONHM (5% = £500). Senior Researcher at HUM (40% = £12,000). HTS unpaid time 20 days @£150/day = £3,000.



The following outputs were not achieved or only partly achieved during respective reporting periods. Comments on status from the 1999-2000, 2000-2001, and 2002-2003 annual reports are listed below. **Additional** outputs include the publications listed in table 2.

Item	Progress reported and progress projected in respective annual reports			
	1999-2000	2000-2001	2001-2002	2002-2003
7 Museum Display	Not due. No progress specified.	Design completion due August 2000. Designs submitted and awaiting approval –display will be launched during September 2001 field phase.	Draft layout approved in October 2001. Awaiting translation of text into Arabic by ONHM.	Designed. Final arabic provided March 2003. Final production underway.
7 Poster	Not due. No progress specified	Due: A number of preliminary designs are under consideration.	Poster to be made of the Museum Display once the display has been finalised.	Finalisation/printing by August 2003. Awaiting approval for launch date. Launch in November.
9 Management Plan	Not due. No progress specified.	Not due. No progress specified.	Due to start November 2001. Discussed with responsible Ministry and decided that not appropriate.	Re-discussed with responsible Ministry but no follow-up from Ministry.
10 Booklet	Not due. No progress specified	Design start due January 2001. Initial booklet design “has been” produced. Work will continue on this during the final year of the project	Due to be published December 2001. Work started November 2001.	Draft submitted July 2002. Revisions on December 02 and February 03 comments. Approved March 03. Printing awaiting signature on Omani foreword. Proposed printing in July/August and hand over in November.
12a Database	Due October 1999. Designed and data from two collections accessed	Data entry	Data entry	Re-designed, updated and handed over March 2003
15 TV/Radio	Due: Draft Press release and 2 popular articles presented in report in Annex.	This output was achieved during the first year of the project when an interview with a member of the project staff was broadcast on Oman TV. There have been no further opportunities for TV or Radio coverage.	Encouraging Omani counterparts to give press release for launch of website and display etc in September 2002.	Omani Darwin project partners have been approached to agree to a formal handover for Darwin products in November 2003.
17a Website	Due August 1999. Not yet established. Activity delayed to year 2 to link with with ONHM website	Designs submitted and waiting approval. Website launch proposed for September 2001 field phase	Hardcopy draft approved September 2001. Electronic website under construction.	Website active in July 2002 and handed over for approval in September 2002.. Revised March 03. Approved May 2003.
Extra: Study Tour	Not specified	This additional output was a study tour for a senior member of the partner institution and has been added to the programme at the request of host country government. The arrangements are in place and it is anticipated that the tour will go ahead in June or July 2001	This did not take place due to administrative problems	

8.2 Publications

Table 2: Publications

Type * (e.g. journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (e.g. contact address, website)	Cost £
Journal	Wynne, M.J. (2002). The status of our understanding of the benthic marine algal flora of the Sultanate of Oman and the broader biogeographical implications. Botany 2002, Tsukuba City, Japan, 19-24 July 2002, p. 21. [Abstract.]	Botany, 2000, Tsukabi City, Japan	M.Wynne**,	N/A
Journal	Wynne, M.J. (2002). Highlights of recent collections of marine algae from the Sultanate of Oman. Journal of Phycology 38 (Supplement): xx-xx. [Abstract.]	Journal of Phycology	M.Wynne**,	N/A
Journal	M. J. Wynne.(2002). A description of <i>Plocamium fimbriatum</i> sp. nov. (Plocamiales, Rhodophyta), from the Sultanate of Oman, with a census of currently recognized species in the genus. Nova Hedwigia 75: 333-356.	Nova Hedwigia	M.Wynne**,	N/A
Journal	M. J. Wynne. (2002). <i>Turbinaria foliosa</i> sp. nov. (Fucales, Phaeophyceae) from the Sultanate of Oman, with a census of currently recognized species in the genus <i>Turbinaria</i> . Phycological Research 50: 283-293	Phycological Research	M.Wynne**,	N/A
Journal	M. J. Wynne. (2002). <i>Jolyra furcata</i> sp. nov. (Scytosiphonales, Phaeophyceae) from the Sultanate of Oman. Cryptogamie, Algologie 24: 51-61	Cryptogamie, Algologie	M.Wynne**,	N/A
Journal	M. J. Wynne. (In press). <i>Centroceras secundum</i> sp. nov. (Ceramiaceae, Rhodophyta) from the Sultanate of Oman. Nova Hedwigia	Nova Hedwigia	M.Wynne**,	N/A
Journal	M. J. Wynne. (In press). The benthic marine algal flora of the Sultanate of Oman and its biogeographical relationships. Japanese Journal of Phycology (Sorui) Suppl.	Japanese Journal of Phycology	M.Wynne**,	N/A
Journal	Wynne, M.J. (submitted). The benthic marine algal flora of the Sultanate of Oman and the broader biogeographical implications. Japanese Journal of Phycology (Sorui).	Japanese Journal of Phycology	M.Wynne**,	N/A
Journal	M. J. Wynne & D. W. Freshwater.(submitted). <i>Gelidium omanense</i> (Gelidiaceae, Rhodophta) from the Sultanate of Oman. Botanica Marina.	Botanica Marina	M.Wynne**,	N/A
Journal	M. J. Wynne. (Submitted) <i>Leveillea major</i> sp. nov. (Rhodomelaceae, Rhodophyta) from the Sultanate of Oman. Botanica Marina	Botanica Marina	M.Wynne**,	N/A

**mwynne@umich.edu. Department of Ecology and Evolutionary Biology, University of Michigan, Ann Arbor, MI 48109,USA

8.3 Dissemination Activities

No dissemination activities were undertaken in the host country during the year. Dissemination after the Project finishes is likely to be through the Web Site and distribution of the handbook. Whilst ONHM has indicated an interest in hosting the Web site in the long term and in producing an Arabic version of the handbook nothing firm has been agreed.



9. Project Expenditure

Table 3: Project expenditure during the reporting period (from April 2001-March 2003)

Item	Budget	Expenditure	Balance
Total	54511.00	45371.92	9139.08

30% of the above expenditure occurred in the period April 2002-March 2003.

No changes in the budget are proposed.

10. Monitoring, Evaluation and Lessons

The project has no logframe. No new methods were employed to monitor and evaluate the Project in this reporting period. The indicators of achievement relate to the Standard output measures detailed in the project proposal and presented in Table 1. The main lesson learned, as also specified in the 2001-2002 annual report was:-

“Efforts have been made and will continue to be made (by HTS) to encourage ownership of the Project by the (other) Partners but this is difficult at the end of a telephone. The site visit in September 2002 will endeavour to ensure the maximum ownership of the Project at Project handover. It should have had a much higher priority earlier in the Project. If a lesson is to be learned from this process it is that project design should involve the Partners to the maximum extent possible and include objectively verifiable commitments from these Partners.”

The National Partner indicated that a visit by HTS was appropriate in September/October 2002 was best left until proposed corrections had been made to the draft products. The visit took place in March 2003. The lessons learned from the 2002-2003 reporting period are that:-



-
- (1) support from the Embassy helped progress the Project.
 - (2) a visit proved far more effective in progressing the project than electronic communication.
 - (3) there is a strong project professional legacy because key partners (ONHM, BNHM and HUM) have an ongoing professional commitment to conserving and reporting on the collections.

It is suggested, based on our experience, that it should be a pre-condition for approval of Darwin Projects that:-

- (1) proposals include a written commitment from key Country partners to deliver key project outputs.
- (2) there be contact with, and a written commitment to Project support from, the British Embassy or High Commission in the Project country(ies).
- (3) that Project design should explicitly identify any “approvals” required for delivery of products and specify the date by which approval should be obtained and who approval is required from.
- (4) Local partners should “sign-off” on the proposal.


11. Author(s) / Date

Dr Alec Dawson Shepherd, Project Co-ordinator, HTS Development Ltd. 23rd May 2003.



Appendix 1a

سلطنة عمان
Sultanate of Oman
Ministry of Heritage and Culture



سلطنة عمان
وزارة التراث والثقافة
٢٠٠٢/٩/١١/ب/٥٩٩٧١١

OMAN NATURAL HISTORY MUSEUM
Ref: B52
11th Sept 2002

Alec Dawson-Shepherd
Environmentalist
HTS Development Ltd
Thamesfield House
Boundary Way
Hemel Hempstead
Herts HP2 7SR
United Kingdom

Dear Mr Dawson-Shepherd


After compliments and greetings


Darwin Initiative: Collection and Cataloguing of algae for the Natural History Museum of Oman

Thank you for your letter of 30th July (Ref: 201029). Mr Mohamed Nabhah al Marwafi, the Director of Museums, is on leave until 26th September. We are still reviewing the booklet, comments and corrections will be sent to you as soon as possible. Approval will be given for both the website and the booklet when the changes have been made. We therefore suggest that your visit to Oman should be put back until the website and the booklet are finalised.

Further to the points raised: Point Eight - We would still like to see the research from the Algal Biodiversity Project published in the Journal of Oman Studies. Perhaps this could be discussed on your visit?

We look forward to hearing from you again regarding the proposed change to the visit.

Yours sincerely,

Saddiq bint Ramdhan Al-Haj Sultman
Acting-Director of Museums





Appendix 1b



Mr Mohamed Nabhan Manaly
Director of Museums
Ministry of Natural Heritage and Culture
P.O. Box 668,
Muscat 113,
Sultanate of Oman

Department of Botany

Our ref

Your ref

Date 16 October 2002

Direct 020-7942-5004

Facsim 020-7942-5529

j.bryant@nhm.ac.uk

Dear Mr Manaly,

Please accept my compliments and greetings from the Botany Department of the Natural History Museum, London. I write concerning:

"COLLECTION AND CATALOGUING OF ALGAE FOR THE NATURAL HISTORY MUSEUM OF OMAN 162/8/204."

Please find attached a list of the duplicate specimens that were handed over to us by HTS Development Ltd on the 31st July 2002. I understand that this collection is matched by one held at the Herbarium of the University of Michigan and one held by the Natural History Museum, Oman.

I should firstly like to thank the Ministry of Natural Heritage and Culture and through them the people of Oman for this wonderful gift. We are truly delighted at the quality and diversity of this collection. I would like to congratulate everybody involved in the building of this collection.

Secondly I should like to extend my assurance, on behalf of the Natural History Museum, London, UK, that we will do our best to maintain this collection for future international research, for the inspiration and education of future generations of Omani citizens and will make it available for research by Omani Scientists.

To this end I should like to recognize and accept the condition specified by the Ministry of Foreign Affairs in MFA note number 801/24075/14070/707:-

"Not to use the samples which shall be gathered as genetic resources..... in any activity or technological research for commercial purposes without the approval of the Sultanate"

Prof Mike Wynne of the Herbarium of the University of Michigan and I, in my capacity as curator of the Natural History Museum algal collection, will continue to monitor this collection and notify you of any changes in nomenclature so that the collection in Oman can be updated.

The Natural History Museum, Cromwell Road, London SW7 5BD, Telephone 020 7942 5000, Facsimile 020 7942 5529

www.nhm.ac.uk



Appendix 1b continued....

All I would ask is that you notify me of a current point of contact and keep me informed of any change in that point of contact.

I hope that it will be possible to co-operate with the Oman Natural History Museum in the future and welcome your suggestions as to how we might proceed.

Finally I should like to congratulate the Oman Natural History Museum. I believe that it is visited by large numbers of tourists and is a popular outing for schools in the Muscat area.

I look forward to hearing from you. Many thanks again for the collection.

Yours sincerely,


Jenny Bryant
Curator of Algae

Cc: Dr Alec Dawson Shepherd, HTS Development Ltd
Ms Sylvia Smith, Darwin Initiative
Prof. Mike Wynne, University of Michigan

Appendix 1c

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Sultanate of Oman
Ministry of Heritage and Culture



سلطنة عُمان
وزارة التراث والثقافة

Ref: B5. Oman Natural History Museum
4th December, 2002

Jenny Bryant
Curator of Algae
Department of Botany
The Natural History Museum
Cromwell Road
London SW7 5BD
U.K.

رقم: ٥٠٩٤٨٤٦٧٧٠٨١٧٥٥٠٠

Dear Jenny,


Thank you for your letter of 15th October and the attached list of duplicate specimens. We have been checking the list with our holdings and find that you have some specimens identified that we do not:

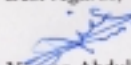
25999-02-06 *Dipterocladia arabiensis*
26999-01-01 *Stirmia prolifera*
29999-05-06 *Dipterocladia arabiensis*
29999-05-07 *Dipterocladia arabiensis*

Thereafter we have problems because in our copy of the list we do not have the specimen numbers, only date and site. We tried checking on the assumption that the specimens were progressive and identified the following, which need your confirmation of the specimen numbers:

24092000-17-01? *Chrysiomenia grandis*
24092000-17-07? *Caulerpa scalpelliformis*

In order to check the rest of our holdings we need the specimen numbers for all those after 220100-09-07, on page 2 of the list. We can also then send you a similar list of all those we have identified, to ensure both collections are the same. For speed, the list can be e-mailed to me at: mnhcgov@gto.net.om.



Best regards,

Yaseen Abdul Rhadha
Director of Museums

ص.ب: ١٦٨ مسقط، الرمز البريدي: ١١٢ - هاتف: ٦٠٢٢٢٥ - ٦٠٢٤٤٥ - فاكس: ٦٠٢٢٣٥ - ٦٠٢٢٣٥ - ٦٠٢٢٣٥ - ٦٠٢٢٣٥ - ٦٠٢٢٣٥ - ٦٠٢٢٣٥
Web Site: WWW.mnhcgov.om موقع الوزارة على الإنترنت E-mail: mnhcgov@gto.net.om البريد الإلكتروني



Appendix 1d

Yaseen Abdul Rhadha
Director of Museums
Oman Natural History Museum
P.O.Box 668
Postal Code 113
Muscat
Sultanate of Oman

13th March 2003

Dear Dr Rhadha,

I am now beginning to sort and process the seaweed specimens that have been arriving over the last few months from HTS and Dr Michael Wynne. This is a complex procedure and is taking some time, as each specimen has to be connected first to the correct label (using the collection number) and then to the relevant entry on the specimen database. Each labelled specimen is given a unique BM accession number (in the form of a barcode) and this number has to be added to the database before the specimen can be mounted and laid into the BM Herbarium. Currently, we have processed about 150 specimens and I have asked Dr Dawson Shepherd to bring you this list of accessioned specimens with their BM numbers.

There appear to be some discrepancies where we are having difficulty matching labels and specimens and I will not be able to give you a full list of what we hold until we finish processing the whole collection. Similarly, Dr Wynne is still working through material and forwarding small batches of the specimens destined for our set. He is also making changes to some earlier determinations and sending us revised labels. I think, therefore, it will be some time before we can assume that “the dust has settled”. I certainly have some queries for him that I will pursue in due course.

Eventually, we should have a complete list of taxa with associated collection data and BM accession numbers available as an Access database, which we can copy for you. We are happy to continue our cooperation with the Oman Natural History Museum and Dr Michael Wynne following the cessation of the Darwin funded HTS project. It might be advantageous for us to look into the possibilities of building a more formal relationship between the Natural History Museums of London and Oman and Dr Wynne to ensure the continuing and future development of the collection.

With reference to the questions raised in your letter of December 4th 2002 I hope you can wait until we have processed the bulk of the collection. I think it will be easier to solve any mysteries when we have a complete set of data and have checked it against the specimens we hold.

Yours sincerely,

Jennifer Bryant (Ms)
Curator of Algae

Appendix 1e



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موقع الوزارة على الإنترنت: WWW.mshc.gov.om E-mail: mshc.gov@go.net.om البريد الإلكتروني: mshc.gov@go.net.om



Appendix 1f

Dr Alec Shepherd

7 May 2003

By e-mail:

alec.dawson-shepherd@htsdevelopment.com



**British Embassy
Muscat**

PO Box 185
Mina al Fahal
Postal Code 116
Sultanate of Oman

Dear Alec,

Hugh Philpott and I called on Ms Saddiqa Ramdhan and Dr Yassin, Director of Museums at the Ministry of Heritage and Culture yesterday for a briefing on the latest developments on the Darwin Initiative Algae Project.

The Project is now with His Highness Sayyid Haitham, Minister for Heritage and Culture, who has also requested to view all related project papers back to the beginning of the work. Dr Yassin told us that the Minister is enthusiastic and impressed by results.

Ms Ramdhan was planning to Open the Exhibition and Launch the book on 15 June 2003, this date however, clashes with Ministerial travel plans, she is now considering other dates. I take this intention to set a date as an implicit sign that the programme has been or will be shortly signed off by the Minister.

Dr Yassin is also keen to have limited edition presentation versions of the project book published. These would be to present to the guests of honour at the opening ceremony and also for the Ministry's library. We believe this would be a good idea if time permitted. Ms Ramdhan said that she would be in contact with you about this.

It was a good meeting. Dr Yassin and Ms Ramdhan are pleased with the results and highly appreciative of the Darwin Initiative Input.

Yours sincerely

Steven Scott

Appendix 1g


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M H C

PAGE 01/02

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Sultanate of Oman
Ministry of Heritage and Culture



سلطنة عمان
وزارة التراث والثقافة

الرقم: 602735 / 17 مايو 2003

Natural History Museum
Ref: B5

To: Dr Alec Dawson Shephard
HTS Development Ltd
Thamesfield House
Boundary Way
Hemel Hempstead
Herts, HP2 7SR
UK

11th May 2003

Dear Dr Shephard

After compliments and greetings

First of all We would like to apologise for the delay in replying. The launching date is not approved yet, we recommend to have the launching in a day convene to an international or local environmental event such days in June are 5th June is the "International day of the Environment" and 17th June is "the international day for Desertification".

Regarding the handbook, the forward page will be signed by the Supervisor of The Natural History Museum, we will send you the signature tomorrow by email and on the floppy disc.

We have a further request, could you please print five copies of the book with unique cover, those copies will be presented to HH, the Minister and the VIP who will attend the ceremony. We appreciate so much your kind help.

MUSEUM DISPLAY

We have provided you a disc with the further corrections for the Arabic text when you left Oman on 22nd March 2003. I hope you have proceed to finalise the Museum display and this correction have been made as requested by ourselves.

WEB SITET

This web site now relates solely to Darwin Initiative Project but includes information about the Natural History Museum and reference to it's collaboration on the Project.

We should be most grateful if you could host this web site through your company server for the next six months whilst the Ministry web site is further developed.

4. CD-Rom

We look forward to receiving ten copies of the following materials on CD-Rom at your earliest convenience.

P.O. Box 958 Muscat, Postal Code: 113, Tel: 603225-602556, Fax: 603735 ٠١٠٧٧٤ : فاكس - ٠١٠٧٧٣٥ - ٠١٠٧٧٣٤ : هاتف
 صندوق بري: ٩٥٨ مسقط، الرمز البريدي: ١١٣، هاتف: ٦٠٣٢٢٥ - ٦٠٢٥٥٦، فاكس: ٦٠٣٧٣٥
 البريد الإلكتروني: info@mh.gov.om / www.mh.gov.om الموقع الإلكتروني: www.mh.gov.om E-mail: mh@gov.om

Appendix 1g continued....

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M H C

PAGE 02/02

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Sultanate of Oman
Ministry of Heritage and Culture



سلطنة عُمان
وزارة التراث والثقافة

a. Web site .
b. Handbook.
c. Museum display .
d. Scanned images of selected algae (file name as per algal collection reference number)
e . Project related publications.

Please update us on the progress you have made.
We look forward to hearing you soon

Yours sincerely



Yasoon Abu Rhadna Ali
Director of Museums



P.O. Box:688 Muscat, Postal Code:113, Tel. 002325-692666, Fax:002735 5-1774, فاكس: 002735 5-1774-5-1774, هاتف: 002325-692666
ص.ب. 688 مسقط، الرمز البريدي: 113، هاتف: 002325-692666، فاكس: 002735 5-1774، E-mail: web@gov@stm.net.om، موقع الوزارة على الإنترنت: www.mhsc.gov.om