### Section 5: Posters not linked to other topics

The list of posters displayed is at Appendix 2.

The following posters are included in the Sections listed, to which they relate:

Pitcairn Islands Environment Management Plan - Noeleen Smyth (National Botanic Gardens, Dublin, Ireland; for Pitcairn Islands Council)	Section 2
The Chagos Archipelago: Its Nature and Future - Dr John Turner, Chagos Conserva- tion Trust & Bangor University, Wales, UK	Section 6
Invertebrate Conservation in the UKOTs: Tackling Invasives in South Georgia - Roger Key, Rosy Key & Jamie Roberts (Buglife)	Section 8
Action to reduce the impacts of invasive species on the South Atlantic United King- dom Overseas Territories - Clare Miller, Brian Summers & Andrew Darlow (South Atlantic Invasives Project)	Section 8

In this section, we publish other posters for which papers or abstracts have been received.

Because discussion of poster session tends to be limited at most conferences, we asked two parties, one from a scientic viewpoint and the other from a non-scientific one, to give some impressions of the posters, and hence feedback to help future poster-presenters. These follow below, before the individual posters.



Reception at the main poster session (Photos of participants in this section by Dr Mike Pienkowski unless otherwise indicated)

### **Reviews of posters**

### Posters - a scientist's point of view

From this point of view, the most interesting posters are those that tell a story, that give details of the biology of a species or the natural history of a locality, rather than those that just say what an institution does. In no particular order here are some of those that fitted these criteria and which I found memorable.

Fiona Gell's poster had a basking shark that was tracked from the waters off the Isle of Man all the way across the Atlantic with details of its behaviour. Previous data had shown wide movements by this species but on the eastern side of the Atlantic. This showed that gene-flow could occur between populations in the west and east of the Ocean. Similar data for turtles were on a poster from the Cayman Islands, giving details of diving depth and movements.

A poster on the Gough Island albatrosses by John Cooper and others gave details of the predation on the chicks of these birds by mice! This poster wins the prize for the most authors (9).

One of Alan Gray's posters was on the plant ecology of Acension Island. The other had a graph showing the relationships between species richness, herbivores and carnivores which led to an interesting discussion as to what it meant.

The poster on habitat mapping in the Cayman Islands was an example to many other Territories, and particularly to the Crown Dependencies, on how much can be achieved. I come from Guernsey (one of the Crown Dependencies), where we are mostly dealing with man-made habitats. The most important of these for their biodiversity are various sorts of grasslands. The detailed data from the Cayman Islands are better than anything we have in any of the Channel Islands, and have enabled the very scientific approach to the red data book, *Threatened Plants of the Cayman Islands*, by Fred Burton.

The set of posters by the students from the local University College showed example of the habitats and conservation in the Cayman Islands.

### Posters - a view by non-scientists

These comments are based on our impressions of the posters from a non-scientific viewpoint

### **Display Types**

Firstly, we did not really know what to expect from a 'poster', so we were slightly surprised to see a wide variety of items shown as posters, from single and sets of A3-sized prints, to large professionally produced wall hangings as single units and groups which formed exhibition type displays. Some posters were booklets with the wall displays as just the page extracts.

#### **Target Audience**

It was difficult to tell who the target audiences were from the posters as they varied from ones that we could easily understand to ones that were more technical and which would interest scientists perhaps more than the casual observer.

#### Accompanying literature

Some of the 'posters' also had accompanying literature - the JNCC posters really were only part of a whole exhibit which had very easy-to-read walldisplays, together with a comprehensive collection of literature.

### **Production Quality**

The quality of production of the posters varied from very high quality to amateur (from the students). Nonetheless, the clarity of the message conveyed did not necessarily depend entirely on this. The better produced posters were certainly easier on the eye, but some did not say as much as standalone items and only worked as part of a larger display, whereas some of the simpler posters had a very clear message.

#### Complexity

Some posters were quite complex in that they contained a lot of information. The Cayman Island ones were good examples of this; they were highly professional in production terms but perhaps a little too comprehensive and technical for public use. There was no natural flow through the poster - but maybe, for the scientist, they provided the type of detail needed in a visual summary form.

Charles David



#### **Visual Impact**

Posters would naturally lend themselves to showing pictures to convey a message, together with suitable text. The posters that relied mainly on text alone with a colourful background seemed to work only as part of a larger display

#### Balance

The posters which achieved a good balance for us had a simple structure with some technical details - they had a natural flow to them. The Pitcairn and Isle of Man posters were typical of this, with a simple flow with some technical details. The production quality was not up to the Cayman Island or JNCC standard, but the message was clear all the same. The St Helena National Trust poster was highly professional in production quality but seemed to be aimed entirely at the general public with very little technical detail.

Steve & Mary Cheeseman



### Poster: The endemic plants of the Pitcairn Islands

### Noeleen Smyth (National Botanic Gardens, Dublin, Ireland; for Pitcairn Islands Council)



Smyth, N. 2010. The endemic plants of the Pitcairn Islands. p 162 in *Making the Right Connections: a conference on conservation in UK Overseas Territories, Crown Dependencies and other small island communities, Grand Cayman 30th May to 5th June 2009* (ed. by M. Pienkowski, O. Cheesman, C. Quick & A. Pienkowski). UK Overseas Territories Conservation Forum, www.ukotcf.org

Noeleen Smyth (for Pitcairn Islands Council), National Botanic Gardens, Dublin, Ireland. noeleen.smyth@opw.ie

Local pockets of native vegetation occur on Pitcairn Island, while the vegetation of Henderson, Oeno and Ducie islands remains mostly intact. With regard to individual plant species, 60% of the flora of Pitcairn is threatened. Henderson and Pitcairn are the most floristically rich of all the islands in the group, and they support a number of endemic and endangered species, Pitcairn holds ten endemic plant species, and five are critically endangered; Henderson holds nine endemic species, of which two are threatened. Both Oeno and Ducie

*beneifca*. Results from these studies suggest that these endemics remain genetically diverse despite existing in extremely low numbers, suggesting that these Pitcairn endemics are genetically well adapted to existing in small populations. The main threats to the endemics on the island group are stochastic threats (e.g. extreme weather events such as high winds and human disturbance), because of the critically small population sizes and competition from invasive species such as *Lantana camara*.

have depauperate floras, yet Oeno contains three threatened taxa, one of which may be extinct. Only two vascular plant species have been recorded from Ducie.

Population and genetic diversity studies have been carried out for some of the more threatened endemics on Pitcairn such as *Angiopteris chauliodonta* (Figure 1) and *Coprosma* 



Figure 1. Clearing Lantana camara an invasive species away from one of the main populations of Angiopteris chauliodonta. Left to right: Jay Warren, Conservation Officer; Betty Christian, islander; Tana Pritchard, Governor's representative wife; Leslie Jaques, Pitcairn Island Commissioner and Christine Johnston, tourist.

### Poster: Jost van Dyke's Community-based Programme Advancing Environmental Protection and Sustainable Development

### Susan Zaluski (Jost van Dyke Preservation Society, British Virgin Islands)



Zaluski, S. 2010. Jost van Dyke's Community-based Programme Advancing Environmental Protection and Sustainable Development. p 163 in *Making the Right Connections: a conference on conservation in UK Overseas Territories, Crown Dependencies and other small island communities, Grand Cayman 30th May to 5th June 2009* (ed. by M. Pienkowski, O. Cheesman, C. Quick & A. Pienkowski). UK Overseas Territories Conservation Forum, www.ukotcf.org

As our island community wrestles with development changes, there is little scientifically based information for the community to employ in evaluating the short and long-term impacts of development. The long term implications of economicallydriven actions (e.g. the casual cutting of roads, the incremental filling of mangrove swamps and the inattention to solid waste disposal rules) are often not fully understood by the island's residents, and our current project was designed to provide community access to science-based environmental data, findings and recommendations to help provide a base for community decision-making to a wider base of stakeholders.

Major outputs include the publication of an *Environmental Profile*, a detailed characterization of the natural resource base of the island, based on primary research. While the initial draft of the publication is prepared by leading experts, the draft will be reviewed by an advisory group comprised of island residents, who will help guide the final product. The profile will form the basis of an extensive education and outreach programme, and will help the community to determine priority environmental issues to form the basis of a community-based environmental monitoring programme. Other outputs, such as a website and bimonthly newsletter will help to provide information to island residents, while an environmental resource centre will be developed for local students, community members and to visiting researchers.

Our OTEP project brings a new level of community involvement to natural resources management in the Territory, and is playing an active role in supporting the guiding principles outlined in the BVI's Environment Charter in building local capacity and environmental stewardship.

Susan Zaluski, Jost van Dykes Preservation Society, British Virgin Islands. susan@jvdps.org

### **Plant Ecology on Ascension Island**

### Alan Gray (Centre for Ecology and Hydrology, UK) and Stedson Stroud (Ascension Island Government)



Alan Gray (above - Photo: Dr Colin Clubbe) and Stedson Stroud (below)



Gray, A. & Stroud, S. 2010. Plant Ecology on Ascension Island. pp 164-166 in *Making the Right Connections: a conference on conservation in UK Overseas Territories, Crown Dependencies and other small island communities, Grand Cayman 30th May to 5th June 2009* (ed. by M. Pienkowski, O. Cheesman, C. Quick & A. Pienkowski). UK Overseas Territories Conservation Forum, www.ukotcf.org

Predicted global climate change and the threat of invasive species are particular concerns for biodiversity conservation, particularly many islands. Ascension Island in the South Atlantic Ocean, a UK Overseas Territory, has suffered a long history of introduced species which have had a disastrous effect on the endemic and native species. Of the 10 endemic vascular plants on Ascension Island, 4 are now considered extinct.

Ascension Island is likely to experience increased temperatures and changes to precipitation through human-induced climate change. Ecological research to inform the conservation of biodiversity within the UK Overseas Territories is currently severely lacking. The identification of the responses of native and introduced species to climate change and the ecological traits and processes that are essential for establishment and survival are paramount.

Highlighted on this poster is some of the ongoing research on Ascension Island to address plant biodiversity loss. This project has particular emphasis on the ecological characteristics of both native and introduced species, with climate change as an overarching theme.

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Stedson Stroud, Ascension Island Government, Ascension Island (UK), South Atlantic Ocean Tel: +247-6359 conservation@cwimail.co.ac www.ascensionconservation.org.ac

#### 60S-60N ERSST annual anomaly(1880-2006)







Figure 2. Correlation between mean sea surface temperature and mean land temperature between 1988 and 2007. Ascension Island is likely to experience increased temperatures but also changes to precipitation through human induced climate change.

### 1. Climate Change

Predicted global climate change and the threat of invasive species are particular con-



Figure 3. Weather station on Sisters Peak Ascension Island. We have also collated Global Circulation Model predictions and historical climate data to characterise past, present and future climate on Ascension.



Figure 4. Since the mid 1800's, introduced species have had a disastrous effect on the endemic and native species of Ascension. Shown here are the extinct plant species, clockwise from top left: Oldenlandia adscensionis, Sporobolus durus, Dryopteris ascensionis and Anogramma ascensionis.

cerns for biodiversity conservation, particularly on many islands. Ecological research to inform on the conservation of biodiversity in relation to climate change within the Overseas Territories is currently severely lacking. The data we are currently collecting on Ascension will be used to apply an adaptive management approach to the conservation of biodiversity.

### 2. Endemic Flora

Of the 10 endemic vascular plants on Ascension, 4 are now considered extinct (Fig. 4 and below). Of the remaining 6, only the ecology of *Euphorbia origanoides* L. is known (ref 1) (Fig. 5 and 6).

Species	IUCN Status
Anogramma ascensionis (Hook.) Diels	Extinct
Dryopteris ascensionis (Hook.) O.Kuntze	Extinct
Oldenlandia adscensionis (D.C.) Cronk	Extinct
Sporobolus durus Brogn.	Extinct
Euphorbia origanoides L.	Critically Endangered
Pteris adscensionis Sw.	Critically Endangered
Sporobolus caespitosus Kunth	Vulnerable
Asplenium ascensionis S.Watson	Near Threatened
<i>Marattia purpurascens</i> de Vriese	Near Threatened
<i>Xiphopteris ascensionense</i> (Hieron.) Cronk	Near Threatened



Figure 5. Euphorbia origanoides L.: (a) general habit;
(b) flowers, fruits and likely pollinators including members of Hemiptera and Diptera; (c) close up of inflorescence; and (d) grazed stem from the Hummock Point site. Scale bars are approximate. From Gray et al. (in press). Several studies have now been conducted on this species (refs 1, 2, 3, 4, and 5).

### 3. The Future

The next phase of the continuing research on Ascension will address:

- The conservation genetics of endemic vascular species.
- Experimental re-introduction trials to investigate, for example, responses to nutrients, competitive effects and mycorrhizal relationships.
- Compilation of a Biological Flora for each of the other 5 extant endemic vascular species.
- The ecology of Ascensions' overlooked groups such as bryophytes and lichens.



Figure 7. In situ and ex situ conservation; E. origanoides plants in the nursery on Ascension (inset left) population restoration at Mars Bay (inset right) and the first plant to flower in CEH glasshouses in Edinburgh 2008. Ex situ measures are currently only in place for E. origanoides but there are plans to extend this to other species in the near future.

#### References

- 1 Gray, A., Robinson, P. D. & Stroud, S. (in press). Use of the Biological Flora framework in the United Kingdom Overseas Territories: Euphorbia origanoides L. *Biological Conservation*.
- 2 Duffey, E. 1964. The Terrestrial Ecology of Ascension Island. *Journal of Applied Ecology* 1:219-251.
- 3 Cronk, Q. C. B. 1980. Extinction and survival in the endemic flora of Ascension Island. *Biological Conservation* 17:207-219.
- 4 Gray, A., Gardner, S., Kirk, L., Robinson, P., Smolka, Z. & Webster, L. 2000. The status and distribution of the endemic vascular flora of Ascension Island. Unpublished Report, University of Edinburgh, Edinburgh.
- 5 Gray, A. 2003. *Aspects of the ecology of* Euphorbia origanoides *L*. Unpublished report to USAF Ascension Island

Figure 6. Monthly rainfall minus potential evapotranspiration from July 1988 until November 2007. Recently, E. origanoides has suffered a decline due to increasing herbivory and low population recruitment due to less available rainfall to stimulate germination (Fig. 8). Increased herbivory is an unfortunate by product of the success of the cat eradication programme ultimately releasing herbivores from predation pressure.



# **Opportunities for collaborative projects: The Centre for Ecology and Hydrology**

### Alan Gray, Adam Vanbergen, Sarah Burthe, Juliette Young and Stephen Cavers



Alan Gray (Photo: Dr Colin Clubbe)

Gray, A., Vanbergen, A., Burthe, S., Young, J. & Cavers, S. 2010. Opportunities for collaborative projects: The Centre for Ecology and Hydrology. pp 167-170 in *Making the Right Connections: a conference on conservation in UK Overseas Territories, Crown Dependencies and other small island communities, Grand Cayman 30th May to 5th June 2009* (ed. by M. Pienkowski, O. Cheesman, C. Quick & A. Pienkowski). UK Overseas Territories Conservation Forum, www.ukotcf.org

The Centre for Ecology & Hydrology undertakes integrated research in terrestrial and freshwater ecosystems and their interaction with the atmosphere. As part of the Natural Environment Research Council (NERC), we conduct innovative, independent and interdisciplinary science and long-term environmental monitoring. Working in partnership with the research community, policymakers, industry and society, we seek to deliver solutions to the most complex environmental challenges facing humankind.

This poster demonstrates some case studies of our research to indicate possible areas of collaboration with UK Overseas Territory partners

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The Centre for Ecology and Hydrology undertakes integrated research in terrestrial and freshwater ecosystems, working in partnership with the research community, policymakers, industry and society.

CEH analytical services are available to external organisations and researchers. These include: genetic analyses, soil and water chemistry, stable isotopic analyses, and radiochemical analysis. CEH is a major custodian of environmental data, with expertise in data collection, collation and management supporting large-scale, long-term research. Major datasets include: Biological Records Centre, Countryside Survey, National River Flow Archive, National Water Archive, Predatory Bird Monitoring Scheme, Butterfly Monitoring Scheme, Phenology Network and the Environmental Change Network.

Four case studies are highlighted here to show the potential for collaboration with UK Overseas Territory partners.

# Case Study 1: Genetic diversity in plants & animals

CEH have experience in assessment of genetic diversity in temperate and tropical ecosystems. These types of data can be used for:

- Range-wide mapping and testing of genetic resources
- Assessing genetic responses to change (habitat and climate)
- Modelling stand and landscape level population genetics

And contribute to:

- International policy on trade and practice (e.g. CITES)
- Practical guidelines for management
- Scientific knowledge on population genetics and ecology



Figure 1: Cedrela odorata L., a globally important timber species, is severely exploited throughout its range. Data from chloroplast DNA was sampled across Mesoamerica. Distinct lineages were detected, occupying different habitats and probably reflecting historical colonisation processes. Above left, map showing the distribution of genetic variation in C. odorata (Meliaceae) in Central America. Middle, logging of Mahogany forest (C. odorata, Swietenia macrophylla King) in Belize. Right: S. macrophylla in Costa Rica.

# Case Study 2: Assessing public attitudes to biodiversity

Human involvement in the conservation of biodiversity is fundamental to its success but globally, conflicts between conservation and stakeholder livelihoods are increasing.

The identification of the drivers of conflict can aid resolution. One of the first steps can be to assess public attitudes to biodiversity in order to identify potential conflict areas.



Figure 2: Qualitative (drawings) and quantitative (questionnaire) approaches to attitudes to biodiversity addressing questions such as: How do people understand biodiversity? Do people actually value biodiversity? What is it that people value about biodiversity? How do people perceive biodiversity? What do they perceive as relevant issues? This type of analysis catalogues attitudes and reveals wide ranging opinion from a practical management orientated mind-set to more esoteric ideas of openness and wilderness.



Figure 3:Clockwise from top left: the Isle of May, Atlantic puffins, tick infested black legged kittiwake and kittiwake breeding success vs. sea surface temperature during open and closed fishery. The study monitors European shag, black-legged kittiwake, common guillemot, razorbill and Atlantic puffin. Data include, individual behavioural studies, breeding success, parasitism and diet (quantity and quality). Diet is particularly important because it can indicate changes to marine ecology. The lesser sand eel, the most important forage fish, has become substantially smaller over the last 30 years. Climate change effects have also been linked to >50% decline in black-legged kittiwakes since 1990.

### Case Study 3: Isle of May long-term study

A particular strength of CEH is our ability to carry out long-term monitoring:

Since 1973, the Isle of May study has become one of the most data-rich and complex studies of its type in Europe. It forms part of CEH's network of long-term monitoring sites for detecting effects of environmental change, particularly climate change and is partly funded by the UK's Joint Nature Conservation Committee (JNCC).

## **Case Study 4: Land-use impacts on insect biodiversity**

CEH have wide ranging invertebrate ecological expertise e.g. the examination of pollination and



Figure 4: GIS representation of increasing (right to left) landscape heterogeneity that can influence biodiversity. Carabid beetles were sampled from 48 1-km<sup>2</sup> heterogeneous landscape parcels from 8 European countries. Landscape heterogeneity was quantified using remote-sensing.



Figure 5: Feeding group response to landscape heterogeneity. Herbivores were more sensitive than predators to landscape heterogeneity in all 8 countries surveyed. These differential patterns appear driven by habitat specialisation (herbivores) and changes in the activity density of a single speciose herbivore genus.

biological control.

The conservation of carabid beetles can be important to regulate insect pest populations. However, increasing landscape heterogeneity has little effect on predatory carabids, and hence biological control.

### **INTO – The Future**

# **Oliver Maurice (Hon Director, The International National Trusts Organisation (INTO))**

Maurice, O. 2010. INTO – The Future. pp 171-174 in *Making the Right Connections: a conference on conservation in UK Overseas Territories, Crown Dependencies and other small island communities, Grand Cayman 30th May to 5th June 2009* (ed. by M. Pienkowski, O. Cheesman, C. Quick & A. Pienkowski). UK Overseas Territories Conservation Forum, www.ukotcf.org

INTO is a network of National Trusts and similar organisations from around the world, united by their common interest in the conservation and enjoyment of our shared heritage.

We bring people together to exchange information, develop and promote best practice, and work to effect change. INTO's mission is to "promote the conservation and enhancement of the heritage of all nations for the benefit of the people of the world and future generations".

INTO offers a communications network (website, e-bulletins, conferences), capacity building support, an expert knowledge bank, training programmes, strategies for collaborative projects and advocacy, and a forum for advancing intercultural understanding and the development of civil society.

The National Trust movement has grown to encompass more than 45 organisations throughout the world. The 'trust' model has evolved and been adapted to national circumstances but the basic hallmarks remain the same. National Trusts are independent organisations that help people and communities to protect irreplaceable heritage - intangible and tangible, both cultural and natural.

Beginning in the 1970s, many of these bodies came together at regular intervals to exchange best practice within the global movement, to develop professional expertise among staff and volunteers, to stimulate the formation of more National Trusts and to consider specific conservation issues that transcend national boundaries and that may benefit from a collective approach (such as tackling climate change).

The 13th International Conference of National Trusts (ICNT) *Heritage of the World in Trust: Conservation in a Changing Climate*, will be hosted by An Taisce The National Trust for Ireland, in Dublin from 13th - 17th September 2009.

Heritage is important in its own right, but also as a key contributor to the lives we want to lead in the future. INTO can demonstrate the potential of our built, natural and cultural heritage, to drive the economy, develop people's skills and improve quality of life by showing that the National Trust model is helping nations meet many contemporary challenges - economic and social as well as environmental.

Oliver Maurice, Hon. Director of Membership Development and Services, The International National Trusts Organisation (INTO) olmaurice@aol.com At a time when there are so many changes taking place in the world, from recessions to global warming, from man-made to natural disasters, from demographic to political changes, cheap travel creating mass tourism, and increasing pressures on our natural resources, the threat to the cultural and natural heritage of the world intensifies.

It is against this background that the International National Trusts Organisation (INTO) was founded in December 2007 in Delhi. It could not have come at a better moment, for INTO's mission is to "promote the conservation and enhancement of the heritage of all nations for the benefit of the people of the world and future generations."

INTO is the vision of the members of the original Steering Committee, now the Executive Committee, who saw the need for there to be an overarching organisation that could bring together the national and heritage trusts around the world as a global family united in their common purpose.

Shortly after its foundation, the Executive appointed an Officer, Catherine Leonard, to run the Secretariat, followed by two honorary Directors, Geoff Read, who is responsible for fundraising and infrastructure, and myself, in charge of membership development and services. INTO is a membership-based organisation that brings people together to exchange information, develop and promote best practice and work to effect change.

Its members will normally be national, voluntary, not-for-profit, membership-based organisations that are substantially independent and autonomous of government, operating at a national level and engaged in practical management of the cultural and/or natural heritage. There are also Associates and Affiliates, and recently it has been agreed that an individual can join as an Amicus.

INTO offers its members a communication network that connects organisations around the world through its website, e-bulletins, workshops and, every other year, through the International Conference of National Trusts: the next one is due to take place in Dublin in Sept 2009.

It provides also: a network of experts and a knowledge bank; capacity building support for existing trusts and support in establishing new trusts; training and exchange programmes; strategies for collective advocacy; and a forum for advancing intercultural understanding and the development of civil society. So how is the mission to be accomplished? I will touch on some of the things that we are putting into practice and follow that with ideas for the future:

1. An increasing membership base. We have a number of members signed up and plenty more who are keen to join but we need to increase this number substantially and to encourage associates and affiliates to join, as well as individuals. The larger the family, the more powerful the voice. We have already started to do this by raising awareness of our existence through meetings with like-minded organisations such as UNESCO, IUCN, ICO-MOS and Europa Nostra, an event that took place at the Canadian Embassy in London last November and via links to our website

2. Fundraising. A strategy has been developed both for core funding, which is unlikely to be met by membership fees alone and for project costs, some of which I have already touched on. We hope to establish funds to support our members' own projects as appropriate.

Advocacy. This is fundamental to INTO's 3. mission. So often governments around the world give low or no priority to their heritage, ignoring the fact that it is often the very asset that can draw tourists to their country and thus increase their GDP. It is vital that tangible and intangible heritage, both cultural and natural, is put at the heart of global and national policy making. And it is not merely policies for the protection and conservation of the heritage; it is also ensuring that there are rescue plans in place in the event of seemingly everincreasing natural disasters and human conflicts. We are hoping to develop an advocacy programme, funds permitting, that will achieve these aims and at the same time will support national trusts with campaigning techniques at a national level

4. Assisting with the establishment of new trusts. Another key element of our mission is to help countries that are wishing to set up a national or heritage trust. In terms of advocacy and raising awareness of the need for protection of the heritage, there is no better way than by leading by example and establishing an appropriate organisation.

We already have had a number of requests for assistance from Canada, South Africa and a number of other African countries, and most recently Kurdistan. The idea of sending out 'Task Forces' of experts, normally volunteers, to the countries in question is being considered

5. Access to information. The INTO website is a repository for documentation from the various trusts around the world – legislation, strategies, business plans, advocacy documents, etc. - to inspire and assist other trusts facing similar issues. The bi-annual e-bulletin gives unparalleled upto-date information in one place, from the global family of trusts.

6. Exchange of best practice. Because INTO has a knowledge bank and access to experts, it is in a strong position to provide its members, associates and affiliates with guidance as to best practice to save any one organisation from having to "reinvent the wheel"

As an example of this, I recently put the local office of the Environment Department in the area where I live in France, in touch with the National Trust in the Lake District in NW England, where I had previously worked. The French were trying to establish the best methods of restoring eroded footpaths in the mountains. For over 30 years, the NT has been dealing with this problem and a visit by the French was arranged. They learnt a huge amount in 3 days, culminating in the extreme likelihood of an exchange programme being organised and the possibility of a tripartite partnership with Ireland to bid for European funding.

7. I mentioned earlier the ICNT. This biennial event is the cornerstone of all that we do. It is the meeting ground for new ideas, best practice, networking, training and learning from others. It is an opportunity for experts on a particular topic to convey their thoughts to the gathering, for a series of workshops on specific relevant subjects and for site visits to learn how the host country deals with certain issues. Above all there is a spirit of great comradeship at the ICNTs amongst the global family that is now INTO.

The Conference in Dublin on 14-17 September 2009 is entitled *Heritage of the World in Trust – Conservation in a Changing Climate*. Little did we know when choosing the title some months ago that the pace of change in the financial climate would accelerate so fast that the Conference itself was at one time threatened!

1. The establishment of an Expert Network, by seeking volunteers willing to participate, through the e-bulletin or website. A number of advisory services, including the INTO Task Forces, will then be set up and funding sought

2. Professional Training. Best training practice in natural and cultural heritage issues will be identified across the world; courses will then be designed and promoted and funding sought

3. Funding will be sought to support research into the value of the National Trust model

4. Funding advice. INTO will offer advice and support to its members on where to go for external funding for specific projects. This will be supported by a volunteer at our office in London

5. Secondments. We hope to be able to facilitate secondments by matching the requirements of the host member to the appropriate skills of potential secondees. Experiences gained will then be shared with the wider INTO network through the website.

6. World Heritage Exchange Programme. We are hoping to establish an exchange programme that will enable staff or volunteers from our member organisations to work with colleagues from other trusts to gain new skills and experiences. This particular programme would focus specifically on World Heritage Site management. INTO would seek to work with relevant partners including UNESCO, ICOMOS and IUCN as well as the States Parties to the World Heritage Convention

I hope I have managed to convey to you an outline of the work of INTO both current and in the future, and some of the challenges it faces in bringing together the global community of heritage conservation organisations.

The 21st century is a time when built and natural heritage around the world is under increasing threat from environmental decay, neglect and conflict. Against this background is a growing awareness and recognition of the value of collaborative international action.

As it grows so INTO will be in a stronger position to enhance this collaborative approach and reverse the decline.

So let's go INTO - the future!

Our future plans include:



### JNCC Overseas Territories and Crown Dependencies Programme

### Tara Pelembe, Nikki Chapman, Deborah Procter, Deanna Donovan & Marcus Yeo (Joint Nature Conservation Committee)

Pelembe, T., Chapman, N., Procter, D., Donovan, D. & Yeo, M. 2010. JNCC Overseas Territories and Crown Dependencies Programme. p 175 in *Making the Right Connections: a conference on conservation in UK Overseas Territories, Crown Dependencies and other small island communities, Grand Cayman 30th May to 5th June 2009* (ed. by M. Pienkowski, O. Cheesman, C. Quick & A. Pienkowski). UK Overseas Territories Conservation Forum, www.ukotcf.org

The JNCC Overseas Territories and Crown Dependencies Programme has an overall aim to "Provide, to UK Government departments, the Governments of the Overseas Territories and Crown Dependencies and others, timely and sound advice to support the achievement of the 2010 biodiversity target, the progressing of Environment Charters, and the implementation of multilateral environmental agreements". This is being done through 5 projects

- 1. Advice and Communications
- 2. Multilateral environmental Agreements
- 3. Agreement on the Conservation of Albatrosses and Petrels
- 4. Funding and Research
- 5. Sustainable Development (includes invasive species, economic valuation and climate change)

In addition to a general overview of the programme, 5 areas of work that are being developed under these projects will be displayed in posters i.e. economic valuation, ecosystem services, UKOT research and training programme, UKOT and CD funding project, climate change. More detailed information is available on the JNCC website: http://www.jncc.gov.uk/page-4079

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# The UK Overseas Territories: the UK's hidden natural treasures

### **Royal Society for the Protection of Birds**

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www.rspb.org.uk/ourwork/conservation

(Note: this article was prepared from a leaflet, by UKOTCF editorial staff at the request of RSPB.)

### Background

The UK has responsibility for 16 Overseas Territories. These are mostly small islands dispersed across all the world's major oceans. They range from tropical coral atolls in the Indian and Pacific Oceans, to windswept volcanic landmasses rising from the depths of the South Atlantic. These spectacular islands are home to plants and animals that are found nowhere else in the world, and many are important seabird breeding areas.

### The importance of biodiversity

The UK Overseas Territories are astoundingly rich in bird species. Worryingly, there are over 30 breeding bird species facing extinction within the Territories, compared to none at all in the UK itself. This places the UK ahead of countries like Madagascar and South Africa –which are famous for their wildlife – in terms of numbers of globally threatened birds. The people of the Territories are also reliant on the natural environment for their livelihoods and quality of life. The economies of many of the islands are dependent on revenue raised from fisheries and tourism. Mangroves, forests and coral reefs provide protection from hurricanes, which under current climate change projections are likely to become more intense in the future.

### An uncertain future

Many species face a high risk of extinction and ecosystems face irreversible destruction if current efforts to safeguard them are not strengthened. Most of the Territories have small populations and limited resources, so look to the UK for assistance. For example, Tristan has a population of just 275 people, yet there are 11 globally threatened birds breeding there. This tiny community has a huge responsibility to bear.

### Threats

- The impact of introduced invasive species, such as rats and feral cats, has been catastrophic, causing species extinctions and reductions in every Territory.
- One third of the world's albatrosses breed on



Anegada Island, British Virgin Islands (Photo: Andy McGowan)



Birdwatchers (Photo: Stephen Mendes)

the UK Overseas Territories. Long-line fishing kills 100,000 albatrosses per year so is having a devastating impact.

- Tourism is rapidly expanding and in some places, is in danger of damaging the natural environment on which it depends.
- Although beyond the Territories' control, climate change is a threat to many of the low-lying islands. As sea levels rise, some islands will disappear.

## Threatend Birds in the UK Overseas Territories

### 1. Ascension

Ascension frigate-birds were previously confined to breeding on the 5-hectare offshore Boatswain Bird Island. The RSPB has supported the successful eradication of feral cats from the mainland so they can return to nest.



Boatswainbird Island, Ascension (Photo: Clare Stringer)

Threatened breeding bird species: Ascension frigatebird

### 2. Anguilla

The network of ponds on the mainland are a key stopover point for migrant birds flying to and from North America.

### 3. Bermuda

For three centuries, the Bermuda petrel (cahow) was thought to be extinct. A tiny remaining population was found in 1951, and determined conservation efforts on the island have led to a steady increase - a remarkable success story.

Threatened breeding bird species: Bermuda petrel (cahow)

### 4. British Indian Ocean Territory

A collection of remote coral atolls and reefs with



British Antarctic Territory and the Sovereign Base Areas on Cyprus are not included because they are administered separately by the UK government.



spectacular marine life, the Chagos Archipelago also hosts some of the largest and most diverse seabird colonies in the Indian Ocean.

### 5. British Virgin Islands

This archipelago of more than 60 islands, cays and rocks provides an important corridor for North American migrant birds. Great Tobago Island has one of the largest colonies of magnificent frigatebirds in the Caribbean.

### 6. Cayman Islands

The islands boast a wide variety of tropical sealife, but also many bird species, including red-footed boobies and the Cuban (Cayman) parrot. West Indian whistling-duck

### 7. Falkland Islands

A rich southern ocean seabird community supporting albatrosses, four species of penguin and many others. Eradicating rats has brought the Cobb's wren back to some islands.



Black-browed Albatross (Photo: David Osborn)

Threatened breeding bird species: Cobb's wren, black-browed albatross, white-chinned petrel, macaroni penguin, southern rockhopper penguin

#### 8. Gibraltar

As the narrowest crossing point for migrating birds between Europe and Africa, Gibraltar is a critical bottleneck for many European species. A small group of lesser kestrels survives here, although the species has declined massively in Europe due to industrial farming.

Threatened breeding bird species: Lesser kestrel

#### 9. Montserrat

Invasive species are severely degrading the habitat of the Montserrat oriole. Since the volcanic eruptions, the entire world population of this bird is now confined to two tiny patches of forest.

Threatened breeding bird species: Forest thrush, Montserrat oriole

#### **10. Pitcairn Islands**

The decline of bird populations in the Pitcairn group is largely due to predation by introduced rats. Uninhabited Henderson Island was designated a UNESCO World Heritage Site in 1988.

Threatened breeding bird species: Phoenix petrel, Henderson petrel, Henderson lorikeet, Henderson crake, Henderson fruit-dove, Pitcairn reed-warbler, Henderson reed-warbler

### 11. South Georgia and South Sandwich Islands

One albatross dies every five minutes by getting caught on long-line fishing hooks. Fortunately, this island's government has one of the best-managed fisheries in the world and is putting measures in place to reduce the number of birds being killed.

Threatened breeding bird species: Macaroni penguin, wandering albatross, grey-headed albatross, black-browed albatross, white-chinned petrel

### 12. St Helena

Five out of six endemic birds have become extinct since the discovery of this island. The St Helena plover (wirebird) is under threat due to changes in grazing land and predation.

Threatened breeding bird species: St Helena plover (wirebird)

### 13. Tristan da Cunha

The Tristan group is one of the world's greatest seabird colonies. The Inaccessible rail is the smallest flightless bird in the world and is found only on Inaccessible Island – a World Heritage Site.

Threatened breeding bird species: Northern rockhopper penguin, Tristan albatross, Atlantic yellownosed albatross, sooty albatross, spectacled petrel, Inaccessible rail, Gough moorhen, Atlantic petrel, Gough bunting, Tristan bunting, Grosbeak bunting



14. Turks & Caicos Islands

The combined effects of habitat loss, overhunting, and predation by introduced rats, cats and mongooses have wiped out West Indian whistlingducks from some islands.

Threatened breeding bird species: West Indian whistling-duck

### How the RSPB is helping

The RSPB works on the Overseas Territories because of their outstanding importance for biological diversity. Protecting these special places puts a very high level of responsibility on the UK. We work with local conservation organisations, government departments, scientists and volunteers to:

### Protect globally threatened birds

Invasive species are one of the main threats to birds and biodiversity on the Territories. We have successfully eradicated feral cats from Ascension Island so that seabirds, including the Ascension frigatebird, can return to the mainland to breed. We are also assessing the possibility of eradicating introduced house mice from Gough Island, as they are driving both the Tristan albatross and Gough bunting to extinction.

### **Conserve Important Bird Areas**

We have identified 78 Important Bird Areas on the Territories and are assisting partners to conserve these sites. We are working with partners on Montserrat to enable the effective conservation and management of the Centre Hills, the last remaining habitat for the critically endangered Montserrat oriole.

### Build political and financial support

The RSPB is working to strengthen environmental policies and legislation on the UK Overseas Territories. It has commissioned a study to estimate the cost of meeting biodiversity priorities on the Territories. We have calculated a minimum of £16 million per year is needed, which is a small amount compared to the global importance of the wildlife.

Atlantic Yellow-nosed Albatross (Photo: Paul Tyler)



