DARWIN INITIATIVE

DArWiN in TCI

DEVELOPING BIODIVERSITY MANAGEMENT CAPACITY
AROUND THE RAMSAR SITE IN THE TURKS & CAICOS ISLANDS

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Turks & Caicos National Trust
UK OVERSEAS TERRITORIES CONSERVATION FORUM
CABI Bioscience
A division of CAB International

The Darwin Project - Management Plan Produced

The Turks & Caicos Islands support some beautiful, fascinating plants and animals, including species that are internationally recognised for their conservation value. Local communities told the Turks & Caicos National Trust, the UK Overseas Territories Conservation Forum and CABI Bioscience that they valued their natural heritage. They wanted their islands to develop, providing work for local people, but without unnecessary damage to wildlife, archaeological sites, or local culture.

If locally-based, small businesses are to be developed, and traditional crafts encouraged, an infrastructure is needed. Businesses can be built around activities and features used by eco-tourists and other visitors, who come to experience the wildlife and cultural heritage. Such activities include the opening of trails (using the local name of "field-roads"), visitors' centres, and so on. To ensure local ownership and "environmental democracy" these ideas have been developed in a collaborative way, with management led by the Turks & Caicos National Trust.

The Darwin Project was designed to help, by building local capacity for sustainable development and biodiversity management. Work focused on the terrestrial habitats and species around the Ramsar site centred on Middle Caicos, where Project Officer Bryan Naqqi Manco was based. The Darwin Project has brought together many local stakeholders, as well as international specialists. Although the project has officially finished, these groups are continuing to work together, using the tools that the Darwin Project has provided. The establishment of these collaborative networks, and the constructive dialogues that are now taking place, are themselves important outputs from the Darwin Project. Others are described in this newsletter.

One of the key outputs of the project is a management plan - *Plan for Biodiversity Management and Sustainable Development around Turks & Caicos Ramsar Site* Version 1.0. This draws together local knowledge, results from surveys of plants, animals and habitats, and information on heritage sites, such as centres of Lucayan activity (c.750-1500AD) and Loyalist plantations (c.1780-1830AD). Particular sites of conservation value, and of potential interest to visitors, have been identified. Recommendations have been developed for the future protection of these sites, and for the ways in which eco-tourists might be encouraged to visit them. As examples, amongst the trails identified as being of potential interest to visitors to Middle and North Caicos are Crossing Place Trail and field-roads to Haulover Plantation, Garden Pond, Armstrong Pond and White-top. A number of such trails are already maintained by the Turks & Caicos National Trust as passable tracks, but others require some clearance work. A start is being made with support from the UK Government's Foreign & Commonwealth Office (FCO) and the Forum, and additional funding is being sought. Other sites of particular biodiversity value and potential visitor interest include Man O' War Bush and Ocean Hole (accessible by boat), Flamingo Ponds, the Wades Green area and Conch Bar Caves. The latter are particularly important, for example, as the main roosting site for cave-dwelling bats on the island. Although designated as a National Park, the conservation requirements of the caves required urgent consideration. The management plan provides this, with a detailed set of recommendations for the future management of the site. This is an example of the type of plan that can be developed for specific trails and sites. Generic recommendations for management, interpretation materials, stakeholder involvement, and so on, are given for other sites, as part of the overall management plan.

If properly managed, trails like the Haulover Plantation Field-road (above) provide ideal places for visitors to experience the biodiversity and cultural heritage of the Turks & Caicos Islands (photo: O Cheesman/CABI Bioscience)

The first full version of the management plan was finalised after consultations that will continue as the plan evolves. There was an initial presentation to the local community, in one of the many community meetings that were a feature of this project, and a full-day seminar with senior staff of Government Departments and NGOs. The current version of the plan was presented to TCI Executive Council (Governor and Ministers) in October 2002, where it was well received, with a request that the work be developed further.

Ethlyn Gibbs-Williams (Turks & Caicos National Trust) and Dr Mike Pienkowski (UK Overseas Territories Conservation Forum) proudly display the Management Plan produced by the Darwin Project, surrounded by locally produced craftwork (photo: TCNT)

The management plan is available on the Forum website, at www.ukotcf.org. It is a "living document" that will continue to develop, as new information is collected, and as work is undertaken at particular sites.

Birds

Birds provide some of the most spectacular examples of biodiversity, and bird-watchers will travel around the world to see rare and unusual species. The current bird list for TCI comprises some 200 species, representing 44 different families. Visitors (and locals) who want to know about the birds of TCI can get two excellent publications from the Turks & Caicos National Trust: Patricia Bradley's (1995) *Birds of the Turks & Caicos Islands – the official checklist,* and Richard Ground's new book *Birds of the Turks & Caicos Islands.* However, Darwin Project bird surveys, led by Dr Mike Pienkowski (UK Overseas Territories Conservation Forum, UK), have generated new information. As well as feeding into the management plan, this will contribute significantly to the BirdLife International *Important Bird Areas* analysis, currently underway for the Americas.

The yellow warbler (left) and tricolored heron (right), are just two examples of birds that rely on TCI's dryland and wetland habitats (photos: M Pienkowski/UK Overseas Territories Conservation Forum)

TCI is important for water birds (resident and migratory), providing unusually large, undisturbed areas of their wetland habitats. The islands support internationally important populations of the reddish egret *Egretta rufescens,* the brown pelican *Pelecanus occidentalis*, the West Indian flamingo *Phoenicopterua ruber*, several species of breeding terns and several species of wintering shorebirds, amongst many others. TCI is also home to the West Indian whistling duck *Dendrocyhna arborea*, listed as *Vulnerable* by the World Conservation Union (IUCN).

Work under the Darwin Project has shown that TCI is also much more important for dryland species than had been appreciated. The scrub and woodland of the higher ground, inland on Middle Caicos (and other islands), support important breeding populations of endemic and near endemic species. These include the Cuban crow *Corvus nasicus* (restricted to Cuba and the Caicos islands), a subspecies of the thick-billed vireo *Vireo crassirostris stalagmium* (endemic to the Caicos islands), and a subspecies of the Greater Antillean bullfinch *Loxigilla violacea ofella* (endemic to Middle and East Caicos). In addition, the dry shrublands provide important wintering areas for birds that breed in North America, notably Kirtland's warbler *Dendroica kirtlandii.* This species, listed as *Vulnerable* by the IUCN, is one of the most threatened bird species of the region, with a world population of only about 3000 individuals.

Herpetiles

Herpetiles (reptiles and amphibians) are of great interest in the wider Caribbean region, where many islands support unique (endemic) species and subspecies. The Darwin Project enlisted the help of Dr Glenn Gerber and Tandora Grant (San Diego Zoo, USA) for its herpetile surveys. Glenn and his colleagues are also involved in other work on reptiles in TCI, so he knows the islands well. Glenn's initial work on the herpetiles of Middle Caicos has been developed by Bryan Naqqi Manco.

The Darwin Project recorded the following lizards in its surveys. The Turks & Caicos bark anole *Anolis scriptus*, a gecko *Aristelliger hechti,* the Turks & Caicos rock iguana *Cyclura carinata*, a house gecko *Hemidactylus mabouia*, the curly tail *Leiocephalus psammodromus*, the Mabuya skink *Mabuya mabouya*, and the Caicos Islands reef gecko *Sphaerodactylus caicosensis*. The pygmy geckos *Sphaerodactylus mariguanae* and *S. underwoodi* are also part of the TCI fauna. Three snakes were also recorded - the Bahamian rainbow boa *Epicrates chrysogaster*, the Caicos Islands trope boa *Tropidophis greenwayi*, and a blind snake (possibly *Typhlops richardi*). Two frogs (native to the Caribbean, but possibly introduced to TCI) were also found - the greenhouse frog *Elutherodactylus planirostris* and the Cuban treefrog *Osteopilus septentrionalis*.

As expected, many TCI reptiles are endemics. Four lizards and one snake are species unique to TCI, and another snake and three lizards are represented here by unique subspecies. One of these, and the one remaining lizard, are species that occur only in TCI and on adjacent southern Bahamian islands. Because they are found in so few places in the world, these animals are very rare in global terms, and some are already recognised internationally as having special conservation status. For example, three of the reptiles listed above are protected under the Convention on International Trade in Endangered Species (CITES), and one was recently listed as *Critically Endangered* by the World Conservation Union (IUCN).

Reptiles like this bark anole can be difficult to spot amongst the vegetation, but like to keep an eye on visitors (photo: O Cheesman/CABI Bioscience)

The Darwin Project did not include marine turtles in its reptile studies, but work by others (including the TCI Government's Department of Environmental and Coastal Resources) has demonstrated the importance of TCI sites for nesting of important and vulnerable species. These include the green turtle *Chelonia midas*, the hawksbill turtle *Eretmochelys imbricata* and the loggerhead turtle *Caretta caretta*. These species are all internationally recognised as having special conservation status.

Plants

Some TCI plants are included in Donovan and Helen Correll's seminal (1982) work, *Flora of the Bahama Archipelago.* However, earlier botanical surveys here were far from complete, so the Darwin Project work led by Dr Gerald "Stinger" Guala and Jimi Sadle (Fairchild Tropical Gardens, USA) has provided valuable new information. Jimi obtained funding from Fairchild for extra fieldwork, visiting TCI with Jen Trusty in September 2002. Fred Burton and Bryan Manco have also collected many specimens for the project, and Kathleen McNary Wood (Providenciales) has provided valuable advice. A visit by Dr Colin Clubbe (Royal Botanic Gardens, Kew) also contributed valuably. As expected, the TCI flora is similar to that of the Bahamas. This reflects geological and climatic similarities amongst the islands, as well as their close proximity to one another.

Dr Oliver Cheesman (CABI Bioscience), Jimi Sadle (Fairchild Tropical Gardens) and Bryan Naqqi Manco (left to right) take a break from fieldwork (photo: O Cheesman/CABI Bioscience)

Work is still on-going to identify plant material collected under the Darwin Project, but hundreds of specimens have already been mounted and processed for herbarium storage. These include a number of new records for TCI, such as *Malaxis spicata, Oldenlandia callitrichioides, Ponthieva racemosa* and *Psychotria nervosa.* Plants of particular interest in TCI include the palm, *Pseudophoenix sargentii.* This was initially seen growing in cultivation, but wild populations have now been located - an important discovery. The orchid, *Encyclia caicensis* is also of particular significance, as an apparent TCI endemic. At least half a dozen other plants may also be unique to the islands. Some of the plant material collected by the Darwin Project can be viewed in the "virtual herbarium" established by Fairchild Tropical Gardens (http://www.virtualherbarium.org/lf/tci/tci.html).

As well as individual species of particular interest, the plant communities supported by TCI habitats are also important. The patchy *Pinus caribea* var. *bahamensis* woodlands, and the gallery forest adjacent to Wade's Green Plantation (North Caicos), as well as the dry scrub-woodland on Middle Caicos, are of particular interest, and worthy of further investigation. The limited freshwater habitats support locally rare botanical communities, the value of which needs to be recognised in conservation planning. Fairchild Tropical Gardens hope to continue studying the plants of TCI, building on the foundations laid by their work under the Darwin Project, leading to a better understanding and appreciation of the botanical biodiversity of the islands.

Insects

TCI probably supports many more species of insect than of bats, birds, herpetiles and plants combined. Often overlooked, insects play a vital role in maintaining the healthy functioning of ecosystems, providing resources and services for other animals and plants. Insect studies under the Darwin Project have been led by Dr Oliver Cheesman (CABI Bioscience, UK) and Dr Roger Booth (The Natural History Museum, UK). Two particular insect groups have been studied in detail, butterflies and beetles. A book on the butterflies of TCI, based on information collected under the Darwin Project, is planned.

Some 47 different butterflies have been recorded in TCI over the years, although fewer will be present at any one time. Some species only visit the islands fleetingly, whilst others are resident here, making up an attractive part of the biodiversity of the islands. Of particular local importance is a subspecies of Drury's hairstreak *Strymon acis leucosticha*, which appears to be endemic to TCI. Another five subspecies of butterfly occur only in TCI and the neighbouring islands of the southern Bahamas (Mayaguana and the Inaguas). These are the Turk Island leaf butterfly *Memphis intermedia intermedia*, Chamberlain's sulphur *Eurema chamberlaini mariguanae*, Thomas's blue *Cyclargus thomasi clenchi*, the dusky swallowtail *Heraclides aristodemus bjorndalae,* and a form of *Wallengrenia* skipper.

The beetles of TCI have provided a particular challenge. Unlike the butterflies, they have never been studied before. Dr Roger Booth has collected hundreds of specimens, and is still at work identifying the different species encountered – at least 200 so far. Some are relatively widespread, common species, but others are rarities with very restricted distributions. Because of the lack of previous studies, almost all are new records for TCI. Some of the beetles collected may even be new species, never discovered anywhere in the world before. Amongst the largest identified specimens are a longhorn beetle known locally as the "jack o'lantern" *Lagocheirus araneiformis* and the bright green ground beetle *Calosoma splendidum*, which is only known from a few islands across the Greater Antilles and Bahamas. This mighty predator of the insect world is about an inch long, but other species of beetle found in TCI are rather smaller. A feather-winged (ptiliid) beetle found whilst sieving beach debris measures only half a millimetre in length.

This subspecies of Drury's hairstreak appears to be unique to TCI – other endemic insects are also likely to be found on the islands (photo: O Cheesman/CABI Bioscience)

Habitats

Flats and saltmarshes make up much of the habitat in the southern part of North, Middle and East Caicos. Exposed to varying degrees of tidal flooding, these habitats support characteristic vegetation, tolerant of salt water (photo: O Cheesman/CABI Bioscience)

As well as surveys for bats, birds, herpetiles, insects and plants, the Darwin Project has invested much effort in developing a detailed and accurate habitat map for the study site in TCI. Knowledge of the distribution of habitats, as well as species, is vital for biodiversity management planning. Fred Burton (Cayman Islands) co-ordinated the production of a habitat map for the project. A provisional map (based on satellite imagery) was prepared first, and then habitats were surveyed on the ground to ensure the map's accuracy. Input from plant specialists was important at this stage, as many habitats are distinguished from one another by their characteristic vegetation. Fred, Bryan Naqqi Manco and Dr Mike Pienkowski spent many days in the field, fighting through dense undergrowth in places, to check and record the locations of particular plant communities and the boundaries between habitat types. The survey results were analysed and refined by Fred and Mike, using specialised Geographic Information System (GIS) software, and resulted in the colour-coded map shown below. Their work also provided an accurate map of the boundary of the TCI Ramsar site – information required by the TCI and UK governments. The detailed outputs of the habitat mapping exercise form an important part of the management plan developed by the project, but the main map only is reproduced here to illustrate the range and distributions of habitats across the study site.

The central, inland areas of North, Middle and East Caicos are dominated by low-growing scrub. These dry shrublands support a range of evergreen and deciduous woody plants, as well as herbaceous species including orchids (photo: O Cheesman/CABI Bioscience)

The habitats mapped by the project include three types of saltmarsh, one dominated by herbaceous plants, another by grasses, and the third characterised by scattered buttonwood *Conocarpus erectus* var. *seriacea* trees. There are a number of woodland and shrubland habitats, ranging from those (typically coastal) mostly dominated by red mangrove *Rhizophora mangle*, to the dry mixed deciduous/evergreen shrublands that cover large areas inland. Intermediate, seasonally flooded habitats include woodlands characterised by the presence of Bahama pine *Pinus caribea* var. *bahamensis*, or dominated by different trees, and shrublands dominated by buttonwood and other plants. Unvegetated habitat types include exposed intertidal mud, rocky mud flats, and natural brine pans. Distinct areas of sand flats, where evidence of flamingo nesting was recorded in some areas, were partially vegetated by highly specialised, salt tolerant plants. Ponds of different sizes also represent an important habitat category in their own right.

Of particular interest are the complex transitional zones that occur between the diverse wetland habitats, and between these and the dryland and marine habitats. Such natural transition complexes are becoming extremely rare in coastal areas throughout the world.

Some inland areas support extensive stands of Caribbean pine, as well as other woody and herbaceous species. These areas are typically exposed to seasonal flooding by freshwater during periods of heavy rain (photo: O Cheesman/CABI Bioscience)

Middle Caicos and adjacent islands support many ponds (illustrated here by Armstrong Pond). Some are regularly inundated by seawater, whilst others are less saline. The aquatic biodiversity and shore-line vegetation of these ponds varies with the salinity of the water and the local topography (photo: O Cheesman/CABI Bioscience)

Bats

As well as being fascinating creatures in their own right, bats play an important role in maintaining the ecological balance of the ecosystems in which they occur. Some visit flowers, helping to pollinate plants, whilst others feed on fruit, dispersing seeds in the process. Others feed on insects (including mosquitoes!), helping to regulate their numbers. The bats found in TCI include all of these types of species.

The Darwin Project's bat experts were Dr Tony Hutson (UK) and Tim McCarthy (Carnegie Museum, USA), who worked closely with Bryan Naqqi Manco. They found five species of bat on Middle Caicos, the Cuban fruit-eating bat *Brachyphylla nana*, the buffy flower bat *Erophylla sezekorni*, Leach's long-tongued bat *Monophyllus redmani*, the big-eared bat *Macrotus waterhousii* and the red bat *Lasiurus borealis*. The first three are unique to parts of the Greater Antilles and the Bahamian Archipeligo.

Tony and Tim have also studied the scientific literature, which revealed two additional bats recorded in Providenciales in recent years - the Jamaican fruit-eating bat *Artibeus jamaicensis* and the silver-haired bat *Lasionycteris noctivagans*. Evidence of the funnel-eared bat *Natalus stramineus* and the Mexican free-tailed bat *Tadarida brasiliensis* has also been found in TCI, but from fossil material only. It appears that the Antillean fruit bat *Brachyphylla cavernarum* has been recorded here in error.

Apart from the species mentioned above, other species of bat may occur in TCI. These include further species of *Natalus*, the big brown bat *Eptesicus fuscus*, the velvety free-tailed bat *Molossus molossus*, and even the fishing bat *Noctilio leporinus*.

Caves like those found at Conch Bar (left) are home to a range of special creatures. These include the big-eared bat (right) and other bat species (photos: M Pienkowski/UK Overseas Territories Conservation Forum)

Four of the five species of bat found live in caves, and the Conch Bar Caves in particular provide an important refuge for them. For this reason, it was especially important for the Darwin Project to develop a management plan for the caves. This is included in the overall management plan, and provides detailed recommendations for cave visitors, helping to ensure that the resident bat populations have a secure future.

Capacity Building, Training & Environmental Education

As well as collecting information on local species and habitats, the Darwin Project was committed to providing capacity building, training and environmental education. One of its first achievements was the recruitment of Bryan Naqqi Manco to the Turks & Caicos National Trust. Bryan has become a popular and valuable member of the Trust team. After two years on Middle Caicos, co-ordinating visits by international specialists and conducting fieldwork for the Darwin Project, Bryan is now based on North Caicos (working on projects funded from other sources). Amongst his other activities, Bryan has instigated a programme of school visits and other environmental awareness activities. Under the Darwin Project, there were regular classroom visits to the elementary school in Conch Bar, educating the youngest generation about some of the animals and plants with which they share Middle Caicos. Visits to other schools in TCI have involved older students, and some of those from the British West Indies Collegiate (Providenciales) and the Raymond Gardiner High School (North Caicos) were able to participate directly in survey work during visits by bat, bird, herpetile, insect and plant specialists.

Whilst the specialists were working on Middle Caicos, there was the opportunity for others to participate, learning some of the skills of survey work and species identification. The biodiversity of the study site will need to be monitored into the future, if knowledge of local species and habitats is to be up-dated, and the effects of management methods assessed. Amongst those who were able to take advantage of this "hands on" experience were members of Turks & Caicos National Trust staff, Jasmine Parker and Amber Thomas (from the TCI Government's Department of Environmental & Coastal Resources), and Nicola Warwick and Richard Wildman (teachers from Providenciales and North Caicos). Mike Pienkowski held a seminar with senior biology students at the TCI Community College on the study, the management plan and future developments. Equipment and reference books bought by the Darwin Project for the National Trust will also assist future survey and monitoring work.

The Darwin Project has contributed to environmental education and training, involving children (Tony Hutson visits the Conch Bar Elementary School - left), young adults (Jimi Sadle explains plant identification to college students – right) and professionals (photos: O Cheesman/CABI Bioscience)

The participation of the Middle Caicos community in the management planning process has itself involved environmental education, but this has been very much a two-way process! Project personnel have learnt much about the natural resources of the islands from local people, as well as raising awareness of specific conservation issues. The local Project Committee has provided a particular forum for developing ideas and actions, and will now lead on work to implement the management plan. However, participation in community meetings, planning discussions and project presentations has helped many more local people (on Middle Caicos in particular) to participate actively, and with confidence, in management planning and action, and in environmental democracy in general.

Darwin Project: Related Activities - Middle Caicos Eco-centre

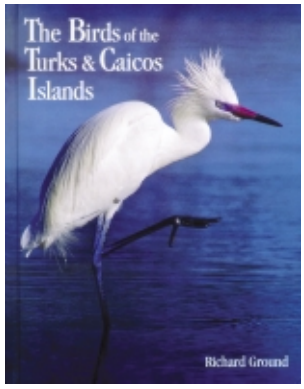
In the last newsletter, we reported that the TCI Government had granted the Turks & Caicos National Trust a long-term lease on the former Vera Hamilton Primary School in Bambarra, Middle Caicos. The Trust plans to convert the old school building and surrounding land into a biodiversity study centre for local people and visitors. Since that time, the Trust has secured (mainly from local sources) much of the substantial funding needed to renovate the building. They have also developed designs for the Centre and its facilities, and building work is expected to commence shortly. Meanwhile, the Trust continues to seek funding to complete the renovation and fit out the Centre.

The old school buildings in Bambarra are to be converted into an eco-centre for TCI residents and visitors (photo: O Cheesman/CABI Bioscience)

Books, Articles & Presentations

All of the specialists involved in biodiversity survey work under the Darwin Project hope to produce publications in the scientific literature, making the findings of the project available to the international scientific community. However, it is just as important to share the results with local people and visitors to the islands. As the plants and animals of TCI become more widely appreciated, the more likely it is that the wildlife can be effectively monitored, and that people will visit TCI to see it. The Turks & Caicos National Trust has been working hard to communicate the findings of the Darwin Project, in publications and through environmental education activities. Articles have appeared in the *Times of the Islands* magazine, and more are planned. For a wider audience, the Forum has included news of the work in its various publications, and presentations have been made at international meetings. For example, Ethlyn Gibbs-Williams presented the work of the project at the Forum's Bermuda conference in March 2003 (the Proceedings of which are available on the Forum website - www.ukotcf.org).

A number of new books are now available, or are being prepared, which describe some of the biodiversity of TCI. The Turks & Caicos National Trust recently published *The Birds of the Turks & Caicos Islands* by Richard Ground. As well as being a talented wildlife photographer and natural historian, Richard was until recently TCI Chief Justice. He has been an active supporter of the Darwin Project, which was happy to provide some new bird information for his book. Richard is now working on two more books, one on the shells of TCI, and one on the butterflies of the islands. He is working with Dr Oliver Cheesman, to combine the information on butterflies collected by the Darwin Project with Richard's excellent photographs and observations. MacMillan Caribbean has recently published *Flowers of the Bahamas and the Turks & Caicos* by Kathleen McNary Wood, an easy-to-use guide to some of the indigenous and introduced plants found in the islands.



The project partners are also developing a set of information cards, specifically for visitors to some of the key sites identified by the project. These describe some of the animals and plants that visitors might see as they walk the trails or look for birds across the ponds. More information will be available at the Middle Caicos Eco-Centre, helping local people and visitors to understand and appreciate the wildlife around them.

Acknowledgements

The project partners would particularly like to acknowledge the financial support of the Darwin Initiative. However, the success of the Darwin Project in TCI has benefited from generous support from many institutions and individuals. We would also like to thank the Governors and their staff, the Honourable Chief Minister, the Honourable Ministers for Natural Resources, the Permanent Secretary for Natural Resources, the Department of Environmental and Coastal Resources, the Department of Economic Planning & Statistics, the District Commissioners, and the communities of Middle and North Caicos.

Activities that have complemented and strengthened the Darwin Project have received funding from the UK Government's Foreign & Commonwealth Office, and some flights have been subsidised under British Airways *Assisting Conservation* programme. ESRI assisted in respect of GIS software. The TCI Government has provided project vehicles, and the Norbellis Foundation has assisted with accommodation.

Much of the survey and research work was undertaken by the Forum network and other international specialists in unpaid time, and many people across the islands have also given up their time, to participate in fieldwork, planning meetings and workshops. Many thanks are due to all of them.

Through regular meetings (like this one in Conch Bar), local communities have contributed to the running of the Darwin Project and the development of the management plan.

News from The Darwin Initiative

The UK Government's Darwin Initiative celebrated its tenth anniversary in 2002 – ten years of innovative conservation projects around the world, guided by the principals of the Convention on Biological Diversity. The success of the Initiative was acknowledged by the British Prime Minister, who announced increased levels of funding. The Initiative has adopted a new logo, and introduced some new procedures, particularly aimed at assisting project development and to help successful projects increase their long-term impact. There were 34 new Darwin projects announced in March 2003, including work to support sustainable farming of coral reefs in Fiji and the Soloman Islands, conservation of rhinos and flamingos in Kenya, protection of marine turtles in Anegada (British Virgin Islands) and the further development of conservation planning in Tristan da Cunha.

Further information can be found at the Darwin Initiative website: http://www.darwin.gov.uk/

News from Turks & Caicos National Trust

The Turks & Caicos National Trust is the lead statutory non-governmental organisation within the Turks & Caicos Islands that is mandated to carry out conservation management. Over the past four years, the Trust has contributed immensely to public awareness, raising the level of conscientiousness amongst residents and visitors about the importance of the native flora and fauna. This accomplishment was largely brought on through the initial activities of the Darwin Project and, more recently, the first steps in the implementation of the *Plan for Biodiversity Management and Sustainable Development around Turks & Caicos Ramsar Site.*

The National Trust's on-going programmes are indicative of the commitment and success of the institution. Capacity building and institutional strengthening are flagged as areas of focus for the immediate future.

Details of the National Trust's various programmes and projects, forthcoming events, as well as information on membership, merchandise and publications, can be found on the Turks & Caicos National Trust website: http://www.tcimall.tc/nationaltrust/

News from UK Overseas Territories Conversation Forum

The Forum has continued to work closely with its member organisations in the UKOTs and UK, UKOT Governments and UK Government on Environment Charters. This concept, which the Forum helped develop, should provide a framework for each UKOT to take forward environmental work in an integrated and effective manner. As a pilot for UKOTs generally, the Forum is facilitating, at the invitation of TCI Government, the development of a strategy for action to implement the Charter. The Forum has also advised UK Government Departments, FCO, DFID and Defra, on various issues including better linking funding support to the Charters, and implementing international commitments. The Forum continues its work in information and capacity building. Important elements here are *Forum News*, its website with database, its regional Working Groups, and the successful conference in Bermuda in March 2003. It has also continued to work in support of individual UKOTs, including working with TCNT to start the implementation of the management plan.

Further information can be found at the UK Overseas Territories Conservation Forum website: http://www.ukotcf.org/

News from CABI Bioscience

CAB International (CABI) continues its work to assist sustainable development and biodiversity management around the world, through its two Divisions, *CABI Bioscience* and *CABI Publishing*. The organisation has recently announced that it will be holding its 15th Review Conference in 2004 in China. Recent work by *CABI Bioscience* in the Caribbean includes a 16-week regional training course on Integrated Pest Management in the cultivation of vegetables, work against the tropical bont tick, and a project assessing taxonomic capacity building needs in the Bahamas. CABI's Caribbean and Latin America Regional Centre (CLARC) has for many years been dedicated to the fight against invasive species in the region. Working with colleagues from the UK, including the Darwin Project's Dr Oliver Cheesman, CLARC have recently completed a review of invasive species threats in the Caribbean, on behalf of The Nature Conservancy (TNC).

Further information can be found at the *CABI Bioscience* website: http://www.cabi-bioscience.org/