

Appendix 1. References

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Appendix 2: Environmental Charter agreed between Turks & Caicos Islands and the United Kingdom

Environment Charter

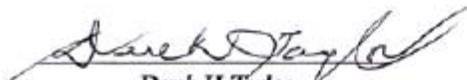
TURKS AND CAICOS ISLANDS

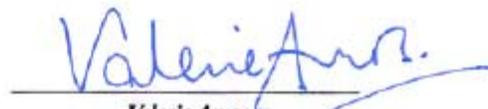


Guiding Principles

*For the UK government, for the government of the Turks and Caicos Islands
and for the people of the Turks and Caicos Islands.*

- 1 To recognise that all people need a healthy environment for their well-being and livelihoods and that all can help to conserve and sustain it.
- 2 To use our natural resources wisely, being fair to present and future generations.
- 3 To identify environmental opportunities, costs and risks in all policies and strategies.
- 4 To seek expert advice and consult openly with interested parties on decisions affecting the environment.
- 5 To aim for solutions which benefit both the environment and development.
- 6 To contribute towards the protection and improvement of the global environment.
- 7 To safeguard and restore native species, habitats and landscape features, and control or eradicate invasive species.
- 8 To encourage activities and technologies that benefit the environment.
- 9 To control pollution, with the polluter paying for prevention or remedies.
- 10 To study and celebrate our environmental heritage as a treasure to share with our children.


Derek H. Taylor
TURKS AND CAICOS ISLANDS
26 September 2001


Valerie Amos
UNITED KINGDOM
26 September 2001

Commitments

The government of the UK will:

- 1 Help build capacity to support and implement integrated environmental management which is consistent with the Turks and Caicos Islands' own plans for sustainable development.
- 2 Assist the Turks and Caicos Islands in initiating, reviewing and updating environmental legislation.
- 3 facilitate the extension of the UK's ratification of Multilateral Environmental Agreements of benefit to the Turks and Caicos Islands and which the Turks and Caicos Islands has the capacity to implement (and a desire to adopt).
- 4 Keep the Turks and Caicos Islands informed regarding new developments in relevant Multilateral Environmental Agreements and invite the Turks and Caicos Islands to participate where appropriate in the UK's delegation to international environmental negotiations and conferences.
- 5 Help the Turks and Caicos Islands to ensure it has the legislation, institutional capacity (technology, equipment, procedures) and mechanisms it needs to meet international obligations.
- 6 Promote better cooperation and the sharing of experience and expertise between the Turks and Caicos Islands, other Overseas Territories and other states and communities which face similar environmental problems.
- 7 Use UK, regional and local expertise to give advice and improve knowledge of technical and scientific issues. This includes regular consultation with interested non-governmental organisations and networks.
- 8 Use the existing Environment Fund for the Overseas Territories, and promote access to other sources of public funding, for projects of lasting benefit to the Turks and Caicos Islands' environment.
- 9 Help the Turks and Caicos Islands identify further funding partners for environmental projects, such as donors, the private sector or non-governmental organisations.
- 10 Recognise the diversity of the challenges facing Overseas Territories in very different socio-economic and geographical situations.
- 11 Abide by the principles set out in the Rio Declaration on Environment and Development (See Annex 2) and work towards meeting International Development Targets on the environment (See Annex 3).

The government of the Turks and Caicos Islands will:

- 1 Bring together government departments, representatives of local industry and commerce, environment and heritage organisations, the Governor's office, individual environmental champions and other community representatives in a forum to formulate a detailed strategy for action. (See Annex 1).
- 2 Ensure the protection and restoration of key habitats, species and landscape features through legislation and appropriate management structures and mechanisms, including a protected areas policy, and attempt the control and eradication of invasive species.
- 3 Ensure that environmental considerations are integrated within social and economic planning processes; promote sustainable patterns of production and consumption within the territory.
- 4 Ensure that environmental and environmental health impact assessments are undertaken before approving major projects and while developing our growth management strategy.
- 5 Commit to open and consultative decision-making on developments and plans which may affect the environment; ensure that environmental impact assessments include consultation with stakeholders.
- 6 Implement effectively obligations under the Multilateral Environmental Agreements already extended to the Turks and Caicos Islands and work towards the extension of other relevant agreements.
- 7 Review the range, quality and availability of baseline data for natural resources and biodiversity.
- 8 Ensure that legislation and policies reflect the principle that the polluter should pay for prevention or remedies; establish effective monitoring and enforcement mechanisms.
- 9 Encourage teaching within schools to promote the value of our local environment (natural and built) and to explain its role within the regional and global environment.
- 10 Promote publications that spread awareness of the special features of the environment in the Turks and Caicos Islands; promote within the Turks and Caicos Islands the guiding principles set out above.
- 11 Abide by the principles set out in the Rio Declaration on Environment and Development (See Annex 2) and work towards meeting International Development Targets on the environment (See Annex 3).

Annex 1 - Illustrative Paper

Topics for consideration by environment committees as components of environmental action strategies.

Note: The circumstances of each OT vary considerably from those with no resident population (eg. SGSSI), very small populations (eg. Pitcairn) to those with bigger populations and a wider range of local resources and skills. Some already have groupings that bring together a variety of stakeholders in the main local environmental issues. It is for each territory to establish/develop the most suitable framework to develop action plans that link the shared principles of the OTs Environment Charter to the needs of each territory. The headings just suggest some areas which each territory may wish to consider - some may be clearly applicable or more important in some territories than in others.

ISSUE SPECIFIC EXAMPLES

1.) Environment/Development Interface

- Sustainable development strategies
- Participatory approaches to environmental and conservation management
- Ensuring environmental planning and management do not disadvantage the poor
- Promotion of sustainable livelihoods
- Rio Declaration and International Development Targets
- Agenda 21 groups
- Consideration of the built environment

2.) Habitat & Species Conservation/Restoration; Invasive Species

- Establishment of baseline information
- Documentation of local ecosystems, fauna & flora
- Priorities -working from baseline information
- Significance for local livelihoods, including tourism
- Key institutions, people and external linkages
- Action planning - implementation of plans, setting targets
- Priorities for monitoring, reporting, disseminating and applying knowledge

3.) Pollution

- A mechanism for monitoring pollution
- Awareness of international (and regional) pollution agreements and standards

4.) Energy and Technology Issues

- Sustainable energy policies - eg. transport, renewable energy sources, energy conservation
- Appropriate new green technologies - UK help with technology transfer

5.) Natural Disasters

- Inclusion of hazard management within development planning
- Vulnerability assessments for habitats and species
- Precautionary measures
- Slow onset disasters (degradation of habitats, climate change)

EXAMPLES OF RESPONSE MECHANISMS

1.) Local Legislation

- Local implementation of Multilateral Environmental Agreements (MEAs)
- Regional agreements/co-operation

- Identification & examination of key items of legislation (eg. Planning permission, Designation of protected areas or species, Environmental Impact Assessments (EIAs), Control of pollution, Regulation of natural resources based industries: fisheries, forestry, agriculture, tourism)
- Effectiveness of implementation - support of local community
- Scope for adopting ideas from other OTs, other countries/territories in the region and the UK.

2.) Environmental Impact Assessments

- Capacity building for EIA production
- Early identification of stakeholders
- Environmental Assessment in planning procedures: Strategic Environmental Assessment and National Physical Plans

3.) Multilateral Environmental Agreements (MEAs)

- Effectiveness of implementation of those MEAs already extended
- Costs and benefits of extending other MEAs
- Reporting and requirements
- Dissemination of information about MEAs & their relevance
- Support needed from UK Departments, Government Agencies and NGOs on international MEA conferences of parties, regional meetings & new negotiations
- Use of international secretariat, UK government and agency, & NGO websites
- Possible contribution to global/regional benefits of MEAs - eg. sharing best practice, being host for workshops and research projects of more than purely local significance

4.) Funding for Environmental Work

- Budgetary and staffing provisions
- Environmental taxes
- Identification of potential sources of funding for environmental projects
- Identification of projects and prioritisation
- Preparation of applications to funding sources
- Monitoring of progress towards outcomes of funded projects
- Reviewing programme and priorities
- Publicising results locally and wider (in concert with funding agencies)

5.) Education and Youth Activities; Media and Public Attitudes

- Disseminating the guiding principles contained within the charter.
- Environmental education programmes in schools
- Information on websites in the territory and links to regional, UK and international websites
- Media strategies
- Conservation volunteer schemes
- Procedures for public inquiries on major developments

6.) Regional and International Links

- Networking with other OTs
- Environmental links to other small island states, territories and communities
- Links to residents and friends of the territory in the UK and elsewhere (also as source of funds, tourists, expertise)

Annex 2 - International Development Targets on the Environment

Preamble

The United Nations Conference on Environment and Development,

Having met at Rio de Janeiro from 3 to 14 June 1992,

Reaffirming the Declaration of the United Nations Conference on the Human Environment, adopted at Stockholm on 16 June 1972, and seeking to build upon it,

With the goal of establishing a new and equitable global partnership through the creation of new levels of co-operation among States, key sectors of societies and people,

Working towards international agreements which respect the interests of all and protect the integrity of the global environmental and developmental system,

Recognizing the integral and interdependent nature of the Earth, our home,

Proclaims that:

Principle 1

Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.

Principle 2

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

Principle 3

The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.

Principle 4

In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.

Principle 5

All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.

Principle 6

The special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority. International actions in the field of environment and development should also address the interests and needs of all countries.

Principle 7

States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.

Principle 8

To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.

Principle 9

States should cooperate to strengthen endogenous capacity-building for sustainable development by improving scientific understanding through exchanges of scientific and technological knowledge, and by enhancing the development, adaptation, diffusion and transfer of technologies, including new and innovative technologies.

Principle 10

Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.

Principle 11

States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries.

Principle 12

States should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus.

Principle 13

States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage. States shall also cooperate in an expeditious and more determined manner to develop further international law regarding liability and

compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.

Principle 14

States should effectively cooperate to discourage or prevent the relocation and transfer to other States of any activities and substances that cause severe environmental degradation or are found to be harmful to human health.

Principle 15

In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

Principle 16

National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.

Principle 17

Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.

Principle 18

States shall immediately notify other States of any natural disasters or other emergencies that are likely to produce sudden harmful effects on the environment of those States. Every effort shall be made by the international community to help States so afflicted.

Principle 19

States shall provide prior and timely notification and relevant information to potentially affected States on activities that may have a significant adverse transboundary environmental effect and shall consult with those States at an early stage and in good faith.

Principle 20

Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development.

Principle 21

The creativity, ideals and courage of the youth of the world should be mobilized to forge a global partnership in order to achieve sustainable development and ensure a better future for all.

Principle 22

Indigenous people and their communities, and other local communities, have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.

Principle 23

The environment and natural resources of people under oppression, domination and occupation shall be protected.

Principle 24

Warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary.

Principle 25

Peace, development and environmental protection are interdependent and indivisible.

Principle 26

States shall resolve all their environmental disputes peacefully and by appropriate means in accordance with the Charter of the United Nations.

Principle 27

States and people shall cooperate in good faith and in a spirit of partnership in the fulfilment of the principles embodied in this Declaration and in the further development of international law in the field of sustainable development.

Annex 3 - International Development Targets on the Environment

The International Development Targets have been agreed by the entire United Nations membership, following a series of summit meetings held by the UN and its specialised agencies over the last ten years or so. The meetings discussed progress in poverty reduction and sustainable development and set targets for measuring that progress.

The target for the environment is as follows:

There should be a current national strategy for sustainable development in the process of implementation, in every country by 2005, so as to ensure that current trends in the loss of environmental resources are effectively reversed at both global and national levels by 2015.

Appendix 3: Ramsar Convention

Wetlands

Wetlands are areas where water is the primary factor controlling the environment and the associated plant and animal life. They occur where the water table is at or near the surface of the land, or where the land is covered by shallow water.

The Ramsar Convention takes a broad approach in determining the wetlands which come under its aegis. Under the text of the Convention (Article 1.1), wetlands are defined as:

“areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres”.

In addition, the Convention (Article 2.1) provides that wetlands:

“may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands”.

As a result of these provisions, the coverage of the Convention extends to a wide variety of habitat types, including rivers and lakes, coastal lagoons, mangroves, peatlands, and even coral reefs.

In addition there are **human-made wetlands** such as fish and shrimp ponds, farm ponds, irrigated agricultural land, salt pans, reservoirs, gravel pits, sewage farms, and canals.

Wetlands occur in every country, from the tundra to the tropics. How much of the earth's surface is presently composed of wetlands is not known exactly. The World Conservation Monitoring Centre has suggested an estimate of about 570 million hectares (5.7 million km²) – roughly 6% of the Earth's land surface – of which 2% are lakes, 30% bogs, 26% fens, 20% swamps, and 15% floodplains. Mangroves cover some 240,000 km² of coastal area, and an estimated 600,000km² of coral reefs remain worldwide. Nevertheless, a global review of wetland resources submitted to the Conference of the Parties to the Convention on Wetlands in 1999, while affirming that “it is not possible to provide an acceptable figure of the areal extent of wetlands at a global scale”, indicated a ‘best’ minimum global estimate at between 748 and 778 million hectares. The same report indicated that this “minimum” could be increased to a total of between 999 and 4,462 million hectares when other sources of information were taken into account.

Why conserve wetlands?

Wetlands are among the world's most productive environments. They are cradles of biological diversity, providing the water and primary productivity upon which countless species of plants and animals depend for survival. They support high concentrations of birds, mammals, reptiles, amphibians, fish and invertebrate species. Of the 20,000 species of fish in the world, more than 40% live in fresh water. Wetlands are also important storehouses of plant genetic material. Rice, for example, which is a common wetland plant, is the staple diet of more than half of humanity.

More and more economists and other scientists are working in the field of the valuation of ecosystem services. This is a difficult task, still full of uncertainties, but there is no other choice than to progress in this direction. Some recent studies have indicated that ecosystems provide at least US\$ 33 trillion worth of services annually, of which US\$ 4.9 trillion are attributed to wetlands.

The interactions of physical, biological and chemical components of a wetland, such as soils, water, plants and animals, enable the wetland to perform many vital functions, for example: water storage; storm protection and flood mitigation; shoreline stabilization and erosion control; groundwater recharge (the movement of water from the wetland down into the underground aquifer); groundwater discharge (the movement of water upward to become surface water in a wetland); water purification through retention of nutrients, sediments, and pollutants; and stabilization of local climate conditions, particularly rainfall and temperature.

Wetland values

Wetlands provide tremendous economic benefits, for example: water supply (quantity and quality); fisheries (over two thirds of the world's fish harvest is linked to the health of coastal and inland wetland areas); agriculture, through the maintenance of water tables and nutrient retention in floodplains; timber production; energy resources, such as peat and plant matter; wildlife resources; transport; and recreation and tourism opportunities.

In addition, wetlands have special attributes as part of the cultural heritage of humanity: they are related to religious and cosmological beliefs, constitute a source of aesthetic inspiration, provide wildlife sanctuaries, and form the basis of important local traditions.

These functions, values and attributes can only be maintained if the ecological processes of wetlands are allowed to continue functioning. Unfortunately, and in spite of important progress made in recent decades, wetlands continue to be among the world's most threatened ecosystems, owing mainly to ongoing drainage, conversion, pollution, and over-exploitation of their resources.

The Convention

The **Convention on Wetlands** is an intergovernmental treaty adopted on 2 February 1971 in the Iranian city of Ramsar, on the southern shore of the Caspian Sea. Thus, though nowadays the name of the Convention is usually written "Convention on Wetlands (Ramsar, Iran, 1971)", it has come to be known popularly as the "Ramsar Convention". Ramsar is the first of the modern global intergovernmental treaties on conservation and wise use of natural resources, but, compared with more recent ones, its provisions are relatively straightforward and general. Over the years, the Conference of the Contracting Parties (the main decision-making body of the Convention, composed of delegates from all the Member States) has further developed and interpreted the basic tenets of the treaty text and succeeded in keeping the work of the Convention abreast of changing world perceptions, priorities, and trends in environmental thinking.

The official name of the treaty – *The Convention on Wetlands of International Importance especially as Waterfowl Habitat* – reflects its original emphasis on the conservation and wise use of wetlands primarily to provide habitat for waterbirds. Over the years, however, the Convention has broadened its scope to cover **all aspects** of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. For this reason, the increasingly common use of the short form of the treaty's title, the "Convention on Wetlands", is entirely appropriate.

The Convention entered into force in 1975 and as of 1 June 2001 has 124 Contracting Parties. More than 1070 wetlands have been designated for inclusion in the List of Wetlands of International Importance, covering some 81 million hectares.

UNESCO serves as Depositary for the Convention, but its administration has been entrusted to a secretariat known as the "Ramsar Bureau", which is housed in the headquarters of IUCN–The World Conservation Union in Gland, Switzerland, under the authority of the Conference of the Parties and the Standing Committee of the Convention.

Why do countries join the Ramsar Convention?

Membership in the Ramsar Convention:

- entails an endorsement of the principles that the Convention represents, facilitating the development at national level of policies and actions, including legislation that helps nations to make the best possible use of their wetland resources in their quest for sustainable development;
- presents an opportunity for a country to make its voice heard in the principal intergovernmental forum on the conservation and wise use of wetlands;
- brings increased publicity and prestige for the wetlands designated for the List of Wetlands of International Importance, and hence increased possibility of support for conservation and wise use measures;
- brings access to the latest information and advice on application of the Convention's internationally-accepted standards, such as criteria for identifying wetlands of international importance, guidelines on application of the wise use concept, and guidelines on management planning in wetlands;
- brings access to expert advice on national and site-related problems of wetland conservation and management through contacts with Ramsar Bureau personnel and consultants and through application of the Ramsar Advisory Mission mechanism when appropriate; and
- encourages international cooperation on wetland issues and brings the possibility of support for wetland projects, either through the Convention's own Small Grants Fund or through the Convention's contacts with multilateral and bilateral external support agencies.

What are the commitments of Parties joining the Ramsar Convention?

When countries join the Convention, they are enlisting in an international effort to ensure the conservation and wise use of wetlands. The treaty includes four main commitments that the Contracting Parties have agreed to by joining.

1. Listed sites

The first obligation under the Convention is to designate at least one wetland for inclusion in the **List of Wetlands of International Importance** (the "Ramsar List") and to promote its conservation, including, where appropriate, its wise use. Selection for the Ramsar List should be based on the wetland's significance in terms of ecology, botany, zoology, limnology, or hydrology. The Contracting Parties have adopted specific criteria and guidelines for identifying sites that qualify for inclusion in the List of Wetlands of International Importance. (See Ramsar Information Paper no. 4.)

2. Wise use

Under the Convention there is a general obligation for the Contracting Parties to include wetland conservation considerations in their national land-use planning. They have undertaken to formulate and implement this planning so as to promote, as far as possible, "**the wise use of wetlands in their territory**" (Article 3.1 of the treaty).

The Conference of the Contracting Parties has approved guidelines and additional guidance on how to achieve "wise use", which has been interpreted as being synonymous with "sustainable use". (See Ramsar Information Paper no. 7.)

3. Reserves and training

Contracting Parties have also undertaken to establish nature reserves in wetlands, whether or not they are included in the Ramsar List, and they are also expected to promote training in the fields of wetland research, management and wardening.

4. International cooperation

Contracting Parties have also agreed to consult with other Contracting Parties about implementation of the Convention, especially in regard to transfrontier wetlands, shared water systems, and shared species. (See Ramsar Information Paper no. 13.)

Over the years, the Conference of the Contracting Parties has interpreted and elaborated upon these four major obligations included within the text of the treaty, and it has developed guidelines for assisting the Parties in their implementation. These guidelines are published in the Ramsar Handbook series. (See Ramsar Information Paper no. 16.)

Reporting

Contracting Parties report on progress in implementing their commitments under the Convention by submission of triennial National Reports to the Conference of the Contracting Parties. The National Reports become part of the public record.

The Conference of the Contracting Parties

The implementation of the Ramsar Convention is a continuing partnership between the Contracting Parties, the Standing Committee, and the Convention Secretariat (the Ramsar Bureau), with the advice of the Scientific and Technical Review Panel (STRP) and the support of the International Organization Partners. Every three years, government representatives of the Contracting Parties meet as the Conference of the Contracting Parties (COP), the policy-making organ of the Convention which reviews the general trends in the implementation of the Convention as reflected in the National Reports and adopts decisions to improve the way in which the Convention works. The programme of each meeting of the Conference also includes a series of technical sessions which analyze issues of importance in the field of wetland conservation and wise use, including further interpretation and development of the key Convention concepts. Ramsar COPs have gained the reputation of being highly effective events, allowing an active involvement and participation of the non-governmental and academic community.

Ordinary meetings of the Conference of the Contracting Parties have been held at: 1. Cagliari, Italy, 1980; 2. Groningen, Netherlands, 1984; 3. Regina, Canada, 1987; 4. Montreux, Switzerland, 1990; 5. Kushiro, Japan, 1993; 6. Brisbane, Australia, 1996; 7. San José, Costa Rica, 1999; 8. Valencia, Spain, 2002 (scheduled).

The Standing Committee

The Standing Committee meets annually to carry out interim activity between each COP on matters previously approved by the Conference; prepare documentation for consideration at the next COP; supervise implementation of policy by the Ramsar Bureau and execution of the Bureau's budget; and decide upon applications for project support from the Ramsar Small Grants Fund.

The Standing Committee consists of 13 Contracting Parties elected on a proportional basis from the six Ramsar regions – Africa, Asia, Europe, Neotropics, North America, and Oceania – as well as the host countries of the most recent meeting and the next meeting of the COP. The Contracting Parties which host the Ramsar Bureau and Wetlands International are invited to participate as Permanent Observers, and the “International Organization Partners” (see below) are invited to participate in an advisory capacity.

The secretariat

The **Ramsar Convention Bureau** is the permanent secretariat for the Convention and carries out the day-to-day coordination of the Convention's activities. The Bureau is headed by a Secretary General, who supervises the work of a small number (currently 14) of technical, communications and administrative staff, and four interns. Ramsar staff members work in several languages (notably the Convention's three official languages, English, French, and Spanish) and provide expertise in a range of disciplines. Consultants are recruited from time to time as needed.

The Scientific and Technical Review Panel

The Scientific and Technical Review Panel (STRP) provides scientific and technical advice to the Conference of the Contracting Parties. The STRP is composed of 13 individual members with appropriate scientific and

technical knowledge, selected from the six Ramsar regions, and representatives of the four International Organization Partners. Other relevant organizations also contribute to the work of the STRP as observers.

The International Organization Partners

The Conference of the Parties may confer the status of International Organization Partner to international organizations, both intergovernmental and non-governmental, that “contribute on a regular basis and to the best of their abilities to the further development of the policies and technical and scientific tools of the Convention and to their application”. So far, four international non-government organizations that have been associated with the Convention since its inception have been recognized as IOPs. They are BirdLife International, IUCN–The World Conservation Union, Wetlands International, and the World Wide Fund for Nature (WWF).

Guidelines for Ramsar site selection

The text of the Convention (Article 2.2) states that:

“Wetlands should be selected for the List [of Wetlands of International Importance] on account of their international significance in terms of ecology, botany, zoology, limnology or hydrology” and indicates that “in the first instance, wetlands of international importance to waterfowl at any season should be included”.

To facilitate the implementation of this provision, the Conference of the Parties has developed criteria to assist in the identification of wetlands of international importance. The latest version of the Criteria was adopted by the 7th meeting of the Conference of the Contracting Parties in 1999.

Group A of the Criteria. Sites containing representative, rare or unique wetland types

Criterion 1: A wetland should be considered internationally important if it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region.

Group B of the Criteria. Sites of international importance for conserving biological diversity

Criteria based on species and ecological communities

Criterion 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.

Criterion 3: A wetland should be considered internationally important if it supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.

Criterion 4: A wetland should be considered internationally important if it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.

Specific criteria based on waterbirds

Criterion 5: A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.

Criterion 6: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.

Specific criteria based on fish

Criterion 7: A wetland should be considered internationally important if it supports a significant proportion of

indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.

Criterion 8: A wetland should be considered internationally important if it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.

The Ramsar concept of “wise use”

Under Article 3.1 of the Convention, Contracting Parties agree to “*formulate and implement their planning so as to promote the conservation of the wetlands included in the List, and as far as possible the wise use of wetlands in their territory*”.

As this term “wise use” gained currency within the Ramsar community and was used elsewhere for different purposes, the Conference of the Parties recognized the need for greater precision and adopted the following definition at its 3rd meeting in Regina, Canada, in 1987:

“The wise use of wetlands is their sustainable utilization for the benefit of mankind in a way compatible with the maintenance of the natural properties of the ecosystem.”

At the same time, “sustainable utilization” of a wetland was defined as:

“Human use of a wetland so that it may yield the greatest continuous benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations.”

“Natural properties of the ecosystem” were defined as:

“Those physical, chemical and biological components, such as soil, water, plants, animals and nutrients, and the interactions between them.”

To assist the Parties in implementing the wise use concept, the Wise Use Working Group, established at Regina, developed *Guidelines for the implementation of the wise use concept*, which were adopted by the 4th COP in Montreux, Switzerland, in 1990. Also at the 4th meeting, the Wise Use Project, funded by the Government of the Netherlands, was instituted, and an international panel of experts began work which culminated in the *Additional guidance for the implementation of the wise use concept*, adopted by the 5th Meeting of the Parties in 1993, as well as the book of principles and case studies entitled *Towards the Wise Use of Wetlands*, edited by T.J. Davis (Ramsar, 1993). The Ramsar Strategic Plan 1997-2002, which was adopted by the Conference of the Parties in Brisbane in 1996, states that the Contracting Parties consider the term “wise use” to be synonymous with “sustainable use” and goes on to observe that “*through this concept of ‘wise use’, the Convention has always emphasized that human usage on a sustainable basis is entirely compatible with Ramsar listing and wetland conservation in general.*”

The ‘Wise Use Guidelines’ call upon Contracting Parties to:

- **adopt national wetland policies**, involving a review of their existing legislation and institutional arrangements to deal with wetland matters (either as separate policy instruments or as part of national environmental action plans, national biodiversity strategies, or other national strategic planning);
- **develop programmes** of wetland inventory, monitoring, research, training, education and public awareness; and
- **take action at wetland sites**, involving the development of integrated management plans covering every aspect of the wetlands.

The Guidelines emphasize the benefits and values of wetlands for sediment and erosion control; flood control; maintenance of water quality and abatement of pollution; maintenance of surface and underground water supply; support for fisheries, grazing and agriculture; outdoor recreation and education for human society; and

climatic stability.

The Ramsar Bureau assists the Contracting Parties in implementing the Guidelines and Additional Guidance on the wise use of wetlands by:

- providing expertise, either through Ramsar technical personnel and its network or through external consultants;
- funding projects through the Ramsar Small Grants Fund; and seeking third-party funding for wise use projects.

Application in TCI

The Convention encompasses all types of wetland from temporary to permanent bodies of fresh or salt water. Wetland types found in the Turks and Caicos Islands include the extensive tidal and submerged banks to the south of the islands, mangrove swamps, salt ponds and salinas, sinkholes, marshes and intertidal beaches. Contracting Parties are also obliged to promote the wise use of all wetlands whether they are in the List or not. It is important to emphasise that Ramsar is not a “hands off” Convention and that a Ramsar site may be used and exploited for the benefit of people provided this does not harm the ecological character of the site.

The original reasons set out for selecting the present Ramsar site were as follows (Clarke & Norton 1987):

The boundaries were chosen to include prime examples of each type of wetland habitat within a single contiguous area, the major link between types is the intertidal and submerged banks on the South side of the Caicos Islands. On the west side of the proposed Ramsar area Malley Pond, Whitby Cove Slough, and Sawgrass Pond drain into Flamingo Pond on North Caicos providing excellent examples of marshland, mangrove swamp and salt Pond. On the east side of the proposed area Flamingo Pond and Black Rock on East Caicos provide prime examples of lagoon and salina habitat. While each of the locations described as part of the proposed Ramsar site may not qualify individually as a site of international importance, together they provide a remarkable range of unspoilt wetland habitats which is rare in such island systems in the region.

The criteria that qualify the total area as a Ramsar site are as follows [note that these referred to an earlier revision of the criteria]:

1. Importance to waterfowl - regularly supports 1% of the individuals in a population of one species. The West Indian whistling-Duck, *Dendrocygna arborea*, (e.g. found at Sawgrass Pond on North Caicos) is given vulnerable status in the 1986 IUCN Red List of Threatened Animals. It is scarce and believed to be declining because of hunting and habitat (Freshwater and brackish swamps) loss (Endangered Birds of the World, ICBP, 1981). The total population is unknown but probably numbers less than 1,000 pairs in the Caribbean. Two flocks were sighted (11 and 15 birds per flock) during the survey suggesting family groups and implied breeding. Sightings occurred at Sawgrass Pond and Bellfield Landing, North Caicos. The former pond is included in the Ramsar site boundary while the latter is not and should be protected by other means.
2. Importance to plants and animals - is of special value as the habitat of animals at a critical stage of their biological cycles. The submerged banks, creeks and lagoons are used by endangered green turtles and commercial fish, conch and lobster for feeding. The coastal mangroves form nursery grounds for reef fish and commercial species. Flamingos and other waterbirds depend on the Salt Ponds and Salinas for feeding and breeding areas. The northern beaches of North, Middle and East Caicos are recorded as turtle nesting areas (Fleetmyer 1983) and the section on East Caicos within the boundaries appears to be suitable nesting habitat.
3. Importance as representative habitat - is a particularly good example of small island wetland habitat in the Caribbean region. Because of the light use by man in recent years the proposed area is as close to the natural state as any similar island system in the American tropics.

The major wetland sites included within the proposed Ramsar boundaries are summarised below:

Submerged Sand Bank and Intertidal Sand and Mud Flats - The southern marine boundary encloses prime

examples of these habitats on the south side of North, Middle and East Caicos. The unique Ocean Hole is also included.

Lagoons - Big Pond on Middle Caicos and Flamingo Pond on East Caicos are both good examples of lagoon habitat, the former opening to the sea on the south and the latter opening on the north side of the islands.

Mangrove Swamp - Sawgrass Pond on North Caicos, West Armstrong Pond on Middle Caicos, and Flamingo Pond on East Caicos provide representative areas of swamp.

Salt Pond - Flamingo Pond on North Caicos, and Topham Pond on Middle Caicos are good examples of salt Pond habitat.

Salina - Flamingo Pond and East Armstrong Pond on Middle Caicos, and Black Rock Salina on East Caicos provide good examples of salinas.

Sinkhole - several small sinkholes are found within the proposed boundaries on Middle Caicos.

Marshland - Malley Pond and Whitby Cove Slough on North Caicos and scattered areas on Middle Caicos provide good examples of this habitat.

Small Island - Iguana Cay is included in the boundaries providing a refuge for iguanas (*Cyclura cornuta*) which have been exterminated on the larger islands and only exist on a few cays in the Turks and Caicos.

Coastal Rock, Beach and Dune communities - These habitat types are found on the north coast of East Caicos.

Coppice/Pineland - these vegetation zones provide buffer areas around wetland habitat on North and Middle Caicos.

As noted in the main body of the report, the new information now available extends this considerably, and raises the importance of the Ramsar site and adjacent areas even further. The project provided material at the request of UK and TCI Governments to allow an updating of the official Ramsar Information Sheet. This is copied below.

RAMSAR INFORMATION SHEET

FOR WETLANDS OF INTERNATIONAL IMPORTANCE

Site reference number	6UK001
1 Compilation date	10 July 2002
2 Country	UK (Turks & Caicos)
3 Name of wetland	North, Middle and East Caicos Islands
4 Site centre location:	Latitude: 21 45 00 N Longitude: 71 45 00 W
5 Altitude (m)	Min: 0 Max: 30 Mean
6 Area (ha)	58617

7 Overview

A wetland site of international importance containing a variety of marine and coastal habitat types, and complex natural transitions. Noteworthy are mangrove swamps, diverse bird life, numerous Arawak sites and several inlet cays. The whole area is a particularly good example of coastal wetland habitat in the Caribbean, providing shelter and nursery locations for various species of waterfowl, turtles and commercial fish species.

8 Wetland type Marine/coastal wetland

Code	Name	% Area
C	Coral reefs	0.9
D	Rocky shores	0.1
E	Sand / shingle shores (including dune systems)	0.1
Q	Saline / brackish lakes: permanent	0.8
R	Saline / brackish lakes: seasonal / intermittent	0.2
Sp	Saline / brackish marshes: permanent	2.6
Ss	Saline / brackish marshes: seasonal / intermittent	7.5
Ts	Freshwater marshes / pools: seasonal / intermittent	0.1
W	Shrub-dominated wetlands	4.6
Xf	Freshwater, tree-dominated wetlands	9.9
Other	Other	2.8
B	Marine beds (e.g. sea grass beds)	50.3
G	Tidal flats	4.6
H	Salt marshes	7.3
I	Mangrove / tidal forest	8.2

- 9 Ramsar Criteria** 1, 2, 3, 4, 6
10 Map of the site ✓
11 Compiler **Joint Nature Conservation Committee**
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Cambridgeshire PE1 1JY
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12 Justification of criteria

Ramsar criteria 1

The North, Middle and East Caicos wetlands comprise interrelated ecosystems complete with submerged mangroves, algal flats and seagrass beds. It is a wetland site of international importance containing a variety of marine and coastal habitat types, and complex natural transitions. Noteworthy are mangrove swamps, diverse bird life, numerous Arawak sites and several inlet cays. The whole area is a particularly good example of coastal wetland habitat in the Caribbean, providing shelter and nursery locations for various species of waterfowl, turtles and commercial fish species.

Ramsar criterion 2

Internationally important species occurring on the site (and in some cases more importantly on the adjacent woodland area which is ecologically linked and for which measures of conservation are being explored):

The following Turks & Caicos Islands endemic species of lizard:

the gecko *Aristelliger hechti* (CR), Curly Tail *Leiocephalus psammmodromus*, Caicos Islands Reef Gecko *Sphaerodactylus caicosensis*;

and the one endemic species of snake: the Caicos Islands Trope Boa *Tropidophis greenwayi*.

In addition there are three further lizards that are endemic at the subspecific level:

Turks & Caicos Bark Anole *Anolis scriptus scriptus*, Turks & Caicos Rock Iguana *Cyclura carinata carinata* (CR; the only subspecies of *Cyclura carinata* found outside the Turks & Caicos Islands is confined to the small island of Booby Cay off nearby Mayaguana); Mabuya Skink (or slippery back or snake-doctor) *Mabuya mabouya sloanei*);

and one snake: Bahaman Rainbow Boa *Epicrates chrysogaster chrysogaster*.

The waters of the Ramsar site are important for turtles *Chelonia midas*, *Eretmochelys imbricata*, *Caretta caretta*, but most nesting beaches have not been included.

Cuban Crow *Corvus nasicus* - occurs only in Cuba and in the Caicos Islands;
 Thick-billed Vireo *Vireo crassirostris stalagmum* - endemic subspecies restricted to the Caicos Islands;
 Greater Antillean Bullfinch *Loxigilla violacea ofella* - endemic subspecies restricted to Middle and East Caicos;
 Kirtland's Warbler *Dendroica kirtlandii* (VU) - non-breeding grounds for one of the most threatened bird species of the region, the world population consisting of only about 3000 individuals, which breed only in a restricted habitat in one part of Michigan, USA and spend the non-breeding season in largely unknown locations in the Bahamas and TCI.

Ramsar criterion 3

Additionally, submerged mangroves and algal flats are important in contributing suspended material to nearby sand banks and by virtue of circulation to and from the cuts and creeks, the mangroves also contribute materials to the coral reefs.

Ramsar criterion 4

The wetlands are thought to play a major role in providing a nursery and feeding grounds for numerous fauna. They act also as land-protection against hurricane damage. The shallow flats where the seagrasses grow serve as major nursery areas of the inshore marine environment. They are the immediate recipients of nutrients produced from the mangrove areas themselves. The areas often do not contain many species, but some exist in high numbers. Thus the economic value of these areas, particularly with regard to edible species such as mullets and shrimp and sport species such as bonefish, is high.

Ramsar criterion 6

The site (in some cases in combination with adjacent ecologically linked areas) regularly supports internationally important populations of

West Indian whistling duck *Dendrocyhna arborea* (VU),
 the Caribbean population of brown pelicans *Pelecanus occidentalis*,
 the nominate subspecies of the reddish egret *Egretta rufescens*,
 the "Cuban/Bahaman" population of the West Indian flamingo *Phoenicopterus ruber*,
 white-cheeked (or Bahama) pintail *Anas bahamensis*,
 possibly non-breeding black-bellied plover *Pluvialis squatarola cynosurae*,
 possibly non-breeding lesser yellowlegs *Tringa flavipes*,
 Caribbean subspecies of gull-billed tern *Sterna nilotica aranea*.

13 General location

Nearest town/city: Kew, North Caicos Island. The settlements of Whitby, Bottle Creek (North Caicos), Conch Bar, Bambarra and Lorimers (Middle Caicos) are all situated close to the site.

Administrative Region: Turks & Caicos

14 Physical Features

Soil & Geology	basic, biogenic reef, limestone, mud, nutrient-poor, sand
Geomorphology and Landscape	caves, coastal, enclosed coast (including embayment),
intertidal sediments (including sandflat/mudflat), islands, lagoon, lowland, open coast (including bay), pools,	
subtidal rock (including rocky reefs), subtidal sediments (including sandbank/mudbank)	
Nutrient status	mesotrophic, oligotrophic
pH	alkaline
Salinity	brackish / mixosaline, fresh, hypersaline / hyperhaline,
saline / euhaline	
Soil	mainly mineral
Water permanence	usually permanent, usually seasonal / intermittent
Summary of main climatic features	Rainfall averages 700 mm per year but is very variable.

Potential evapotranspiration exceeds rainfall. Temperatures vary between 20°C and 35°C. Highest temperatures and rainfall occur in the summer.

15 Hydrological values

Shoreline stabilisation and dissipation of erosive forces, Sediment trapping

16 Ecological features

At February 2002, the Ramsar site and adjoining areas which form part of the same system are the subject of a detailed study leading towards a management plan for the area. The study is being conducted by the UK Overseas Territories Conservation Forum, CAB International and the Turks & Caicos National Trust, in conjunction with the local residents and the TCI Government. The study was funded largely by the UK Department of the Environment, Agriculture and Rural Affairs Darwin Initiative. Work to implement the plan is planned by the Turks & Caicos National Trust and the UK Overseas Territories Conservation Forum, with support initially from UK Foreign & Commonwealth Office as well as sources in Turks & Caicos. (Contact point: UK Overseas Territories Conservation Forum (Attn: Dr Mike Pienkowski), 102 Broadway, Peterborough PE1 4DG, UK; E-mail : pienkowski@cix.co.uk; web: www.ukotcf.org).

Some of the first products of this study were the maps which accompany this data form (see also section 8). These are amplified below by notes on the main vegetation and habitat classes compiled by Frederic J. Burton. Each Ramsar category is followed by a paragraph on the map categories (where appropriate) which fall within it.

Ramsar class A: Shallow marine waters

Water

Open seawater over sand banks south of the Caicos Islands, and in channels between them. Bottom vegetation not described or mapped. (Nothing is attributed to this category in section 8 because category B describes better.)

Ramsar class B: Marine beds

Water

Open seawater over sand banks south of the Caicos Islands, and in channels between them. Bottom vegetation not described or mapped but aerial and boat checks indicate extensive areas of sea grass.

Ramsar class C: Coral reefs

Water

Typical Caribbean barrier reef communities, including a reef crest and a back-reef lagoon off the north shore of east Caicos.

Ramsar class D: Rocky shores

Occurring along parts of the north-eastern shores of the Caicos Islands and small islets off these. Within the site, this is primarily on East Caicos and Iguana Cay.

Ramsar class E: Sand / shingle shores (including dune systems)

Occurring along parts of the north-eastern shores of the Caicos Islands and small islets off these. Within the site, this is primarily on East Caicos.

Ramsar class G: Tidal flats

Water

Low tidal flats which were flooded at the time of satellite image acquisition, showing as shallow water on the map, are unvegetated sand and silt substrates.

Exposed intertidal mud

Unvegetated sand and silt substrates exposed at the time of satellite image acquisition.

Ramsar class H: Salt marshes

Salicornia-Batis-Portulaca saltmarsh

A succulent herbaceous salt marsh community, on a flat calcareous silt substrate. Dominated by *Salicornia virginica*, *Salicornia bigelovii*, *Batis maritima*, and *Portulaca rubricaulis*. *Lycium tweedianum*, *Chamaesyce vaginulatum*, *Sporobolus virginicus*, and scattered *Avicennia germinans* shrubs may be present.

Distichlis / Sporobolus saltmarsh

A grass-dominated salt marsh community, on a flat calcareous silt substrate. Dominated by *Sporobolus virginicus* and *Distichlis spicata* in varying proportions. *Borrchia frutescens*, *Salicornia virginica*, *Salicornia bigelovii*, *Lycium tweedianum*, *Portulaca rubricaulis*, with *Conocarpus erectus* as isolated shrubs or trees, may be present.

Mixed saltmarsh with sparse silver Conocarpus

Scattered *Conocarpus erectus* var. *seriacea* shrubs and trees forming up to 20% cover on a calcareous silt substrate with emergent limestone bedrock. *Sporobolus virginicus*, *Salicornia virginica*, *Rhachicallis americana*, *Borrchia frutescens*, *Portulaca rubricaulis*, *Salicornia bigelovii*, *Fimbristylis ferruginea*, and *Batis maritima* form a partial ground cover in varying combinations. *Avicennia germinans* may be present as a rare emergent shrub or tree.

Ramsar class I: Mangrove / tidal forest

Rhizophora & Avicennia mangrove shrublands

Mangrove shrubland communities 1 metre tall, forming 40% - 60% cover on soft calcareous mud covered with a thick algal turf, and a network of tidal creeks. Ranging from monospecific *Avicennia germinans* at the landward extreme of the community, through mixed *Avicennia germinans* - *Rhizophora mangle*, to monospecific *Rhizophora mangle* towards the seaward edge.

Rhizophora, *Avicennia* and *Laguncularia racemosa* shrublands also occur in more inland sites, associated with *Conocarpus erectus* and succulent halophytes on pond fringes and in seasonal floodwater channels.

Ramsar class J: Coastal brackish / saline lagoons

The waterways between the islands (i.e. not in the open sea N or S) might fall into this category, but they fall also into other categories (e.g. B) and have been included there.

Ramsar class Q: Saline / brackish lakes - permanent

Ponds

Shallow brackish to hypersaline ponds, usually narrowly fringed by mangroves and succulent halophytes and otherwise unvegetated. Water levels fluctuate seasonally and many ponds may dry out periodically or seasonally, grading to class R below.

Ramsar class R: Saline / brackish lakes - seasonal / intermittent

Ponds

See Q above.

Ramsar class Ss: Saline / brackish marshes - seasonal / intermittent

Unvegetated rock & mud flats

Rock pavements and dark calcareous silt flooded by seasonal/intermittent expansion of natural brine pans. Virtually devoid of higher plants due to extremely high salinity. Slightly raised rock areas may rarely support a few prostrate *Conocarpus erectus*, severely stunted *Avicennia germinans*, *Salicornia virginica* or *Rhachicallis americana*.

Sparsely vegetated saline sand flats

Approximately 75% unvegetated sand with a thin algal crust, supporting local aggregations of *Avicennia germinans* shrubs, and the succulent halophytes *Portulaca rubricaulis*, *Salicornia virginica* and *Suaeda conferta*. Intermittently flooded by rain and/or tide. Old flamingo nests were observed in this habitat, as well as in some ponds.

Ramsar class Sp: Saline / brackish marshes - permanent

Natural brine pans

Depressed rock pavement areas, intermittently filled by high tides, becoming extremely hypersaline due to evaporation, forming crystalline salt at the margins. No vegetation.

Ramsar class Ts: Freshwater marshes / ponds: seasonal / intermittent

Pine woodland sinkholes

Ramsar class W: Shrub-dominated wetlands

Conocarpus shrubland on saltmarsh grasses

Conocarpus erectus, usually var. *seriacea*, forming a 1-3 metre seasonally flooded shrubland over a herbaceous community dominated by *Sporobolus virginicus* or occasionally *Distichlis spicata*. *Conocarpus erectus* var. *erectus* is often present as a prostrate shrub, with *Salicornia virginica*, *Portulaca rubricaulis*, *Borrchia frutescens*, *Rhachicallis americana*, *Jacquinia keyensis*, *Rhynchospora colorata*, *Fimbristylis ferruginea*, *Agalinis maritima*, and occasionally *Rhizophora mangle* and/or *Avicennia germinans* as shrubs.

Conocarpus-Rhachicallis dwarf shrubland

A seasonally flooded, shrubland with most woody vegetation dwarfed, on calcareous silt with emergent limestone bedrock. Dominated by prostrate *Conocarpus erectus*, with *Rhachicallis americana*, *Rhizophora mangle*, *Jacquinia keyensis*, *Manilkara bahamensis*, *Thrinax morrisii*, *Borrchia frutescens*, *Coccoloba uvifera*, *Cladium jamaicense*, *Swietenia mahagoni*, *Gundlachia corymbosa*, *Strumpfia maritima*, *Crossopetalum rhacoma*, *Sophora tomentosa*, *Fimbristylis ferruginea*, and *Distichlis spicata*.

Ramsar class Xf: Freshwater tree-dominated wetlands

Seasonally flooded woodlands (various)

1). *Conocarpus erectus*, including var. *seriacea*, forms seasonally / intermittently flooded woodland communities on very slightly raised sand banks amid tidal flats. The tree layer may be monospecific, or may variously include *Pithecellobium keyense*, *Dodonea viscosa*, *Guapira discolor*, *Swietenia mahagoni*, *Maytenus phyllanthoides* and *Metopium toxiferum*. The shrub layer may include the endemic *Eupatorium lucayanum*, *Crossopetalum rhacoma*, *Borrchia frutescens*, *Thrinax morrisii*, *Coccoloba uvifera*, and *Erithalis fruticosa*, while the herbaceous layer typically includes *Sporobolus virginicus*, *Chamaesyce vaginulatum* and *Lycium tweedianum*.

2). *Sabal palmetto* palms form seasonally flooded woodlands in association with *Gundlachia corymbosa* where fresh to brackish floodwater accumulates during the rainy season. The two species are strongly co-dominant, with *Distichlis spicata* often also abundant.

Seasonally flooded Pinus woodland

Pinus caribaea woodland occurs in extensive stands intermingled with other seasonally flooded habitats. The limestone bedrock has very thin soils, and many seasonally flooded sinkholes: the entire habitat floods with fresh water during periods of intense rain. *Sabal palmetto* and *Cladium jamaicense* grow in the sinkholes. The shrub layer is usually sparse, with *Coccoloba uvifera*, *Thrinax morrisii*, *Randia aculeata*, *Tabebuia bahamensis*, *Cassia inaguensis*, *Byrsinomia lucida*, *Lysiloma latisiliquum*, *Savia erythroxyloides*, *Conocarpus erectus*, *Metopium toxiferum*, *Acacia choriophylla*, *Swietenia mahagoni*, *Ernodea*

serratifolia and *Erithalis fruticosa*. Herbaceous species include *Rhynchospora colorata*, *Jacquemontia havanensis*, *Cassytha filiformis*, and the ground orchid *Spiranthes vernalis*.

Ramsar class Other

Dry shrublands

Diverse xerophytic mixed evergreen-deciduous shrublands and woodlands, on limestone bedrock and thin soils. Species composition varies with elevation above ground water, and exposure to salt spray. Abundant tree species include *Lysiloma latisiliquum*, *Coccoloba diversifolia*, *Tabebuia bahamensis*, *Coccothrinax argentata*, *Thouinia discolor*, *Metopium toxiferum*, *Acacia choriophylla*, *Cephalocereus millspaughii*, *Guaicum sanctum* and *Thrinax morrisii*. Several orchid species in the genus *Encyclia* are also widespread and conspicuous in these habitats.

The notes in this section and, more particularly in sections 17 and 18, will be amplified when the results of current studies coordinated by UK Overseas Territories Conservation Forum, CAB International and the Turks & Caicos National Trust become fully available.

17 Noteworthy flora

Internationally important species occurring on the site

Habitat:

The mangroves of the TCI are typical of the region. Three species of mangrove, *Rhizophora mangle*, *Laguncularia racemosa* and *Avicennia germinans* grow with *Conocarpus erectus* (Combretaceae) in mixed stands along the inland margin of the islands fringing the Caicos Bank.

Nationally important species occurring on the site

Habitats:

Pine forests are particularly noteworthy on North Caicos which has the highest rainfall of all the islands, as well as on Middle Caicos.

The dry shrubwoods of coastal areas and rocky plants, with species such as the prickly pears, *Opuntia millspaughii*, *O. bahamana* and *O. lucayana*, have been identified as regional priorities for the conservation of cacti and succulents.

Matured forest stands are rare in many places, probably because of clearance for plantations, hurricane action, and possibly the high demands for fuelwood and for charcoal production (CDB 1983).

Higher plants:

Batophora sp, *Penicillus* sp, *Halimeda* sp, *Acetabularia* sp, *Caulerpa* sp, *Thalassia testudinum*, *Cymodocea filiforme*, *Rhizophora mangle*, *Avicennia germinans*, *Salicornia perrins*, *S.bigloveii*, *Borreria arborescens*, *Sporolobus virginicus*.

Predominant tree species of the forest/scrub biome of the Turks and Caicos include *Pithecellobium quadalupense* (Leguminosae), *Conocarpus erectus* (Combretaceae), *Bursera simaruba* (Burseraceae), a species of lignum-vitae *Guaicum santum* (Zygophyllaceae) (EN), Caribbean mahogany *Swietenia mahagoni* (Meliaceae) (EN), *Manilkara zapota* (Sapotaceae) and Caribbean pine *Pinus caribaea* (Pinaceae).

The following tree and shrub species, all scarce and local in Turks and Caicos and restricted regionally in this distribution, were evaluated against IUCN red list criteria but are not considered to be globally threatened.

Caesalpinia reticulata, *Euphorbia gymnonata*, *Hibiscus brittonianus*, *Mimosa bahamensis*, *Pavonia bahamensis*, *Pinus caribaea* var. *bahamensis*, *Tabebuia bahamensis*, *Thouinia discolor*, *Ziziphus taylori*, *Encyclia caitensis*, *Argythamnia argentea*, *Opuntia x lucayana*, *Limonium bahamense*, *Cynanchum stiptatum*, *Borreria brittonii*, *B. capillaris*.

18 Noteworthy fauna

Internationally important species occurring on the site:

Reptiles and amphibians:

the following Turks & Caicos Islands endemic species of lizard:

the gecko *Aristelliger hechti* (CR),
 Curly Tail *Leiocephalus psammodromus*,
 Caicos Islands Reef Gecko *Sphaerodactylus caicosensis*;
 and the one endemic species of snake: the Caicos Islands Trope Boa *Tropidophis greenwayi*.
 In addition there are three further lizards that are endemic at the subspecific level:
 Turks & Caicos Bark Anole *Anolis scriptus scriptus*,
 Turks & Caicos Rock Iguana *Cyclura carinata carinata* (CR; the only subspecies of *Cyclura carinata*
 found outside the Turks & Caicos Islands is confined to the small island of Booby Cay off nearby
 Mayaguana);
 Mabuya Skink (or slippery back or snake-doctor) *Mabuya mabouya sloanei*);
 and one snake: Bahaman Rainbow Boa *Epicrates chrysogaster chrysogaster*.
 Marine turtles are common, nesting on many of the cays, *Chelonia midas*, *Eretmochelys imbricata*, *Caretta
 caretta*.

Birds:

Dendroica kirtlandi, *Dendrocygna arborea*, *Phaethon lepturus catesbyi*, *Pelecanus occidentalis
 occidentalis*, *Fregata magnificens*, *Ardea herodias*, *Casmerodius albus egretta*, *Egretta thula thula*,
Egretta caerulea, *Egretta tricolor ruficollis*, *Egretta rufescens colorata*, *Bubulcus ibis ibis*, *Butorides
 striatus bahamensis*, *Nycticorax nycticorax*, *Nycticorax violaceus violaceus*, *Phoenicopterus ruber
 ruber*, *Dendrocygna arborea*, *Anas crecca*, *Anas bahamensis bahamensis*, *Anas discors*, *Oxyura
 jamaicensis*, *Pandion halioetus ridgwayi*, *Rallus longirostris*, *Pluvialis squatarola*, *Charadrius
 alexandrinus nivosus*, *Charadrius wilsonia*, *Charadrius seimpalmatus*, *Charadrius melodus*,
Charadrius vociferus, *Haematopus palliatus prattii*, *Himantopus mexicanus*, *Tringa melanoleuca*,
Tringa flavipes, *Tringa solitaria*, *Catoptrophorus semipalmatus*, *Actitis macularia*, *Bartramia
 longicauda*, *Numenius phaeopus*, *Arenaria interpres*, *Calidris alba*, *Calidris pusilla*, *Calidris mauri*,
Calidris minutilla, *Calidris melanotos*, *Calidris himantopus*, *Limnodromus griseus*, *Gallinago gallinago*,
Larus atricilla, *Sterna nilotica aranea*, *Sterna maxima maxima*, *Sterna sandvicensis acuflavida*, *Sterna
 dougallii dougallii*, *Sterna hirundo*, *Sterna antillarum antillarum*, *Sterna anaethetus recognita*, *Sterna
 fuscata fuscata*, *Anous stolidus stolidus*, *Ceryle alcyon*.

19 Social and Cultural Values

Aesthetic

Aquatic vegetation (e.g. reeds, willows, seaweed)

Archaeological/historical site

Conservation education

Current scientific research

Fisheries production

Non-consumptive recreation

Sport fishing

Subsistence fishing

Tourism

Traditional cultural

20 Land tenure/ownership

Ownership category	On-Site	Off-Site
National/Crown estate	+	+
Private	+	+

21 Current land use

Activity	On-Site	Off-Site	Scale
Nature conservation	+	+	Small-Scale
Tourism	+	+	Small-Scale

Recreation	+	+	Small-Scale	
Research	+	+	Small-Scale	
Collection of non-timber natural products: subsistence			+	+ Small-Scale
Cutting of vegetation (small scale/subsistence)		+	+	Small-Scale
Fishing: (unspecified)	+	+	Small-Scale	
Fishing: recreational/sport	+	+	Small-Scale	
Arable agriculture (unspecified)		+	Small-Scale	
Grazing (unspecified)		+	Small-Scale	
Urban development		+	Small-Scale	
Other		+	Small-Scale	

22 Adverse factors affecting the ecological character of the site

Activity	On-Site	Off-Site	Scale	
Introduction/invasion of exotic animal species		+	+	Small-Scale
Introduction/invasion of exotic plant species		+	+	Small-Scale
Transport infrastructure development	+	+	Small-Scale	
Unspecified development: urban use		+	Large-Scale	

23 Conservation measures taken

Conservation measure	On-site	Off-site
NNR	+	+

24 Conservation measures proposed but not yet implemented

see below

Site vulnerability and management statement

The Ramsar site was protected under domestic legislation as a nature reserve around the time of its listing under Ramsar. At the same time, several other nearby sites were protected. Recent and current studies have identified other parts of the adjacent and ecologically linked areas which need protection.

There is no current management plan. However, the purpose of the Darwin Initiative project 1999-2002 is to produce a draft management plan, and this is on schedule for production in 2002. The work is coordinated by the Turks & Caicos National Trust and the UK Overseas Territories Conservation Forum, and has involved local people at all stages. The general approach of the draft management plan was enthusiastically supported at a community meeting in Middle Caicos in February 2002.

As noted above, the Darwin Initiative project Developing Biodiversity Management Capacity Around the Ramsar Site in Turks & Caicos Islands is being completed in 2002. Led by UK Overseas Territories Conservation Forum, CAB International and the Turks & Caicos National Trust, this is resulting in a draft management plan for the Ramsar site and surrounding area, which has already achieved a high degree of local support during its development. TCNT and UKOTCF are setting up follow-up work to bring this plan into operation, including its further development. This has received initial financial support from the UK Foreign & Commonwealth Office and local sources, with the further necessary support being pursued. Some aspects of the plan are indicated in sections 26 & 27 below.

25 Current scientific research/survey/monitoring and facilities

The Darwin Initiative project has brought together a group of scientific specialists from a range of institutions, many of whom have not previously worked together. The biodiversity surveys conducted have drawn on: conservation management, organisational capacity building and ornithological expertise from the UK Overseas Territories Conservation Forum; entomological expertise from CABI Bioscience and the Natural History Museum in London; botanical expertise from The Fairchild Tropical Gardens (Florida) and the National Trust for the Cayman Islands, with satellite-imagery skills of the latter; knowledge of bats from the joint chairman of the IUCN/SSC Chiroptera Specialist Group and conservation advisor to The Bat Conservation Trust, and the Carnegie Museum of Natural History (Pennsylvania); expertise in herpetiles from the Zoological Society of

San Diego. In each case, the work of these recognised international specialists has been complemented by the knowledge of local people. The results of this work are being incorporated in the draft management plan as well as being prepared for scientific publication. Needs for further study and for monitoring are being addressed within the context of the working plan.

26 Current conservation education

The training and education elements of the Darwin Initiative project have been varied considerably to fit in with changing local requirements. During the specialists' visits, a wide range of those interested in developing skills have been invited to join in on Middle Caicos. Those to take advantage of this ranged from the local elementary school on Middle Caicos to the British West Indies Collegiate from Providenciales, the High School on North Caicos and staff of the TCI Government. Another extra area of training developed was capacity-building in the Middle Caicos community as a whole to take an increased part in decision-making on the future of their island, based partly on the preliminary results of this project discussed in community meetings. In terms of formal education, the Turks & Caicos National Trust, in consultation with local schools, has developed and implemented an internationally acclaimed environmental education programme for elementary schools *Our Land, Our Sea, Our People*. This fills a gap in either the absence of suitable environmental material or the use of locally inappropriate materials from UK or distant parts of the Caribbean, so as to restore in young people a value in local knowledge of relations with their environment, while it is still possible to benefit from the first-hand knowledge of their grandparents, who had to live off the land. This will be extended using results from the study of the Ramsar site and adjacent area.

The ecotourism-related developments noted below will be used also for educational purposes.

27 Current recreation and tourism

A key element of the draft management is the provision and management of trails, other viewing situations, literature and guide training at a range of situations within the Ramsar site and surrounding area. Other initiatives of the Turks & Caicos National Trust and of the TCI Government are providing support to local residents on the development of small businesses compatible with, and complementary to, the conservation and education initiatives.

The Government of the Turks & Caicos has transferred to the Turks & Caicos National Trust a former school building, in Bambarra, Middle Caicos, to provide an environmental centre. The building requires considerable renovation before it can be used effectively, but it is already a major asset. TCNT, with the support of TCI Government, UKOTCF and others, is seeking funding for this from various sources, mainly in-country. This will integrate with the other initiatives noted above.

28 Functional jurisdiction

Ministry of Natural Resources, Government of the Turks & Caicos Islands, Grand Turk, Turks & Caicos Islands, British West Indies

29 Management authority

Proposal for Turks & Caicos National Trust (PO Box 540, Providenciales, Turks & Caicos Islands, British West Indies; tel +1 649 941 5710; fax +1 649 941 4258; e-mail: tc.natrust@tcway.tc) to lead in mgmt of site in conjunction with TCI Gov Departments.

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Appendix 4: Turks & Caicos National Trust

Information on some of the work of TCNT is given below.

MISSION STATEMENT:

To safeguard the natural, historical and cultural heritage of the Turks & Caicos Islands for present and future generations and for the enjoyment of all.

The Turks & Caicos National Trust is a membership, non-profit, non-governmental organisation dedicated to the preservation of the cultural, historic and natural heritage of the Turks & Caicos Islands. It was founded in 1992, after the passage of enabling legislation by the TCI Government. The Turks & Caicos National Trust is governed by an elected Council which includes representatives from all the inhabited islands in the TCI.

The enabling legislation gives the Trust a wide variety of powers, among which are the powers to:

- Identify, investigate, classify, protect and preserve any area, site, building, structure, or object of cultural, historic or natural significance;
- Hold property in trust for the future, including the powers to declare such property inalienable and to provide public access;
- Create a Heritage Register;

TURKS & CAICOS NATIONAL TRUST STAFF

The National Trust daily routine of managing the office of the Trust lies with the Executive Director, Ethlyn Gibbs-Williams and support staff comprising, an Executive Officer Colette Robinson, Administrative Assistant Jovett Harvey, and Public Relations/Education Officer Gigi Williams.

The National Trust also has field staff, who oversee the management of the Darwin Project, Little Water Cay and other heritage sites. Allen Ray Smith the Heritage Sites Supervisor oversees all the National Trust sites and supervises the field staff, Bryan Manco the Darwin Project (now Conservation) Officer currently based in Middle and North Caicos and Bruce Garland the Little Water Cay Warden.

PROJECTS

Enrich your knowledge of the Turks & Caicos by visiting these historic and natural sites, all of which are projects of the Turks & Caicos National Trust



CHESHIRE HALL

The Trust has been granted a 99 year lease on this important Loyalist site in Providenciales. It is slated to become a major cultural tourism facility. So far, some signage has been installed, and some of the buildings stabilised, and the preliminary studies and archaeological work will soon be underway. Plans include nature trails and a garden featuring native plant species.



WADES GREEN

The Trust is working with two community-based groups to conserve and make accessible these well-preserved ruins from the Loyalist Period. Access is along an ancient

carriage trail, leading to the ruins of the Great House and its support buildings which give a powerful sense of life in North Caicos over 200 years ago. The Trust has been granted a 99 year lease on the property.





SNORKEL TRAILS SMITH REEF & THE BIGHT REEF

The Trust has developed snorkel trails on two of Providenciales best snorkel reefs. These feature “reef balls” which give the visitor information on the marine life and on reef etiquette, in order to ensure that while snorkellers are learning about our vibrant marine environment they avoid damaging this delicate ecosystem.

LITTLE WATER CAY ROCK IGUANA NATURE TRAIL

This tiny island just northwest of Providenciales is home to some 2000 rare and endangered rock iguanas. The Trust has developed two boardwalk trails which give the visitor the chance to see these endemic lizards, as well as ospreys and other birds, while protecting both the animals and their delicate habitat.

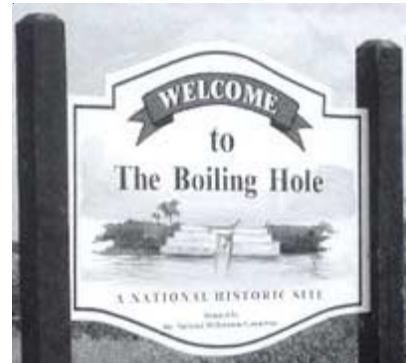


MIDDLE CAICOS CROSSING PLACE TRAIL

Hiking & Biking trails along the coastal headlands of Middle Caicos which follow the old path from Lorimers to the place where in times long past the people crossed the sandbars to North Caicos. This endeavor is a part of the Middle Caicos Eco-Tourism Project, a local community based program prompted through the National Trust to give the financial and physical support needed to promote eco-tour activities on Middle Caicos.

THE BOILING HOLE

The Trust is engaged in a joint project with the School for Field Studies to study and enhance the Boiling Hole on South Caicos. The site was designated as an area of Historic Interest in the National Parks Ordinance, 1992, because the Boiling Hole was a vital part of the South Caicos salt works. The natural flow of oceanic water through the Boiling Hole was once directed to control the water levels in the salinas to facilitate salt production. In addition to its historic value, the area contains abundant wildlife, from flamingoes which feed in the salinas to herons that roost in the mangroves.



This project consists of three elements:

1. Development and installation of interpretive and directional signs covering general information about the salt works, aquatic birds, mangroves, the endemic heather, sheepshead minnows and other marine species of significance.
2. Establishment of a Naturalist Training Programme for tour guides, so that they will be conversant in the cultural and natural history of the Boiling Hole and the surrounding areas, and can give visitors a high-quality experience.
3. Completion of a scientific investigation of the birds and fish that inhabit the Boiling Hole and adjacent salinas.

It is critically important that we enhance our cultural and historic tourism resources on every Island, and the Trust is delighted to have formed a partnership with the School for Field Studies and Marine Resources Faculty, Andy Danylchuck, to work together in this endeavour.

PROGRAMMES

Stewardship of Trust Lands

One of the major purposes of the Trust is to hold land in trust for the future of the TCI. The Trust owns three areas of important habitat, located in Providenciales, North Caicos and Grand Turk, and has recently been granted long-term leases on several other sites of environmental and historic importance. We also work with Government to protect nature reserves and sanctuaries.

Public Awareness and Education

Public education has always been a top priority. We conducted an extensive campaign on the Rock Iguana, under a grant from the RARE Centre for Tropical Conservation, and are currently engaged in a country-wide programme on the West Indian Whistling Duck. We are also working with the CRMP Office to raise public awareness about the importance of the country's parks, reserves and sanctuaries.

Partnership

The Trust works with many partner organisations, including the TCI Government, the TC Hotel & Tourism Association, the Tourism Board, the TCI National Trust, the RARE Centre for Tropical Conservation, the Royal Society for the Protection of Birds, the Caribbean Ornithology Society, UK Overseas Territories Conservation Forum, Mangrove Action Project and many more. Our international partners recognise the unique importance of our wetlands, woodlands and marine environment.

Mangrove Action Project (MAP) sponsored a contest which involved kids from all over the world to produce artwork and poems with the theme " Why Are Mangroves Important To Me And My Community" and the **Turks & Caicos secured the month of August**, you can view and purchase the calendar for 2002 at the following address www.earthisland.org/map/calendar.htm

Pages from International Children's Art & Poetry 2002 Calendar



S. A. Morley Turks & Caicos
- Age 11 August 2002



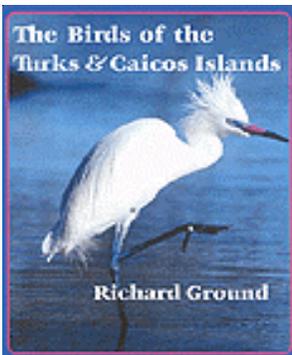
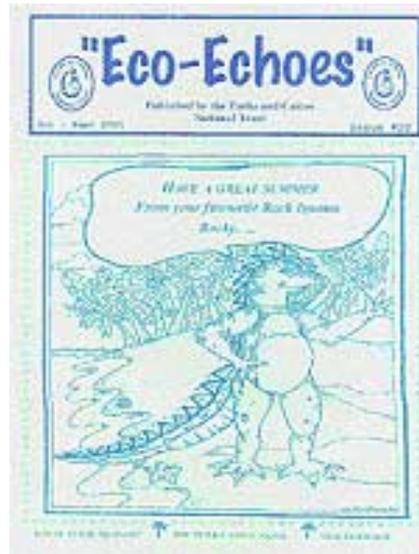
Liyama Atikah Binti Malaysia
- Age 10 January 2002

Education Publications *ECO-ECHOES*

Eco-Echoes is the Turks & Caicos National Trust's children's environmental booklet. It is used as supplementary material in the public awareness programme, and is designed to appeal to school children ages 4 - 12. The booklet is produced quarterly and is distributed to all primary schools in the country, including private schools. All Junior members receive a personal copy of the booklet, each quarter.



Echo Echoes is widely used by teachers as resource material in planning lessons covering topics such as mangroves, coral reefs, national parks, birds, etc.



The Birds of the Turks & Caicos Islands

The Turks & Caicos National Trust launched the publication of the first comprehensive book about the Birds of the Turks and Caicos Islands on Thursday November 15th, 2001 at its Annual General Meeting. The book has a hardcover, with 96 pages of 236 coloured pictures, of birds found in the islands. The birds were photographed and information written by Richard Ground.

One copy of the book is available for \$20.00

10 copies or more are available for \$16.00 per copy.

Appendix 5: Logical framework for next stages of work

This logical framework addresses a wide sweep of needs for the management of the area centred on the North, Middle and East Caicos Ramsar Wetland of International Importance. It also pays attention to the use of the example in the wider context of the rest of TCI and other countries. It is important to recognise that this framework considers needs and is not a statement of what will happen. In order to implement the framework, resources are required. These will need to come from a variety of sources. Various parts of the work outlined in the framework can be broken into projects, which can be progressed on different schedules. At the time of preparation of this version of the plan, several elements of funding have been secured allowing commencement of some elements of the work.

Intervention logic	Objectively verifiable indicators of achievement	Sources and means of verification	Assumptions
Overall objectives			
<i>What is the overall broader objective, to which the project will contribute ?</i>	<i>What are the key indicators related to the overall objective?</i>	<i>What are the sources of information for these indicators?</i>	
To maintain the biodiversity and cultural integrity of the Caicos Islands including the Ramsar wetland of international importance through enabling the local people to protect the area by generating sustainable usage involving eco-tourism-based activities	Maintained presence and distribution of key species and ecosystems, and maintained & enhanced economic activity of local people, as well as maintaining numbers in local communities and increasing the numbers of the working population remaining locally	Continued survey results compared with those from Darwin Initiative project. Local business summary; population demographic figures from TCI Government	No large-scale externally generated built development approved for Middle, North or East Caicos. Natural disasters do not impose huge damage.
Project purpose			
<i>What are the specific objectives, which the project shall achieve?</i>	<i>What are the quantitative or qualitative indicators showing whether and to what extent the project's specific objectives are achieved?</i>	<i>What are the sources of information that exist or can be collected? What are the methods required to get this information?</i>	<i>What are the factors and conditions not under the direct control of the project which are necessary to achieve these objectives? What risks have to be considered?</i>
1. To provide a means by which the rich biodiversity and cultural heritage of the area can be treasured by local people and experienced by visitors without damage to these internationally important ecosystems	Maintained or increased participation in the project by local people. Extra protection for treasured sites in place. Increased visitor numbers. Maintained presence and distribution of key species and ecosystems	Records of community meetings. Reports of TC National Trust. Logs at visitor centres; ticket sales for charged sites; numbers of (uncharged) school visits. Wardens' reports.	
2. To facilitate the development of the capacity of local people to establish small businesses based on eco-tourism and traditional crafts, so as both to provide the economic incentive for (1) and employment for young people so that they no longer need to leave the islands to find work, thereby maintaining the communities and cultural integrity.	No. of small businesses increases. Skilled work force increases. More young adults remain on North & Middle Caicos.	Project reports and TC Invest information. Ditto plus Ministry of Finance statistics. TC Government statistics.	Supply of people of appropriate working ages with readiness to participate in training. (This is partly influenced by the project's awareness raising - and pilot work is encouraging.)
3. To provide means of coordinating the work, educating local children (and where appropriate adults) and visitors and integrating the work into the National Physical Plan.	Trails, literature, training etc in place and modules of Our Land, Our Sea, Our People extended. Results of work incorporated in National Physical Plan.	Project reports. Environmental education course module documents. National Physical Plan document.	TCI Government National Physical Plan progresses.
4. To use this experimental approach to provide an example to the widely spread small island communities which are searching for ways of maintaining biodiversity and local culture while generating an income so that these can be maintained rather than surrendering to intensive development models imposed and driven by external investment replacing local culture and control by North American/European systems.	Widespread availability and promotion of project-based material: presentations, documents, web-sites, publications.	Project reports; publications and their circulation lists; web-sites and statistics on web-visits	Organisations elsewhere are interested. (Pilot work indicates a high demand.)

Expected results			
What are the concrete outputs envisaged to achieve the specific objectives?	What are the indicators to measure whether and to what extent the project achieves the envisaged results and effects?	What are the sources of information for these indicators?	What external factors and conditions must be realised to obtain the expected outputs and results on schedule?
1.1 Working biodiversity management plan	Plan in place and being used	Plan document & reports of project meetings	
1.2 Working cultural heritage management plan	Heritage survey done; plan in place and being used	Plan document & reports of project meetings	
1.3 Appropriate infrastructure (e.g. trails, hides, signage) to maintain and enhance above, and manage access to it	Tracks and signs in place and visited	Project reports, including visitor statistics	External economic activity remains adequate to provide the share of income expected from this.
1.4 Trained personnel (e.g. guides, wardens, educators, managers, conservation officers, technicians)	Personnel in place, training needs assessed, regularly updated and met	Project reports	
1.5 Interpretative materials (e.g. leaflets, displays, information for signs, curriculum and other education materials)	Scientific and historical information translated to accessible form.	The documents and other materials themselves, and project reports	
2.1 Socio-economic analysis and report on existing and potential small business enterprises established and operated by local people and directly linked to the natural, historical and cultural heritages of the Caicos Islands	Report produced	Contract report	Cooperation of TCI Government maintained (as expected)
2.2 Based on this report and prior small business training and consultation workshops and local community meetings, facilitation and training for local people to establish further small businesses and to provide craft, educational technical and other vocational skills required.	Training provided	Project reports	Local people take up training opportunity (as expected on the basis of pilot work)

2.3 Enhanced capacity of the TC National Trust to manage human resources and technical and scientific management of conserved areas as well as its own enterprise elements.	Executive Director completes personnel management course. Human resources policy adopted and in place. Business management system in place.	Project reports. TCNT Council minutes & Annual Reports. Executive Director's reports to Council. Project reports.	TCI Government/ Conservation Fund continue to give core support (in recognition of TCNT's role in site-management, education etc) allowing TCNT to support expansion.
2.4 Optimised tourism income to the project and community while remaining within the sustainable capacity of the resource	Recommendations of socio-economic study and of biodiversity and cultural heritage plans taken up and utilised. Fee collection system in place.	Project reports including financial and scientific monitoring information.	
3.1 A maintained programme of community meetings and management of an integrated and dynamic strategic plan to link the diverse activities to mutual benefit	Meetings occur regularly and are well attended. Action Points from meetings incorporated in strategic plan.	Meeting minutes. Strategy review documents and project reports.	
3.2 Establishment and successful operation of information and resources centres	Centres in place and used by visitors and local people, including for the sale of crafts.	Project reports, especially visitor numbers, sales figures.	External funding raised for construction and equipping centres.
3.3 A wide ranging education programme for local people, teachers and students within the schools system, and visitors	Modules of Our Land, Our Sea, Our People enlarged and updated and teachers trained in their use. Field studies modules developed. Regular programme of presentations available at Centres. Special modules developed for people with disabilities. Programmes on local television.	Education programme documents. Project reports.	TCNT Education Officer continues to be funded by Conservation Fund (i.e. visitor tax).
3.4 Incorporation of plans from this project (which addresses a high proportion of the country's land area) into the National Physical Plan	Recommendations from integrated management plan evident in National Physical Plan	National Physical Plan document	TCI Government continues work to produce National Physical Plan.
3.5 Effective management of the overall project	Project indicators match plan. Financial & technical produced on schedule	Reports to funding bodies.	

4.1 Management plans for other nature reserves and historic sites in Turks & Caicos.	Management plans produced	Plan documents and project reports	Resources available from the Conservation Fund or elsewhere to contribute to the costs of sites transferred to TCNT management
4.2 Establishment of a Heritage Register (as envisaged in statute) to identify all sites within the country warranting special protection and management	Heritage Register produced	Heritage Register document	Availability of volunteer effort
4.3 Dissemination of experience from this pilot project throughout the Caribbean Region	Widespread conferences, workshops & publications. Information supplied to follow-up enquiries.	Project reports; publications and their circulation lists	
4.4 Dissemination of experience of this pilot project as an example of a small island ecosystem to appropriate countries worldwide	Information on web-site. Widespread conferences, workshops & publications. Information supplied to follow-up enquiries.	Project reports; publications and their circulation lists; web-sites and statistics on web-visits	
<i>What are the envisaged effects and benefits of the project?</i>			
Development of the capacity of the Turks & Caicos National Trust wisely to manage protected areas and business enterprises, and to contribute to national strategies both itself and by facilitating other elements of civil society			
Enabling the resident population of the Caicos Islands to maintain their communities and way of life but with sufficient skills training, jobs and income to reverse the current loss of viability through emigration to avoid poverty			
Conservation and sustainable management of the internationally important ecosystems			

Benefit to existing and future generations of Turks & Caicos Islanders through enhanced awareness of the importance of their natural and cultural inheritance underpinned by a sound curriculum and teacher training in this subject			
Benefit to the wider international community as an example of what can be achieved by small communities to protect their way of life and internationally important natural resources by taking control of their own livelihoods			
<i>What improvements and changes will be produced by the project?</i>			
Reversal of the loss of the economically active work-force from the resident population of the Caicos Islands and consequent decline of community viability			
Halting further loss of fragile ecosystems to externally powered intensive development (which then also generates positive-feedback to further intensification)			
Timely mitigation of the potentially negative aspects of the EU-funded road causeway link between Middle and North Caicos, which would otherwise exacerbate the negative developments of the previous item			
Implementation of the international convention commitment of effective conservation management for the internationally important Ramsar wetland and associated ecosystems			

Activities			
<i>What are the key activities to be carried out and in what sequence in order to produce the expected results?</i>	Means: <i>What are the means required to implement these activities, e. g. personnel, equipment, training, studies, supplies, operational facilities, etc.</i>	<i>What are the sources of information about project</i>	<i>What pre-conditions are required before the project(s) start(s)? What conditions outside the project's direct control have to be present for the implementation of the planned activities?</i>
			Pilot work on several elements has addressed many of the pre-conditions required so that relatively few items outside of the project's control are likely to place major constraints. Only items additional to those noted above within this logical framework are noted below.
1.1.1 Communicate results of biodiversity surveys carried out under the Darwin Initiative as baseline for project work	Hold initial meeting of project personnel, supported by familiarisation with reports, to ensure that the results from the preceding Darwin Initiative project are fully available to, and utilized by, the project.	Survey results; feedback from community meetings	
1.1.2 Analyse human actual and potential impacts on biodiversity	As 1.1.1, combined with analyses of increased human activity on study sites, by project personnel	Local knowledge; reports of incidents; monitoring by wardens; reports by visitors	
1.1.3 Develop action plan to implement biodiversity conservation	Project personnel to discuss draft management plan produced by Darwin Initiative with wider pool of TCI stakeholders to produce final working version		
1.1.4 Develop monitoring and revision procedures	Based on recommendations of specialist researchers, project personnel develop and implement procedures to secure information on biodiversity changes to allow input to revisions of plan (see 3.1.3). Develop computing procedures for information handling.		

1.2.1 Survey historical and cultural resource	TC National Trust island network volunteers identify further sites, buildings and artifacts for cataloging. Collate information on actual and potential areas for harvest of plants for traditional crafts and other cultural uses. Develop assessment criteria, recording formats & database.	Local knowledge of senior citizens; national archive sources; UK records; Museum	Adequate volunteers; access to archives; project activation before many elderly knowledgeable local persons (mainly aged about 80) die.
1.2.2 Develop recommendations and action plan on sites appropriate for conservation/restoration activities, and integration with cultural heritage	Project personnel to develop recommendations for incorporation in integrated management plan, contracting (or securing as volunteers where possible) specialists for restoration plans for selected sites.		
1.3.1 Establish full picture of land ownership and rights of way	Project personnel to work closely with Land Registry and Planning Departments to extend and update existing information, collated during Darwin Initiative.		
1.3.2 Develop agreements, land transfers, leases etc as appropriate to establish Turks & Caicos National Trust management control over key areas of biodiversity and historic value	Project personnel to develop applications to Government in relation to land in public ownership, and to enter negotiations with relevant private land-owners.	Land ownership records plus project information	Land parcel ownership is accessible. Owners can be contacted. TCI Govt approve land transfers of government land.
1.3.3 Design and manage integrated nature and historic trails, based where practicable on traditional paths, and including vegetation management, board-walks over wet areas, viewing hides & platforms and signage	Project personnel to take results of Darwin Initiative survey and of sustainable capacity (see 1.1.1&2), studies of cultural & historical sites (see 1.2.1&2) , land & access information (see 1.3.1&2) and other information to decide on appropriate areas for public access; construct trail infrastructure (by locally recruited trades-persons); convert relevant biodiversity, historical and cultural information into user-friendly interpretative materials.		
1.3.4 Establish system for guided access with limitations as necessary to conserve resources	Further develop existing collaboration with local tour guides to agree capacity limitations, means of access control, fees where appropriate, and system of enforcement, feedback and revision as necessary.		

1.4.1 Develop job-descriptions for the necessary tasks and the timing from when these roles will be needed	Project personnel to develop job-descriptions in consultation with appropriate partners, matching this to the sequence of developments as modified by any external constraints.		
1.4.2 Establish financial plan for maintenance of these tasks within and beyond the project period, using resources generated by the activities initiated and other local funding sources	On the basis of experience to date combined with that during the first part of the project, revise preliminary projections of on-going aspects of the work, review potential for income from within these activities, examine potential income from other sources, such as governmental support for the statutory heritage protection function, and prepare forward plan beyond the project period.		
1.4.3 Identify training needs of existing local tour guides and develop in consultation with them integration of these into the system	In consultation with the guides and external expertise, identify nature and level of skills required, evaluate existing competencies, assess training required to reach required level, and organise this.		
1.4.4 Phase recruitment of required personnel	Integrate the results of 1.4.1 and 1.4.2, and implement recruitment strategy aligned to this.		
1.4.5 Organise appropriate training for successful candidates	Identify nature and level of skills required (see 1.4.1), evaluate existing competencies of recruits, assess training required to reach required level, and organise this.		
1.5.1 Develop and implement programme of integrated leaflets, signs and displays matched to the opening of different trails etc	Implement 1.3.3 in the light of the financial and human resources (see 1.4.2 to 1.4.5).		
1.5.2 Work with local teachers to develop further modules of teaching materials, based on the successful pilot programme of TC National Trust and Education Dept environmental education course "Our Land, Our Sea, Our People"	Project Personnel and TC National Trust Education Officer to use information from the Darwin Initiative project to incorporate into revisions of existing modules on the environmental education programme "Our Land, Our Sea, Our People". Make TCNT-managed sites available as living class-rooms for school-children from throughout Turks & Caicos. Develop junior conservation programme for school-children to participate in conservation work in their communities. Explore with the developing Community College curriculum potential for post-school education.		

<p>2.1.1 In consultation with TCI Government's Economic Advisor, commission suitable economist to undertake socio-economic analysis on local small business enterprises linked to heritage and prepare report</p>	<p>In consultation with TCI Government Ministry of Finance and Investment Agency (TCInvest), identify extent of available relevant information and the parameters of further study needed, in the light of developing heritage management plans. Identify potential consultants with experience of socio-economic work with small communities and in heritage-linked aspects, and commission study.</p>		
<p>2.2.1 Further develop successful existing TC National Trust pilot programme of small business workshops</p>	<p>TCNT to work in collaboration with TCI Government's agency TCInvest in UNDP-funded projects on the Development of Small-scale Enterprises for Income and employment Creation, and The Small Enterprise Development Centre, acting as resource to these projects and to identify and address gaps.</p>		
<p>2.2.2 Arrange for suitable training to enhance technical skills of local people to meet the business needs</p>	<p>Identify the technical skills needed both in small businesses and in support of TCNT work, so that local people are in a position to take advantage of employment (or, where appropriate self-employment) opportunities provided directly or indirectly by this project's results as these unfold.</p>		
<p>2.3.1 Management training for Executive Director of the TC National Trust</p>	<p>Identify suitable human resource management course and arrange for enrolment and related logistics.</p>		
<p>2.3.2 Strategic development training for TC NT Council and Executive Committee</p>	<p>Extend previous successful facilitation of organisational development of the Trust so that it is well able to cope with the steadily increasing management of its resources and programmes. The capacity of the Trust will need to be sustainable beyond the project, and the work will be designed to provide for such sustainability.</p>		
<p>2.4.1 Develop integrated marketing strategy incorporating input from biodiversity and cultural management plans and socio-economic study</p>	<p>This is a complex activity which needs to be in place in its initial form as early as possible. Therefore it will develop progressively, as information from other activities becomes available. This will start with the heritage management plans and will later incorporate the results of the socio-economic and financial plan. Some overlap with work on these latter elements will be beneficial to allow some iteration in their development.</p>		

<p>3.1.1 Continue to hold regular community meetings and meetings of other stakeholders</p>	<p>This will build on the successful system established under the Darwin Initiative. Strong local participation has been achieved by open community meetings, with a planned but flexible agenda, which has proven an effective mechanism to capture the knowledge and wishes of local persons rather than impose outside ideas upon them.</p>		
<p>3.1.2 Hold regular staff meetings</p>	<p>This is already part of regular TCNT activities, and will continue to be important as new staff are recruited to the organisation. This will be increasingly vital with the decentralisation of Trust bases for staff from mainly the developed island of Providenciales, initially to include the project bases of Middle Caicos and later North Caicos.</p>		
<p>3.1.3 Integrate outputs from meetings into periodic revisions of working management plans, with full consultation</p>	<p>Working management plans will be annotated with relevant points arising at both community and staff meetings, as well as other inputs, including further research, monitoring, and land-management arrangements. In some cases, this will need early interim amendments to plans. In any event, the plans will be reviewed in addition at annual intervals to consolidate appropriate changes.</p>		
<p>3.2.1 Restoration, renovation and modification of old school building at Bambarra, Middle Caicos</p>	<p>TCI Government has agreed to donate this old building and its land to TCNT. Architectural drawings have been prepared in the pilot period, and funding is being secured. Actual transfer of the land is in progress including necessary mutation of land parcels.</p>		
<p>3.2.2 Planning, fund-raising and construction of centre at Wades Green Historic Site, North Caicos</p>	<p>The Forum arranged via one of its UK member organisations to provide the voluntary services of a professional restoration expert to develop a restoration plan. This will inform the placement of a visitor centre. Within this project, the Trust (with its partner organisations) will then embark on fundraising from local and international sources, including TCI Government and its agencies, local commerce, its local membership, international companies, governments and NGOs, as well as tourists.</p>		

<p>3.2.3 Planning, fund-raising and construction of centre at Cheshire Hall Historic Site, Providenciales, to provide first point of contact in the major population and visitor island in TCI</p>	<p>On this island undergoing rapid built development, Cheshire Hall has the potential to become a key land mark and educational centre, for both local people and tourists. The views from its situation provide also for a gateway to the environment, geography, history and ecology of the islands. It will be developed as a focal point also to make visitors aware of the other heritage sites throughout the country and to facilitate visits to them. As for activity 3.2.3, the Forum arranged via one of its UK member organisations to provide the voluntary services of a professional restoration expert to develop a restoration plan. This will inform the placement of a visitor centre. Within this project, the Trust (with its partner organisations) will then embark on fundraising from local and international sources, including TCI Government and its agencies, local commerce, its local membership, international companies, governments and NGOs, as well as tourists.</p>		
<p>3.2.4 Equipping and manning centres</p>	<p>This will be phased, partly in accordance with the rate of fund-raising (3.2.2 & 3). The first phase is Bambarra Centre (3.2.1). It should therefore be possible to start within the first year of the project. The timing of the other two phases will be adjusted during the project. For each centre, an analysis will be made of user needs. The Bambarra Centre will house an office, basic accommodation for researchers, the national herbarium and seed-store, the information database on biological resources in the islands, a visitor centre including displays, locally produced refreshments, giftshop promoting local craft products and native plants, and a base for trails, and outdoor educational and visitor activities. Wades Green will provide a comparable centre for North Caicos with additional complementary specialisms. For the role of Cheshire Hall, see 3.2.3</p>		

<p>3.3.1 Develop further modules to build on successful pilot environmental education programme "Our Land, Our Seas, Our People"</p>	<p>Project Personnel and TC National Trust Education Officer to use biodiversity information from the Darwin Initiative project with historical, cultural information from this project and work with the Education Dept to incorporate into revisions of existing modules, develop further modules and introduce to schools including teacher training, based on the highly successful earlier TCNT environmental education programme "Our Land, Our Sea, Our People". Make TCNT-managed sites available as living class-rooms for school-children from throughout Turks & Caicos. Special modules developed for people with disabilities. Develop junior conservation programme for school-children to participate in conservation work in their communities. Explore with the developing Community College curriculum potential for post-school education.</p>		
<p>3.3.2 Develop educational activities and material using resource centres with trails and other facilities as living classrooms</p>	<p>These new modules (3.3.1) will include work in living classrooms in the field as well as more traditional elements. The interpretative centres, trails and other facilities will be designed and staffed to incorporate this usage, and to ensure access for people with disabilities.</p>		
<p>3.4.1 Interact with TC Government Dept of Physical Planning to meet their request that this work inform the National Physical Plan</p>	<p>It is expected that, by the start of this project, TC Government will commence work on a physical development plan for the country. Previous meetings staged around the onset of the Darwin Initiative project, identified a need for biological and historical material to be incorporated into the planning process. To this end, the biodiversity surveys which form the basis for the management plan were aligned to be compatible with TCI Government systems. It is anticipated that further information derived from this project will also be compatible so as to inform the physical planning process. Confirmation of this will be obtained at the outset through meetings with the relevant senior personnel in the planning dept.</p>		

3.5.1 Provide project management	The Forum, as proven effective project managers in work by itself and in partnership with UK Overseas Territories, will provide overall project management, working as necessary with the Executive Director, Treasurer and other officers of the TCNT.		
3.5.2 Establish representative project group	Local committee will include representatives from North and Middle Caicos, representatives of appropriate government departments, the Forum, the Trust's own development steering group, the Conservation Officer, with others co-opted as necessary for each stage of the process.		
3.5.3 Ensure that project activities and outcomes are regularly reported and evaluated by the project group and management team, with regular reports as required to project sponsors	Each project group meeting will be minuted, and include an evaluation three times per year of the activities since the last evaluation. Annual reports will be prepared on the work, with these feeding also into both the Trust's and the Forum's annual reports widely circulated to members and others.		
4.1.1 Secure the services of appropriate local personnel and international specialists (on a volunteer basis wherever possible) to produce management plans for all existing sites in the management of TC National Trust, extending this as necessary	Identify persons and organisations prepared to make available appropriate specialist experts, and coordinate working visits with local counterparts from TCNT and TCI Government officials to produce plans		
4.2.1 Commission review of existing information with additional survey and analysis as necessary to revise the list of natural, historical and cultural sites warranting statutory protection and/or ownership by TC Natural Trust	Collate existing information, identify gaps in coverage (geographical, in conservation value, in perceived threats) produce initial updated list and arrange additional surveys to allow revisions within regular work of the project.		
4.3.1 Presentations led by TC National Trust at regional meetings, including e.g. National Trusts, Caribbean Conservation Association, Society of Caribbean Ornithologists, West Indian Iguana Group etc, with follow-up on bilateral or small-group basis as required	Coordinate TCNT representatives to address relevant meetings & conferences, write articles, develop presentations and briefing packs for any suitable representative to present; give local TV presentations.		
4.4.1 Presentations via UK Overseas Territories Conservation Forum network, including periodic international conferences, UK Government Foreign Office network, Forum News, UKOTCF web-site, UKOTCF member organisations' networks (involving several million individual members), contacts with small island states and the Overseas Territories of other EU Member States	Develop presentation package, articles, web-pages, working group meetings.		

Appendix 6: Statutory protected areas in Turks & Caicos

NATIONAL PARKS

1. Admiral Cockburn Land and Sea National Park – South Caicos
2. Chalk Sound National Park - Providenciales
3. Columbus Landfall Marine National Park – Grand Turk
4. Conch Bar Caves National Park – Middle Caicos
5. East Bay Islands National Park – North Caicos
6. Fort George Land and Sea National Park – North of Pine Cay
7. Grand Turk Cays Land and Sea National Park – Grand Turk
8. North West Point Marine National Park - Providenciales
9. Princess Alexandra Land and Sea National Park - Providenciales
10. South Creek National Park – Grand Turk
11. West Caicos Marine National Park – West Caicos

NATURE RESERVES

12. Admiral Cockburn Nature Reserve – Long Cay, Middleton Cay, Six Hill Cay
13. Bell Sound Nature Reserve – South Caicos
14. Cottage Pond Nature Reserve – North Caicos
15. Dick Hill Creek and Bellefield Landing Pond Nature Reserve – North Caicos
16. Lake Catherine Nature Reserve – West Caicos
17. North, Middle and East Caicos (International Ramsar Site)
18. North West Point Pond Nature Reserve - Providenciales
19. Pigeon Pond and Frenchman’s Creek Nature Reserve - Providenciales
20. Princess Alexandra Nature Reserve – Little Water, Donna, and Mangrove Cays
21. Pumpkin Bluff Pond Nature Reserve – North Caicos
22. Vine Point (Man O’ War Bush and Ocean Hole Nature Reserve – Middle Caicos

SANCTUARIES

23. Big Sand Cay Sanctuary – Big Sand Cay
24. French, Bush and Seal Cays Sanctuary – South Caicos Bank
25. Long Cay Sanctuary – South East of Grand Turk
26. Three Mary Cays Sanctuary – North Caicos

HISTORICAL SITES

27. Boiling Hole – South Caicos
28. Cheshire Hall - Providenciales
29. Fort George – Fort George Cay
30. H.M.S. Endymion Wreck – South of Big Sand Cay
31. Molasses Reef Wreck – South East of West Caicos
32. Salt Works and Village – Salt Cay
33. Sapodilla Hill Rock Carving - Providenciales

Appendix 7: Consultations and Recruitment for the project on Biodiversity management and sustainable development around Turks & Caicos Ramsar site [centred on Middle Caicos]

These consultations were held by TC National Trust staff and, when in the TCI, Forum personnel. As the project went forward, CABI personnel were also involved in the meetings, as noted. This is not a complete list of consultations, because many informal meetings were held both in person and by telecommunications. The contacts between Trust personnel and others, in particular, are greatly under-recorded. Also not included are the many meetings of Trust Council and Executive Committee at which the work was discussed and future elements and applications planned, nor the widely circulated project newsletters and numerous other forms of interim reporting.

July 1997

- Consultation with DECR (Christie Hall and Judith Lynn Garland) on whether they would welcome work by Forum and National Trust. Conch Bar Caves and the Ramsar site were top of the list that DECR indicated they would like Forum/Trust to take a lead on.

Autumn 1997

- Following many discussions over preceding months, final consultation with DECR and others to agree on application for Darwin Initiative funding

Spring to Autumn 1998

- Darwin Initiative funding application unsuccessful. Consultations undertaken with local community, TCI Government Departments and international partners in Forum network to develop and submit new Darwin proposal. Applications prepared to UK Government sources and UK NGO members of the Forum, resulting in modest funding to continue preparatory and development work.

Oct/Nov 1998

- Consultations with members of Middle Caicos community about the scope and direction of the proposed project
- Further consultations with Governor, Ministers, DECR and others on application for Darwin Initiative funding.

April/May 1999

- Consultations with Middle Caicos community, DECR, CRMP, Ministers, Governor and others about the forthcoming Darwin Initiative project, for which funding had just been approved.

August 1999

- Discussions with local Middle Caicos community on forthcoming project.
- Meetings with Governor, DECR and CRMP.

November 1999

- The Forum (Dr Mike Pienkowski, Sara Cross), the Trust (Ethlyn Gibbs-Williams) and CABI Bioscience (Dr Oliver Cheesman) spent a few days in Grand Turk meeting with Ministers, Permanent Secretaries, Governor John Kelly, National Museum, Director of Planning, DECR (Christie Hall and Michelle Fulford) to discuss the Darwin Project. Invitations extended to all for their personnel to benefit from training by the volunteer visiting specialists

throughout the project. This was followed by a letter from the Forum to DECR, noting areas in which the DECR could be involved in the project. (At this time, CRMP were rather preoccupied with visiting DFID consultants who were considering the future of CRMP, and did not feel able to become very involved in discussions.)

- A community meeting in the form of a 'Planning for Real' Workshop was held in Conch Bar, as part of the formal initiation of the Darwin Initiative project, to gather from the local residents places of interest etc., that needed protection and that were of ecological importance.
- Project highlighted at Trust AGM, with many stakeholders present, and in Annual Report.

Feb 2000 (and for some weeks before)

- Many contacts with DECR and CRMP as Darwin Project tried to find suitable local candidate for post of project officer. The preferred option of the project partners was to recruit a Turks Islander as project officer, and several potentially suitable candidates were encouraged to apply in the openly advertised recruitment. However, despite much encouragement by the Trust, none of these maintained their applications. The project was fortunate to secure instead as project officer a well qualified candidate who is a relation of a local resident and who happened to be visiting TCI at the time of the recruitment advertisement. The project then began to explore ways of finding and funding the appointment of a counterpart, to work alongside the project officer from a later date (see below).

April 2000

- Field work and consultations with local residents, Middle Caicos.
- Start of work of project officer, based in Middle and North Caicos, with further frequent consultations and interactions with local community.

May 2000

- Community meeting in Middle Caicos.

July 2000

- Meetings with Governor and Minister Natural Resources

August 2000

- Courtesy briefing to CRMP
- Meeting with Darwin Committee and wider community in Middle Caicos (Mark Day, DECR Director, in attendance and also briefed separately outside the meeting).

November 2000

- Project highlighted at Trust AGM and Annual Report
- Launch of Darwin Project Middle Caicos — Permanent Secretaries Nat Res, Public Works & Providenciales present. Mark Day and Michelle Fulford (DECR) attended. CRMP also invited: the Chief Park Warden and the Admin Officer attended.
- Various scientific specialists starting study, and general invitation to participate issued, including searching for suitable potential local counterparts.

Jan/Feb 2001

- Other scientific specialists starting study, and general invitation to participate issued.
- School involvement in the field work with training from specialists.

March 2001

- Meetings with the Governor, the Ministry of Finance, TCInvest, DECR Director (Mark Day), CRMP (Judith (Garland) Campbell)

- Planning session with Trust Executive Committee for next phase of work, plus inclusion of this in Trust Council full-day workshop on future priorities. Development of project funding proposals, including provision of local counterpart, for submission to European Commission, Darwin Initiative, FCO and others.

April 2001

- Bird field work and meetings with Middle Caicos residents

June 2001

- Two community meetings were held in Middle Caicos – one at the beginning and the other at the end of the month

August 2001

- Meetings with Governor, Ministers, senior officials in several departments, including DECR (Michelle Fulford Gardiner), CRMP (Judith (Garland) Campbell) [who indicated that CRMP did not really have the time or skills to be able to contribute in consultations], Dept of Tourism and other bodies, such as National Museum.
- Community meeting on Middle Caicos.

November 2001

- More fieldwork, with involvement of schools and DECR staff.
- Appointment made to meet Project Manager CRMP Judith (Garland) Campbell, but she was not at her office, apparently being detained elsewhere.

15 Nov 2001

- Project featured at Trust AGM and Annual Report

February 2002

- Community meeting Middle Caicos, to discuss early draft of parts of management plan
- More fieldwork, with involvement of schools and DECR staff.
- Met Governor. Updated Minister Natural Resources, who invited presentation on the plan to ExCo.
- Appointments made to meet with DECR Director Mark Day but he cancelled; met with Deputy Director Michelle Fulford Gardiner.
- CRMP staff involved in other meetings, so could not be available for meeting on project, but project staff joined their meeting on other issues.

Spring 2002

- Applications for funding for implementation work to European Commission and Darwin Initiative unsuccessful, due to severe over-subscription (about 40-fold) of applications. Limited funding secured from FCO. Volunteer specialist assistance secured which, combined with the FCO funds, allowed the work to continue, but at a low level, and with insufficient funds to allow recruitment of local counterpart. Trust Executive Committee decide to apply to Conservation Fund for funding for local counterpart; to avoid confusion the application would be made once the Conservation Fund had completed consideration of the application for a contribution to the costs of the Middle Caicos Eco-centre, handling of which proposal had been postponed several times over preceding months.

May-June 2002

- Conservation Fund again deferred consideration of Middle Caicos Eco-centre application, so that proposal to fund local counterpart also delayed.
- Appointments made to meet with Mark Day (DECR Director) but he cancelled; met Deputy Director Michelle Fulford Gardiner (and subsequently in touch with her on various aspects).

- Spoke with Project Manager CRMP, Judith (Garland) Campbell and arranged meeting, but she cancelled; met with Rob Wild, Co-Management Advisor, CRMP.
- Meetings with Governor, Minister Natural Resources, officials in Planning, Tourism and others.
- Briefing meetings for Trust Council members on the draft plan.
- Advised all of plan to hold workshop on draft plan in August.

August 2002

- Informal discussions with Acting Director DECR, Dept of Financial Planning & Statistics, Director of Planning, Sustainable Development Planning Initiative consultants, and various others.
- Considered at Trust Council
- Workshop for all interested parties to be held 22 August 2002.
- In Workshop and follow-up meetings, possible funding sources identified for local counterpart and other elements of proposals delayed by lack of funding. Applications being developed.

Appendix 8: Extract from the National Parks Ordinance and subsidiary legislation, noting protected areas only within the plan area



TURKS AND CAICOS ISLANDS

CHAPTER 80

NATIONAL PARKS ORDINANCE and Subsidiary Legislation

Revised Edition

showing the law as at 15 May 1998

This is a revised edition of the law, prepared by the Law Revision Commissioner under the authority of the Revised Edition of the Laws Ordinance 1997.

This edition contains a consolidation of the following laws—

	Page
NATIONAL PARKS ORDINANCE	3
Ordinance 11 of 1975 .. in force 30 October 1975	
Amended by Ordinance 10 of 1989 .. in force 12 January 1990	
Amended by Ordinance 12 of 1992 .. in force 7 August 1992	
NATIONAL PARKS ORDER – Section 3	9
Legal Notice 40/1992 .. in force 7 August 1992	
Amended by Legal Notice 35/1995 .. in force 14 July 1995	
NATIONAL PARKS REGULATIONS – Section 8	21
Legal Notice 41/1992 .. in force 7 August 1992	
Amended by Legal Notice 4/1994 .. in force 18 February 1994	
Amended by Legal Notice 18/1994 .. in force 29 April 1994	
INDEX	40

Also included in this chapter is a designation by the Executive Council of areas for use by the public as parks—

PUBLIC PARKS GRAND TURK DESIGNATION

39

Gazette Notice 198 of 1993 .. in force 17 March 1993

CHAPTER 89

NATIONAL PARKS ORDINANCE

ARRANGEMENT OF SECTIONS

SECTION

1. Short title
2. Interpretation
3. Declaration of national parks etc
4. Usage of national parks, etc
5. Provisions with respect to land in areas declared to be national parks, etc
6. Restriction on certain activities harmful to the ecology
7. Enforcement
8. Regulations

CHAPTER 89

NATIONAL PARKS ORDINANCE

(Ordinances 11 of 1975, 10 of 1989 and 12 of 1992)

Commencement

[30 October 1975]

AN ORDINANCE TO PROVIDE POWERS TO PERMIT THE ESTABLISHMENT OF PARKS, NATURE RESERVES, SANCTUARIES AND AREAS OF HISTORICAL INTEREST, AND GENERALLY FOR THE CONSERVATION OF THE NATURAL ENVIRONMENT AND ECOLOGY OF THE ISLANDS AND FOR PURPOSES CONNECTED THEREWITH.

Short title

1. This Ordinance may be cited as the National Parks Ordinance.

Interpretation

2. In this Ordinance, unless the context otherwise requires—

“area of historical interest” means an area declared to be of historical interest under section 3;

“court” means the Magistrate’s Court;

“development” includes any change in use, the erection of any structure and the carrying out of any drainage, dredging or sewerage scheme, and such other activities as may be prescribed by the Governor by order;

“national park” means a national park established under section 3;

“nature reserve” means a nature reserve established under section 3;

“private land” means any land the title to which is vested in any person other than the Crown or the Government;
“sanctuary” means a sanctuary established under section 3.

Declaration of national parks etc

3. The Governor may by order declare any area in the Islands, including any part of the territorial waters of the Islands, to be—

- (a) a national park; or
- (b) a nature reserve; or
- (c) a sanctuary; or
- (d) an area of historical interest.

Usage of national parks, etc

4. (1) Subject to any regulations relating to any particular national park or nature reserve—

- (a) an area which is designated as a national park shall be open to members of the public for recreational use, including camping, fishing and sailing, and the Governor may make a grant of development per-mission for the erection in the area of buildings, the construction of roads, marinas and such other development as may be considered to be desirable to facilitate enjoyment by the public of the natural setting of the area and any features of historical interest therein:

Provided that in considering whether or not any such development as is mentioned in this para-graph as being permissible shall be authorised in any particular case, the paramount consideration shall be to limit such development to the minimum consistent with the reasonable access to and enjoyment of the area by members of the public;

- (b) an area which is designated as a nature reserve may be used for agricultural, arboricultural, piscicultural, sporting and recreational purposes, subject to such restrictions as may be prescribed and which may be considered desirable to ensure a proper balance in the natural ecology of the area; but no building or other development shall be permitted except in accordance with the conditions of a grant of development permission made by the Governor and such grant shall only be made for a building or other development which is required for one of the aforesaid uses which are permissible in a nature reserve.

(Amended by Ord. 10 of 1989)

(2) The declaration of an area as a sanctuary shall be made primarily for the purpose of the protection of the natural ecology, or of any particular form of living organism (including any marine life), in the area, and the avoidance of disturbance of the area by human beings, either at any time or at particular times according to the circumstances and the form of life which it is desired to protect. Entry into a sanctuary shall not be permitted except in accordance with any regulations made in respect of that sanctuary and no person shall carry out any development in a sanctuary.

(3) The declaration of an area of historical interest shall be primarily for the purpose of protecting an object of historical interest therein. Such an area may form part of a national park, nature reserve or sanctuary, and in such case shall be subject to those provisions of this section and any regulations which are applicable to that park, reserve or sanctuary. In the case of any other area of historical interest, the public shall have access to the area, or to any object of interest therein, during such times and subject to such conditions as may be prescribed by regulations which are applicable to that area; and no person shall carry out any development in that area except under a grant of develop-ment permission made by the Governor.

(Amended by Ord. 10 of 1989)

Cap.73

(4) Sections 63, 64 and 65 of the Physical Planning Ordinance shall apply *mutatis mutandis* to applications for develop-ment permission in a national park, a nature reserve, a sanctuary or an area of historical interest as

they apply to applications for development permission in a conservation area made under the Physical Planning Ordinance:

Provided that the Director of Planning appointed under the Physical Planning Ordinance shall make available to the Minister responsible for this Ordinance a copy of the environmental impact statement referred to in those sections before any application for development permission is approved. (*Inserted by Ords.10 of 1989 and 12 of 1992*)

Provisions with respect to land in areas declared to be national parks, etc

Cap. 78

Cap. 47

5. In any case in which private land is included in any area which has been declared to be a national park, a nature reserve, a sanctuary or an area of historical interest and the Governor does not consider that it is necessary for the purpose to which the declaration relates to acquire such land under the Land Acquisition Ordinance, any person entitled to any interest therein shall be entitled to receive compensation from the Government for the diminution, if any, in the value of his interest consequential upon any restrictions imposed on his use of the land by reason of such declaration. If agreement cannot be reached between the Government and the party concerned as to whether or not any compensation is payable, or as to the amount thereof, the matter shall be referred to arbitration under the provisions of the Arbitration Ordinance.

Restriction on certain activities harmful to the ecology

6. (1) If the Governor is satisfied that—

- (a) it is, or is likely to become, necessary for the prevention of the pollution of, or any other harmful or disturbing effect or influence on, the natural ecology of any national park, nature reserve or sanctuary; or
- (b) the preservation of any particular form of living organism (including vegetable or marine life) in any part of the Islands so requires,

he may by order impose restrictions on any development or the depositing or discharge of any waste or harmful matter in any area which he considers would have direct or indirect harmful effect on such natural ecology or living organism.

(2) The provisions of section 5, with respect to the assessment and payment of any compensation, shall apply *mutatis mutandis* in the case of any diminution in the value of any interest in land by reason of any restrictions imposed by order made under this section.

Enforcement

7. (1) Any person who—

- (a) carries out any development in a national park, nature reserve, sanctuary or area of historical interest, except in accordance with the terms of a grant of development permission made under section 4; or
- (b) fails to comply with any restriction imposed by an order made under section 6; or
- (c) enters any sanctuary without authority,

shall be guilty of an offence and shall be liable on summary conviction to a fine of \$50,000 dollars or to twelve months imprisonment or to both such fine and imprisonment.

(*Amended by Ords. 10 of 1989 and 12 of 1992*)

(2) The court before which any person is convicted under the provisions of this section may order the demolition of any structure erected or the reinstatement of anything altered or removed in contravention of the provisions referred to in sub-section (1), and in default of compliance with any such order of the court, the

Governor may cause the necessary work to be carried out and may recover as a civil debt the cost of so doing from the person in default.

(3) An appeal shall lie to the Supreme Court from any decision or order of the Magistrate's Court made under this section.

Regulations

8. (1) The Governor may make regulations for carrying into effect the purposes and provisions of this Ordinance, and without derogation from the generality of the power hereby conferred, such regulations may provide—

- (a) for the control and management of national parks, nature reserves, sanctuaries and areas of historical interest;
- (b) the conditions subject to which members of the public shall be permitted to enter and use any national park, nature reserve or area of historical interest, and for the issue of licences to permit persons to enter any national park, nature reserve, sanctuary or area of historical interest for any particular purpose;
- (c) for the regulation and control of prohibition of any hunting or fishing in or the removal of any living organism or any substance from any national park, nature reserve, sanctuary or area of historical interest;
- (d) for the appointment of persons as wardens and for the conferring on such wardens of powers to enforce the regulations;
- (e) that a contravention of a provision of the regulations constitutes an offence and for a penalty on summary conviction in respect of such contravention not exceeding—
 - (i) a fine of \$50,000 or a term of imprisonment for 12 months or both; and
 - (ii) in the case of a continuing offence, a fine of \$100 for every day or part of a day on which the offence continues;
- (f) power for a court to order a person convicted of an offence referred to in paragraph (e) to pay the cost of repairing any damage to a national park, nature reserve, sanctuary or area of historical interest caused by the commission of such offence;
- (g) power for a warden, a police officer or a fishery officer to arrest without warrant any person whom such warden or officer, as the case may be, reasonably suspects to be committing, to have committed or to be about to commit an offence against the regulations or this Ordinance, and for the seizure or forfeiture to the Crown of any article used in the commission of any such offence or alleged offence;
- (h) power for a police officer or fishery officer to initiate proceedings for offences against the regulations; and
- (i) for the imposition of fees and charges in respect of any matter with regard to which provision is made in the regulations or in this Ordinance.

(Amended by Ord. 12 of 1992)

Cap. 104

(2) In subsection (1)(f), "fishery officer" has the meaning assigned thereto by regulation 3(1) of the Fisheries Protection Regulations. *(Substituted by Ord. 12 of 1992)*

NATIONAL PARKS ORDER – SECTION 3

(Legal Notices 40 of 1992 and 35 of 1995)

Made by the Governor under section 3 of the National Parks Ordinance.

Commencement

[7 August 1992]

Short title

1. This Order may be cited as the National Parks Order.

Formation of national parks

2. The areas named and described in the first column of Part I of the Schedule are declared to be national parks for the protection or promotion of the corresponding features of interest specified in the second column.

Formation of nature reserves

3. The areas named and described in the first column of Part II of the Schedule are declared to be nature reserves for the protection or promotion of the corresponding features of interest specified in the second column.

Formation of sanctuaries

4. The areas named and described in the first column of Part III of the Schedule are declared to be sanctuaries for the protection or promotion of the corresponding features of interest specified in the second column.

Formation of areas of historical interest

5. The areas named and described in the first column of Part IV of the Schedule are declared to be areas of historical interest for the protection or promotion of the corresponding features of historical interest specified in the second column.

Site plans

6. (1) The areas described in the Schedule are delimited on site plans designated NP 1–11, NR 12–22, S 23–26 and HA 27–33, that may be inspected at the offices of the Department of Environment, Heritage and Parks during normal working hours.

(2) In a case of inconsistency between the description of an area in the Schedule and its delimitation on a site plan, the former shall prevail for all purposes of interpretation.

SCHEDULE

PART I

National Parks

Ref	Name and Area	Features of Interest
4.	Conch Bar Caves National Park: An area of 235 acres in Middle Caicos bounded in the north by the high water mark and in the east by a line connecting grid reference BQ 120 167, BQ 120 162, BQ 119 161, BQ 119 158, to the south by the main road and to the west by east road, a line connecting grid reference BQ 107 162, BQ 108 162, BQ 108 164 and the south and east side of a 40 feet wide road reserve and back to the starting point (Grid references are to sheet 7 Series E8112 (DOS 309P) Edition 2-OSD 1984.Site Plan NP4.	Extensive under-ground cave system containing large sub-terranean lagoons and bat colonies; once mined by slaves for guano
5.	East Bay Islands National Park: An area of 8746 acres in North Caicos comprising Bay, Conch, High and Major Hill Cays and bounded by a line from grid reference AQ 992 289 at North Mouth to AQ 994 292, AQ 999 292, BQ 019 277, BQ 033 261, BQ 039 204, BQ 031 188, BQ 020 193, AQ 999 222, AQ 995 231, AQ 994 241, AQ 997 261, AQ 983 265, the middle of the channel between Major Hill Cay and the mainland, AQ 986 289, AQ 987 291 and to the starting point. Grid references are to sheet 5 Series E8112 (DOS 309P) Edition 2-OSD 1985.Site Plan NP5.	Scenic islands and favourite picnic area

PART II

Nature Reserves

Ref	Name and Area	Features of Interest
14.	Cottage Pond Nature Reserve: An area of 20 acres in North Caicos bounded by straight lines connecting ZV 099 285, ZV 099 281 and AQ 901 281, along the 25 ft. contour to the road to Sandy Point at AQ 903 284 and back along the road to the starting point. Grid references are to sheet 4 Series E8112 (DOS 309P) Edition 2-OSD 1984 and sheet 5 Series E8112 (DOS 309P) Edition 2-OSD 1985.Site Plan NR14.	Bird nesting
15.	Dick Hill Creek and Bellefield Landing Pond Nature Reserve: An area of 975 acres in North Caicos bounded by a straight line from ZV 067 266 on the eastern edge of Dick Hill Creek to ZV 068 266, a straight line to ZV 068 253 on the north side of the Bellefield Landing road, along the north side of this road to ZV 065 252, the north side of a track to ZV 057 256, a straight line to ZV 056 258, a straight line to ZV 053 272, following the edge of the hard ground around Dick Hill Creek back to the starting point. Grid references are to sheet 4 Series E8112 (DOS 309P) Edition 2-OSD 1984.Site Plan NR15.	Bird nesting

Ref	Name and Area	Features of Interest
17.	<p><i>North, Middle and East Caicos Nature Reserve (International Ramsar Site):</i> An area of 210 square miles bounded by straight lines connecting grid references ZV 050 230, ZV 090 250 and AQ 936 260; the edge of the hard ground; a straight line connecting AQ 936 260 and AQ 934 262; the 25 foot contour, the Kew/Whitby road; a straight line connecting AQ 911 279 and AQ 935 276; the edge of the hard ground (including Mally Pond Slough and Whitby Bight); straight line connecting AQ 942 298, AQ 945 306 and AQ 947 305; the edge of the hard ground; a straight line connecting AQ 951 296 and AQ 958 296; the edge of the hard ground; a straight line connecting BQ 028 162 and BQ 080 150; the edge of the hard ground (including Flamingo Pond); straight lines connecting BQ 160 140, BQ 165 132, BQ 167 137; BQ 175 138; BQ 176 137, BQ 182 127, BQ 188 128; the shoreline of Armstrong Pond; a straight line between BQ 186 115 and BQ 187 111; the edge of the hard ground; a straight line between BQ 268 060 and BQ 286 071 the centre line of the channel between Joe Grants Cay and East Caicos; a straight line connecting BQ 305 090 and BQ 330 085; the reef wall, a straight line connecting BQ 371 056 and BQ 364 045; the north-east side of a track; a straight line connecting BQ 323 075 and BQ 322 078; the edge of the hard ground; and straight lines connecting BQ 330 040, BP 260 960, BQ 050 020, ZV 050 180 and ZV 050 230. Grid references are to sheets 4, 5, 6, 8, 9, 10, 11 Series E8112 (DOS 309P) Edition 2-OSD 1984. Site Plan NR17.</p>	<p>A wetland site of international importance containing a variety of habitat types representative of the region. Noteworthy individual sites within the park include the Mally Pond Slough, Sawgrass Pond and Flamingo Pond wetland area which contains excellent natural mangrove swamp, rich and varied fauna and diverse bird life, the unique Ocean Hole off Middle Caicos, believed to contain diverse and unusual fauna; the Armstrong and Big Ponds areas of Middle Caicos, the former area including numerous Arawak village sites, and the Iguana Cay and Flamingo Pond area on and close to East Caicos. The whole area is a particularly good example of coastal wetland habitat in the Caribbean region. It regularly supports 10% of the individuals in a population of one species of waterfowl (on Sawgrass Pond, the threatened West Indian Whistling Duck) it has special value as the habitat of animals at a critical stage of their biological cycles (submerged banks, creeks and lagoons used by endangered turtles and commercial fish species for feeding).</p>
21.	<p><i>Pumpkin Bluff Pond Nature Reserve:</i> An area of 427 acres in North Caicos comprising the entire area of Pumpkin Bluff Pond to the edge of hard ground, lying within the area bounded by grid references ZV 086 306, ZV 096 294 and AQ 913 312. Grid references are to sheet 4 Series E8112 (DOS 309P) Edition 2-OSD 1984 and sheet 5 Series E8112 (DOS 309P) Edition 2-OSD 1985. Site Plan NR21.</p>	<p>Bird nesting</p>
22.	<p><i>Vine Point (Man O' War Bush) and Ocean Hole Nature Reserve:</i> An area of 1870 acres in Middle Caicos bounded by a line connecting the following grid references BQ 054 046, BQ 043 034, BQ 060 018, BQ 099 044, BQ 092 051, BQ 066 035 and to the starting point. Grid references are to sheets 6 and 8 Series E8112 (DOS 309P) Edition 2-OSD 1984. Site Plan NR22.</p>	<p>Frigate bird nesting area, and 220 feet deep by 1200 feet wide hole in 3 feet shallow sand bottom</p>

PART III

Sanctuaries

Ref	Name and Area	Features of Interest
26	<i>Three Mary Cays Sanctuary:</i> An area of 33 acres in North Caicos comprising the total area of Three Mary Cays and the surrounding 400 ft of sea up to 50 ft seaward of the low water mark of the north coast of North Caicos. Site Plan S26.	Osprey nest site

