

Global Biodiversity Sub-Committee (GBSC)

Thematic Report

**Research priorities in the UK Overseas
Territories**

6th November 2007

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Research priorities in the UK Overseas Territories

Background

- At an earlier meeting (06/02/07), the GBSC discussed the Overseas Territories and Crown Dependencies in relation to national capacity issues (a core component of the Group's work programme). With responsibility for addressing the biodiversity research needs of the Crown Dependencies having been passed to the UK Biodiversity Research Advisory Group, the GBSC focused solely on the OTs. The work programme identified the need to address who leads on OT issues and what actions are required. With the appointment of an OTs Officer at JNCC, the offer was made to take the lead in drafting a paper to identify research needs and capacity issues in the OTs, which would be circulated to Defra, the Scottish Executive, FCO, and DfID, prior to discussion among the wider GBSC membership. The aim will be to identify generic priorities and agree a strategy for taking these forward in partnership with research funders.

Biodiversity in the UK Overseas Territories.

- The Overseas Territories of the United Kingdom (Annex 1) collectively and individually make a significant contribution to global biological and geological diversity.
- Of globally threatened species identified in the 2004 IUCN Red List, 80 critically endangered species occur in the UK Overseas Territories (compared to 10 in metropolitan UK) along with 73 endangered species (12 in metropolitan UK) and 158 vulnerable species (37 in the metropolitan UK). Many of these species are endemic and so are found nowhere else in the world. In addition, and as an indication of the threat to island biodiversity, there are 39 recorded extinctions in the UK Overseas Territories and two species are extinct in the wild, compared with only a single extinction from the metropolitan UK (namely the great auk). Indeed, the latest extinction in the Overseas Territories, namely that of the St Helena olive *Nesiotia elliptica*, occurred in 2003 when the last tree in cultivation died (the last wild individual had died in 1994). It is likely that these figures are under-estimates, as new studies invariably report the occurrence of additional species or populations especially amongst the less well-known taxa, such as invertebrates.
- In addition to numbers of globally threatened species, the Overseas Territories also hold regionally or globally important concentrations or assemblages of species. For example, Ascension Island supports the second largest green turtle rookery in the Atlantic; Gough Island (Tristan da Cunha) has been described as, arguably, the most important seabird island in the world; and the reefs of the Chagos Archipelago (British Indian Ocean Territory) are described as some of the most pristine and best protected in the Indian Ocean (and account for some 1.3% of the world resource). The importance to nature conservation of parts of the Territories is recognised through the designation as World Heritage Sites of Gough Island & Inaccessible Islands (Tristan) and Henderson Island (Pitcairn) for their insular natural heritage interests.

Overseas Territories research priorities: consultation methodology.

- It was considered vital that the identification of research priorities on Overseas Territories came from the territories themselves. Therefore consultations with OTs form the basis of the priority setting exercise.
- Contributors to the consultation process were chosen using the following criteria:
 - Head of the OT government environment department
 - Head of other government department with some environmental remit
 - Head of the main environmental NGO
 - Known OT proactive individuals.
 - Contributors were also given the freedom to forward the consultation document to whoever else they thought might be interested/might have been erroneously excluded.
- The consultation was in the form of a background letter, which outlined the role of GBSC and the origin of the request. A form was attached whereby the respondents were asked to identify their top 3 research priorities. There were no parameters/criteria, giving respondents the flexibility to identify as large or as small a research area as they deemed appropriate.
- Respondents were given 3 weeks initially to give their feedback, this was extended and where appropriate, reminders were sent.
- British Antarctic Territory and the Sovereign Base Areas on Cyprus were not included in the consultation because of their unique governance and funding situations.
- Although officially part of the territory of St. Helena, because of their geographical location, and differing needs, Tristan da Cunha and Ascension Island are considered separately.

Overseas Territories research priorities: consultation results.

- Of the 13 Territories approached, responses were received from all but 1 (British Virgin Islands). In some cases there were a number of responses from 1 territory, and in other cases there was a single response. Some of the single responses were a compilation of territory initiated discussions with relevant parties resulting in an agreed joint response. Other single responses were from those who submitted as individuals. Responses were not weighted for analysis.
- The responses were analysed by considering which of the drivers of biodiversity loss (whether direct or indirect as identified in the Millennium Ecosystem Assessment), each research need addressed; research needs were also assigned to a category of activity (see Annex 2).
- This analysis (see Annex 3) showed that research needs identified addressed three drivers of biodiversity loss (invasive alien species; habitat transformation and over-exploitation) significantly more frequently than others:

- *Invasive species*: Most of the identified research needs related to Invasive alien species. This is not surprising as the MA identifies invasive species as the greatest cause of biodiversity loss in the island ecosystems typical of the OTs. Most of the research needed dealt with current, existing invasive issues, and did not tend to focus on prevention. Examples include: eradication/control of fruit fly (Pitcairn); impact of invasives on native biota (St. Helena) rat eradication (British Indian Ocean Territory, Pitcairn); control feasibility studies (South Georgia and South Sandwich Islands)
- *Habitat transformation* was the driver of biodiversity loss which was second in importance in terms of identified research needs in OTs. Many OTs (especially in the Caribbean) are undergoing rapid development and habitat loss is an important issue. Examples include: understanding and managing observed changes in distribution and occurrence of biodiversity to serve as a basis for enhancing sustainable strategies relating to tourism developments (Anguilla); collecting data on plants, animals and insects ... because of rapid development (Turks and Caicos Islands).
- *Over exploitation* was the direct driver of loss which was third in importance in terms of identified research needs. Areas of research need included lobster and conch assessments (Anguilla); inshore surveys (Falklands) and fisheries management research (South Georgia).
- The main activity identified as needed to address these three causes of biodiversity loss was baseline survey and monitoring. Many Overseas Territories have insufficient baseline information. They considered it important that this knowledge gap is filled so that information is available to feed into decision making. In addition to the examples above, other areas where baseline survey is needed include: shallow marine environment (Falklands, Anguilla) population status of inshore and offshore fish species (Ascension); existence and status of endemic species (Bermuda); terrestrial surveys for data deficient species e.g. insects (Cayman).
- Eradication and control, and species action planning were other key activities identified to address the issue of invasive alien species.

Recommendations.

- The consultation process has resulted in somewhat predictable areas where biodiversity research is needed in Overseas Territories. It is important that ways of addressing these research needs are developed as soon as possible if the unique biodiversity of the Overseas Territories is to be conserved. It is also important that the UK addresses these issues if it is to fulfil its 2010 targets.
- *Capacity¹ issue*: despite some very talented and dedicated staff in governments and NGOs, many of the Territories have limited capacity to address the identified research needs. This situation largely reflects the low population numbers (from 40 to 88,000 people) within the

¹ The definition of capacity in this context includes areas such as resources (human and financial), knowledge and technology.

respective Territories and the attendant limited financial and human resources (and other competing priorities for resources). Even in those Territories where per capita income is high, the low population size greatly limits the funds available for nature conservation.

- *Resources*: both financial and human resources are needed. These can be sourced in various forms. There would be, for example, quick benefits from stronger links to academic institutions where research could potentially be commissioned as part of graduate student projects. The University of Exeter in Cornwall has already provided good examples of how this can work effectively². It is recommended that other universities and academic institutions similarly encourage responsive mode applications to research councils. In doing so, some of the research priorities identified by OTs could be quickly addressed.³
- *Human resources*: It is important that it is acknowledged that it is often the case that there are an insufficient number of (if any) biodiversity research posts. It is therefore important that a funding mechanism is developed which enables extra research posts to be established in the OTs for the short and long term (as appropriate)
- *Financial resources*: The only fund that exists specifically for biodiversity work in the OTs is the Overseas Territories Environment Programme (OTEP) and this does not have a specific research remit. Other than this, OTs have to compete for funds which may have an international remit, such as the Darwin Initiative, where they are often disadvantaged by their limited resources. It is therefore necessary to explore ways in which some research funding can specifically target OTs.
- *Research protocols*. It is a genuine concern for OTs that externally commissioned research should not be exploitative and that results should be fed into Territory data management systems. It is therefore recommended that a research protocol be established to ensure that these concerns are adequately and effectively addressed. Annex 4 contains a draft protocol that originated in Fiji, has been adapted by Ascension Island, and has had a few modifications to make it applicable cross-territory.
- *Knowledge*: There is a good existing OT research skill base across the OTs and within the UK. There are however, inevitably insufficient experts on each OT to cover the range of research priorities identified. It is recommended that a skill share programme be set up to share existing skills to address some of the identified research needs. It is also recommended that a pool of experts who are able to work in the OTs/advise on OT issues is established.
- *Technology*: It is important in the acquiring and storing of research data that there is an adequate data management system that enable the data to be captured, interpreted and be made available to decision makers on island. It is recommended that a data standard is developed for each island and included in the research protocol to ensure that all data is compatible.

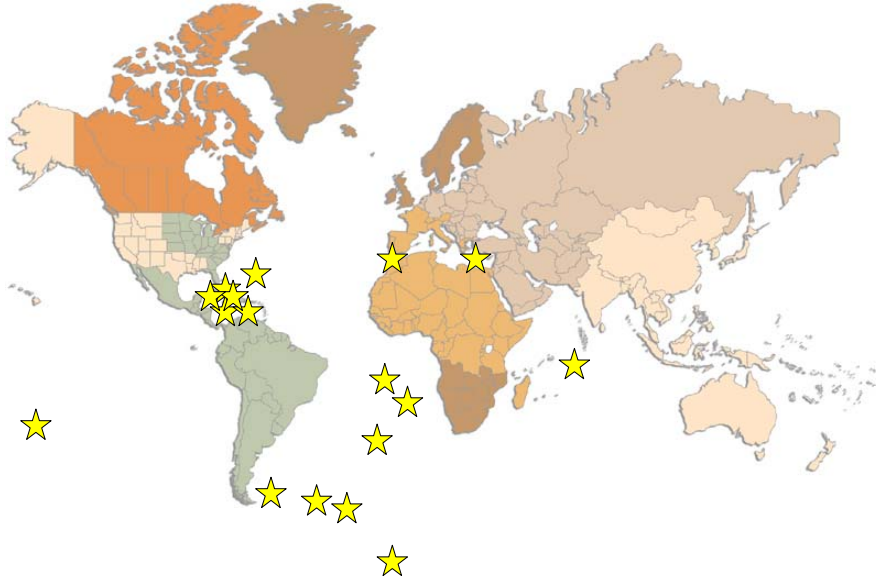
² <http://www.seaturtle.org/mtrg/projects/cayman/DarwinNewsletter3.pdf> pp 7-9

³ nb for the effective development of this recommendation, an organisation needs to act as an interface between the OTs and the UK academia. JNCC is potentially able to take this role(?)

- *Crown dependencies:* It is recommended that a similar review be done for the Crown Dependencies.
- This paper is a valuable analysis of Overseas Territories identified needs. However it might also be interesting to consider why issues such as climate change and invasive alien species prevention have not emerged as being more important. It is recommended that a potential role for GBSC could be to contribute to highlighting, and addressing, global and regional issues that have not been set as priorities by individual territories, but will impact them.

Tara Pelembe, Richard Ferris, Wyn Jones
November 6th 2007

ANNEX 1. THE OVERSEAS TERRITORIES



Stylised map to show location of the UK Overseas Territories

UK Overseas Territory names by region:

Caribbean region: Anguilla, Bermuda, Cayman Islands, Montserrat, Turks and Caicos Islands

South Atlantic region: Ascension Islands (STH), British Antarctic Territory, Falkland Islands, St. Helena, South Georgia and South Sandwich Islands, Tristan da Cunha (STH),

Mediterranean: Gibraltar; Sovereign Base Areas Cyprus

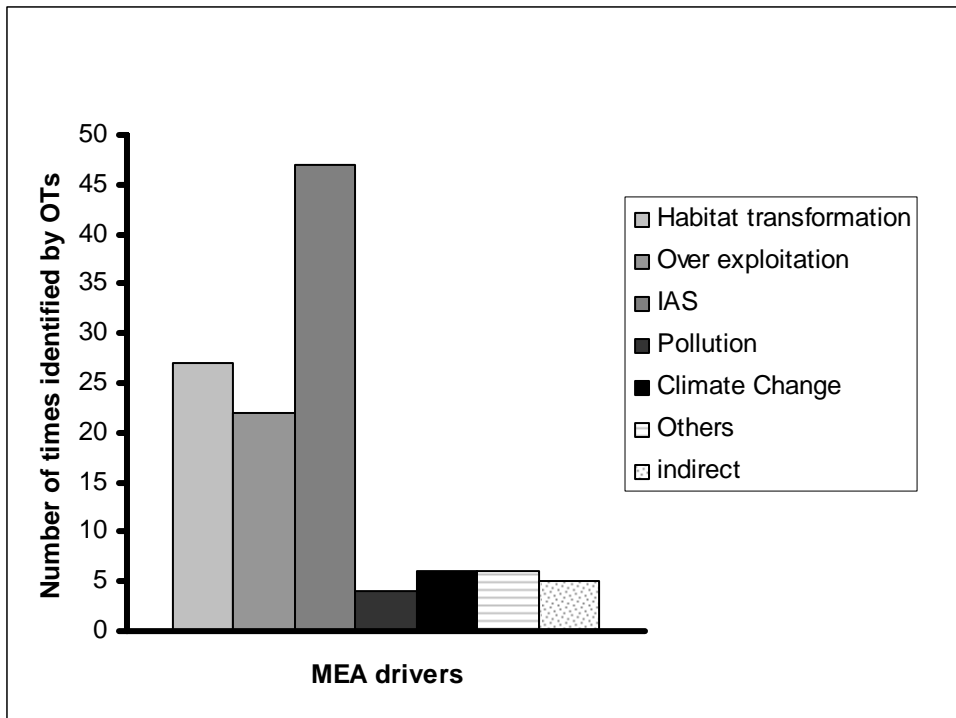
Indian Ocean: British Indian Ocean Territory

Pacific Ocean: Pitcairn group.

ANNEX 2: MATRIX OF NUMBER OF RESEARCH NEEDS BY ACTIVITY AND BY THE DRIVER OF BIODIVERSITY LOSS THAT THEY ADDRESS.

Activities	Habitat transformation	Over exploitation	IAS	Pollution	Climate Change	Others	indirect
Survey and monitoring	10	7	13	3	4	5	2
Species action planning	4	2	10	0	0	0	0
Resource management	4	6	3	0	0	0	0
Land use	2	0	3	1	0	0	0
PA management	0	0	0	0	0	0	0
Eradication/control	0	0	11	0	0	0	0
Sustainable use	2	3	2	0	1	1	1
Capacity building	3	2	2	0	0	0	1
Data management	1	1	1	0	0	0	1
Ecosystem restoration	1	1	2	0	1	0	0

ANNEX 3: GRAPH TO SHOW MAIN DRIVERS OF BIODIVERSITY LOSS IN OTS BASED ON ANALYSIS OF RESEARCH NEEDS.



ANNEX 4. DRAFT RESEARCH PROTOCOL.

Application for permission to conduct Scientific Study on

Applicant Name _____

Date of Application: _____

Name of Institution: _____

Student supervisor (if applicable): _____

Student researcher/s (if applicable): _____

Level of research: _____

Duration of research: _____

Contact information:

Postal Address _____

Postcode _____

Telephone: Work _____ **Home** _____

Email: _____

Website: _____

Location of study on _____

Brief summary of study

Nature of Interaction with study species:

Conservation implications:

Protection measures:

Import/Export requirements:

Nb When permission is granted it will be on the basis that the letter of agreement is signed by the applicant.

For official use only

Permission granted Yes/No

Reason:

Permission given by _____

Signature: _____

Date: _____

Application for permission to conduct Scientific Study on

Letter of Agreement

I, agree to the following principles:

1. Research should be an educational process leading to mutual learning among researchers and the collaborating individuals, communities and institutions.
2. Just as the propriety rights of scientific knowledge are well established and respected; such rights are due to the producers and providers of traditional knowledge and contemporary innovations from local communities.
3. Research should respect local cultural values and norms.
4. Benefits should accrue to all partners in a fair and equitable manner.
5. Informed consent should be obtained within the limits of practicality. All researchers must submit an application for permission to study to.....
6. In particular, I agree to follow all procedures required by and follow the Environment Charter.
7. Community approval is through initial contact with They will assist in the approach to the community if they feel the work is appropriate. In the discussion with and community, the following should be presented as part of the prior informed consent approval process.

When first contacting a community or individual to seek access, the researcher:

- Should carry out all communications in the locally understood language.
- Must explain the nature and purpose of the proposed research, including its duration, the geographic area in which research would take place, and research and collecting methods.
- Must explain the foreseeable consequences of the research for resources, people and stakeholders, including potential commercial value.
- Should explain the potential non-commercial values, such as academic recognition and advancement for the researcher.
- Should explain any social and cultural risks.
- Should explain the guidelines that the research is following, as well as his/her practice in previous similar research projects.

- Should be willing to provide copies of relevant project documentation, or summaries thereof, preferably including the project budget, in the local language. In the case of commercial prospecting, researchers must share such documents.
- Must agree on a protocol of acknowledgements, citations, authorship, and inventories as applicable, either citing local innovators or conservators, or respecting request for anonymity.
- Must share findings at different stages with the providers.
- Must not engage in bribery or making false promises.

In terms of benefits:

- The researcher should be prepared to pay the costs of (*name of on island people/organization who will assist*)..... in the research.
- All community informants (*names of on island people/organization who will assist*)..... should be paid per hour.
- Before leaving the community a short preliminary description of the findings of the work should be delivered in the local language.
- A written report on the research should be sent to and community as soon as possible with an executive summary in the local language.
- Arrangements must be made to have the executive summary discussed with the community.
- Any publications arising out of the work must be sent to and community.
- If the research results are ongoing, periodic reporting (at least annually) to the should be done.
- Contributions of all parties will be acknowledged in all materials produced, included joint authorship if possible.
- If requested, access to original collected data should be provided to All details regarding data management and storage should be agreed with
- Each permit will be subject to annual and periodic review and can be revoked at any time if this agreement is violated.

Name of Researcher

Signature of Researcher

Date

Name of Permit Issuer

Signature of Permit Issuer

Date