Organisations supporting the environmental objectives set out in this brochure include:

The Chagos Environment Network:
- Chagos Conservation Trust
- The Linnean Society of London
- Pew Environment Group
- The Royal Society
- The Royal Society for the Protection of Birds (RSPB)
- The Zoological Society of London (ZSL)

Coral Cay Conservation

National Coral Reef Institute

The Nature Conservancy

UK Overseas Territories Conservation Forum

United Nations Environment Programme (UNEP)

The University of Wales

The University of Warwick

The International Union for the Conservation of Nature (IUCN)

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Creating one of the world's greatest natural conservation areas

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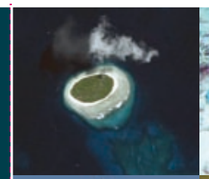
The Chagos Archipelago: Its Nature and the Future

THE BRITISH INDIAN OCEAN TERRITORY



contents

Where and what is the Chagos?

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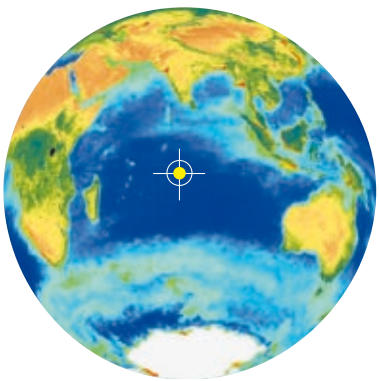
"In our Trust"

The Coat of Arms of the
British Indian Ocean Territory



The Chagos has the world's largest coral atoll and 55 tiny islands in quarter of a million square miles of the world's cleanest seas. It is by far Britain's greatest area of marine biodiversity.

The Chagos Islands are in the middle of the Indian Ocean. They have belonged to Britain since 1814 (the Treaty of Paris) and are constituted as the British Indian Ocean Territory (BIOT). Only Diego Garcia, where there is a base, is inhabited (by military personnel and employees). The other 54 tiny islands add up to only 16 square kms (8 square miles) in total.

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Now, before it is too late, there is an opportunity to save this precious natural environment, creating a conservation area comparable with the Galápagos or the Great Barrier Reef.

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Please support this planet-saving project and encourage the British Government to make it a reality.

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The cleanest sea water in the world.

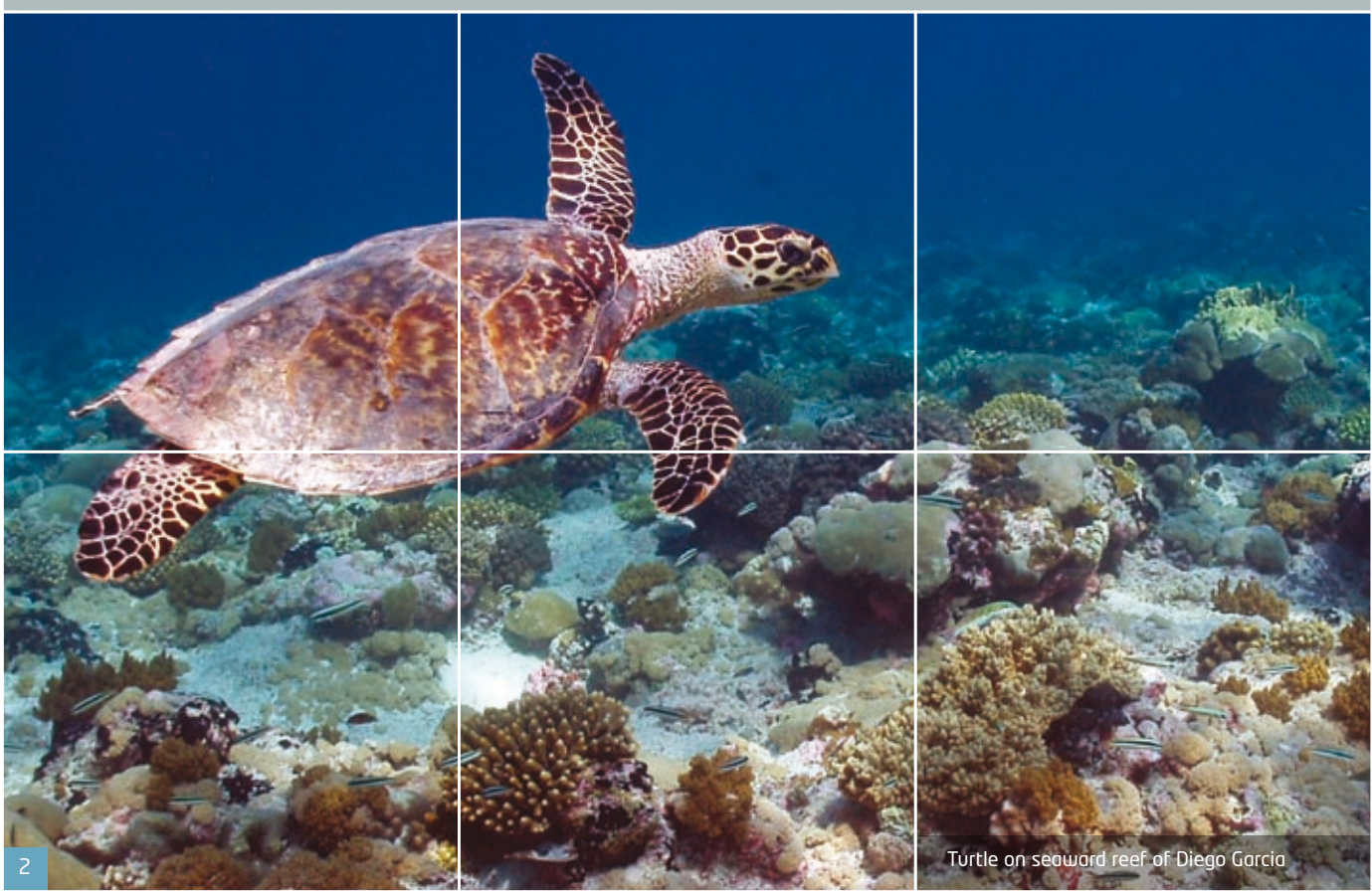
Pollutant levels in Chagos waters and marine life are exceptionally low. Analyses in 1996 suggested that "The marine environment of the Chagos Archipelago as a whole is exceptionally pristine" and was the cleanest water tested so far in the world.[1] Hydrocarbons found are almost entirely of biological (natural) origin. Oils, and pyrogenic (combustion) hydrocarbons, are present only in parts per billion, while some particularly toxic organic pollutants such as PCBs, lindane and dieldrin are present in parts per trillion only. Many others screened showed no trace at all, even in bird livers and other tissues which concentrate pollutants. The identity of those chemicals that were detected suggest that they are wind borne, rather than of local origin. Levels of toxic metals were similarly lower than in most areas.

One exception was in Salomon where small quantities of nickel were concentrated in some marine life, which probably came from the fungicide used in the coconut plantation 40 years previously.

The 2006 Chagos expedition again sampled lagoon water. Analytical sensitivity was such that during sampling, no sunscreen, perfume or deodorants could be worn in case this caused contamination! Samples were then analysed in Plymouth Marine Laboratory. Again, concentrations found were at mostly below detection limits of 1 part per trillion, using the most sensitive instrumentation available. We conclude that Chagos water "...could be considered appropriate as a global reference baseline."[2]

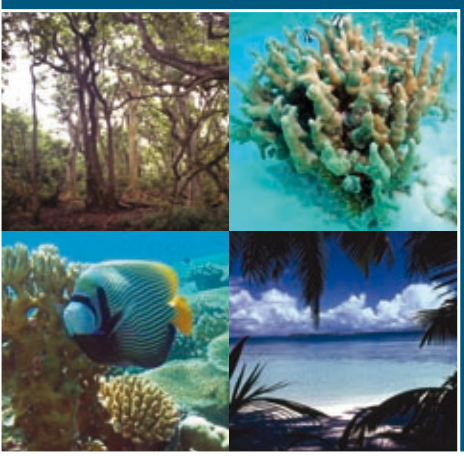
[1] Everaarts, JM, Booij K, Fischer CV, Maas YEM, Nieuwenhuize J. 1999. Assessment of the Environmental Health of the Chagos Archipelago. In: Sheppard CRC & Seaward MRD (eds), *Ecology of the Chagos Archipelago,* Linnean Society London pp305-326

[2] Guitart C, Sheppard A, Frickers T, Price ARG, Readman JW. 2007. Negligible risks to corals from antifouling booster biocides and triazine herbicides in coastal waters of the Chagos Archipelago. Marine Pollution Bulletin 54:226-246



2 Turtle on seaward reef of Diego Garcia

What's so special about the Chagos environment?
What's there?



Creating one of the world's greatest natural conservation areas.

The following are features which make the Chagos an outstandingly important environmental site and threats which make comprehensive conservation so important.

The Chagos contains some of the world's healthiest coral reefs and the world's largest surviving coral atoll. Scientists fear that half of the world's coral reefs could be lost by 2025. It is essential to save them: hundreds of millions of people in the world depend on healthy reefs in one way or another. Living reefs provide food, protect beaches from erosion and form a treasure house of genetically diverse creatures and plants.

The wildlife biodiversity of the Chagos is very rich. It provides at least 220 coral species and over 1,000 species of fish with a surviving stronghold. It is also a refuge and breeding ground for large and important populations of sharks, dolphins, marine turtles, rare crabs, birds and other vulnerable marine and island species. In marine terms BIOT is by far the most biodiverse part of the UK and its Overseas Territories.

The archipelago is isolated and at the very centre of the Indian Ocean where it acts as an 'oasis' for marine and island species (which are nearly all in decline elsewhere, under pressure from the effects of massive recent human population growth in the region).

Most of the Chagos is uninhabited. This is the main reason why the ecology of the Chagos is full of diverse life, a rare surviving example of nearly pristine tropical habitats.

Because of its mainly unspoilt and healthy environment, the Chagos provides us with a scientific benchmark for how the world could be without pollution and other environmental degradation. This is evidently important in helping us to understand and deal with such problems as pollution, loss of biodiversity and climate change.[1]

[1] Sheppard CRC, Seaward MRD, Klaus R, Topp JMW. 1999. The Chagos Archipelago: an introduction In: Sheppard CRC & Seaward MRD *Ecology of the Chagos Archipelago,* Linnean Society London pp1–20

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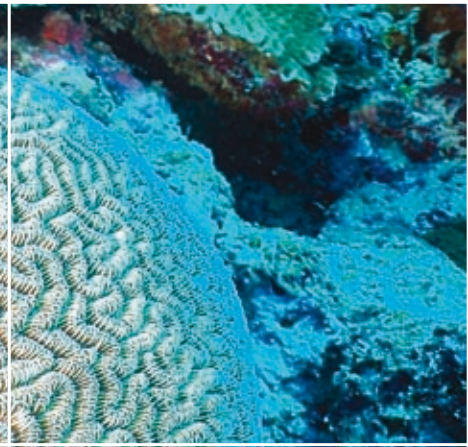
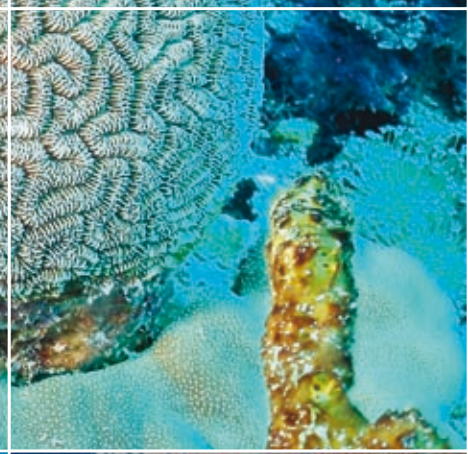


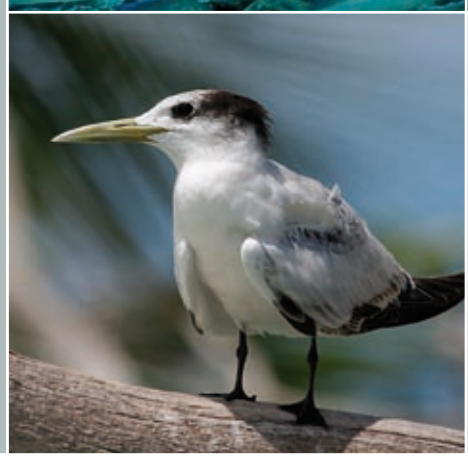
The Chagos Brain Coral, *Ctenella chagius*, found only in this archipelago



"It has been my dream that the whole Chagos Archipelago should be an International Marine Nature Reserve and Sanctuary.... The whole ecological structure is under threat. Fortunately all is not yet lost, though time is short. The powers-that-be, the international commune of conservation and locally focused bodies such as the Chagos Conservation Trust can work together in an effective mix of vision and management. Maybe the Chagossians too can have a role to play. The Archipelago will even more deserve, and perhaps at last obtain, the title of World Heritage Site."

Professor David Bellamy, 2002

Sea fan - seaward reefs of Salomon atoll



Dr Carl Lundin, World Conservation Union

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What's the big idea?
What's the proposal?

The vision:
Protecting the Chagos Archipelago and its seas as a world-class, unspoilt, natural conservation area comparable to the Galápagos and the Great Barrier Reef

"The Chagos Archipelago is comparable in size and importance to some of the world's largest marine protected areas, such as Phoenix Islands Protected Area in Kiribati, Papahanaumokuakea Marine National Monument in the Northwestern Hawaiian Islands, USA, and the Great Barrier Reef Marine Protected Area in Australia. It performs invaluable services for the Indian Ocean, as a stepping stone, and a refuge, making it the arguably most important area of coral reef in the entire region.

Chagos also stands out because of its current near-pristine state, compared with most other reef areas which are impacted by overexploitation and other stresses. As such it is likely to have a higher capacity to adapt to a changing climate. Because of this it presents a unique opportunity to strengthen conservation and reduce biodiversity loss, provided the area is managed for these purposes, e.g. as a marine protected area. It would be a fantastic endowment to the oceans of the future. It provides a great opportunity for the UK Government to apply for a designation as a World Heritage Site."

Dr Carl Lundin, World Conservation Union (IUCN), 2008

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"It is important to remember that Ramsar is about the wise use of all wetlands in the territory of the country and getting the management right. This means, as coral reefs are wetlands under the convention, the whole Chagos ecosystem should be managed wisely."

Dr Peter Bridgewater, Chair, UK Joint Nature Conservation Committee and former Secretary General, Ramsar Convention, 2007

Visiting BIOT

Visits to BIOT (the Chagos) require a permit from the BIOT Administration, FCO (www.fco.gov.uk/resources/en/pdf/pdf16/fco_biot_laws guidance_english). The proposals in this publication envisage that limited vessel-based visiting, related to science and the environment, could be compatible with the conservation vision if it contributed to conservation and did not disturb the nature.

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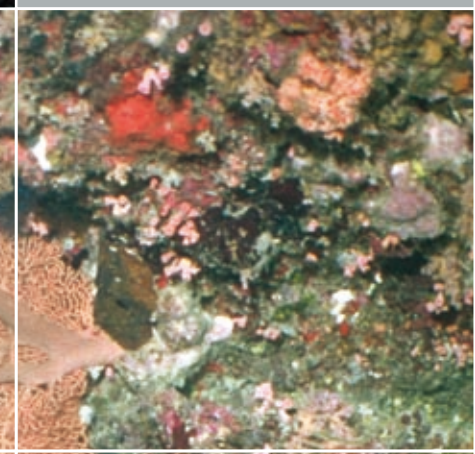

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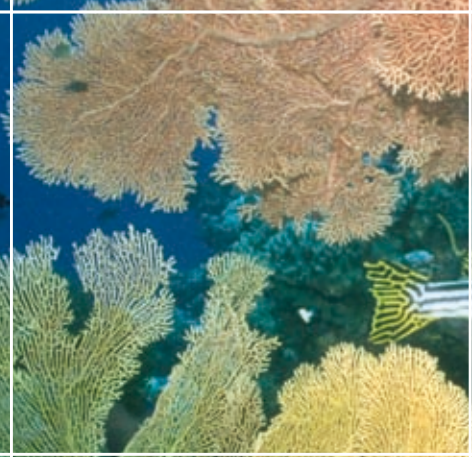

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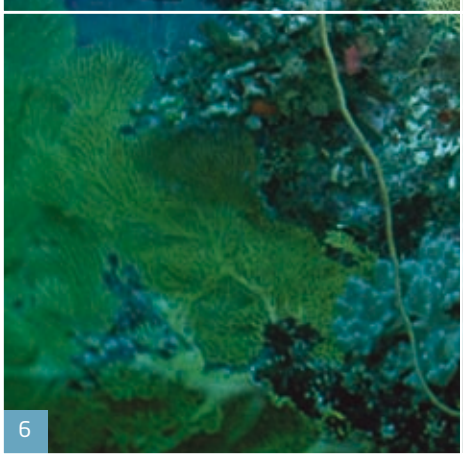

Steep seaward slopes support the richest marine life

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Creating a Chagos Archipelago Conservation Area: the Programme

The British Indian Ocean Territory (the Chagos) has the most pristine tropical marine environment surviving on the planet. Its quarter of a million square miles is Britain's greatest area of marine biodiversity.

The UK Government and the British Indian Ocean Territory (BIOT) Administration are already committed to managing BIOT as if it were a World Heritage site and have enacted significant legislation to protect this globally important environment.

However, a more robust and comprehensive framework for conservation is needed to meet future challenges from destructive impacts of pollution, unsustainable fishing, poaching, habitat degradation, imported invasive species, construction or other forms of interference.

Existing environmental safeguards should be strengthened to create a long-term conservation framework with the maximum international support.

It would be a world-class conservation area and a major contribution to 'saving the planet'. Policy framework elements (some are already agreed but not implemented) could be:

- The existing Ramsar (Wetlands Convention) Area should be extended first to the territorial waters (as already agreed by the Government in principle) and then to the whole Chagos Archipelago, with strict reserve areas for the priority biodiversity sites. The BIOT Environment Zone (created in 2003) should be completed.
- A comprehensive Chagos marine and fisheries management and conservation system should be established, to include a 'no-take' fishing zone, building on the proposal already included in the approved Chagos Conservation Management Plan. This would increase Indian Ocean fish stocks and thus benefit people in neighbouring countries.
- A small, fixed scientific research facility should be established, perhaps on Diego Garcia with a simple facility on a northern Chagos island.
- A programme of further habitat improvement should be implemented, particularly on previously inhabited islands now degraded by invasive species, notably black rats and imported vegetation.
- A sustainably funded, small organisation (perhaps a Public Foundation) should be established by the Government, with effective support from other organisations, to manage and conserve the natural marine and terrestrial environment and biodiversity of BIOT, as well as the related science, research and education. Experience should be drawn from best practice in other comparable protected natural areas in the world.
- Wider international support should be promoted for a comprehensive Chagos Archipelago Reserve Area, using existing protocols such as Ramsar and World Heritage.

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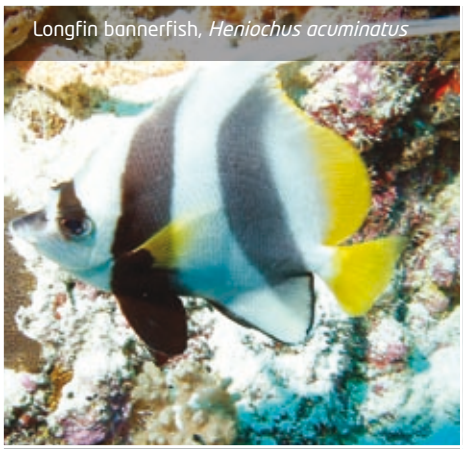
Longfin bannerfish, *Heniochus acuminatus*


Clown triggerfish, *Balistoides conspicillum*


Regal angelfish, *Pygoplites diacanthus*

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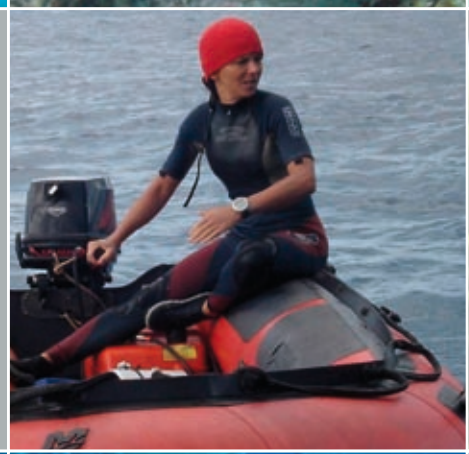
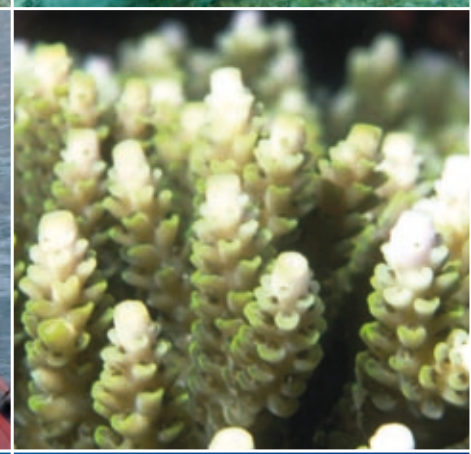
"The Chagos Archipelago provides rare and valuable insights into the dynamics of a reef system far from human pressures; this is what makes it so important on a global scale. The Zoological Society of London fully supports the conservation of this precious series of marine habitats."

Rachel Jones, Zoological Society of London





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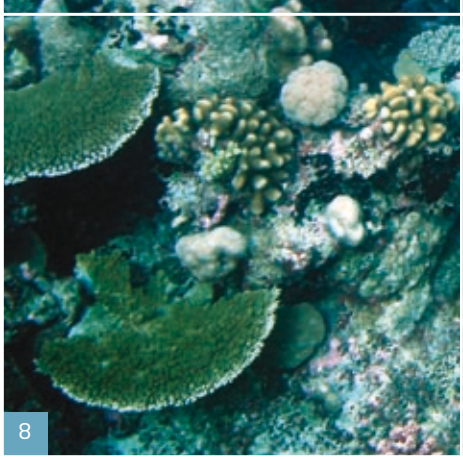

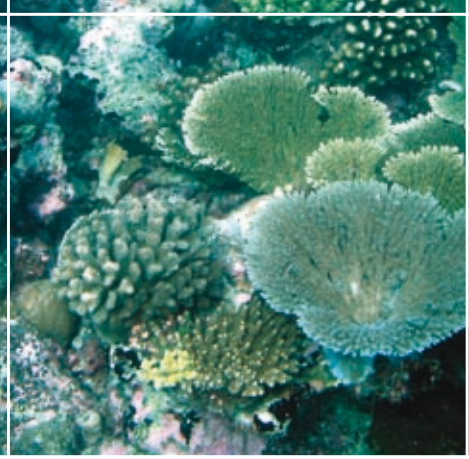

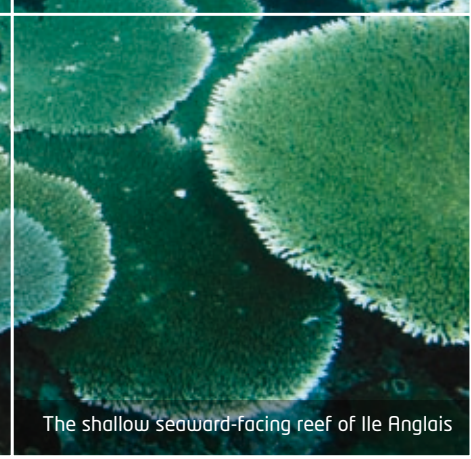
The shallow seaward-facing reef of Ile Anglais

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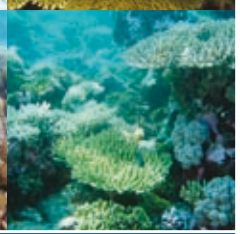
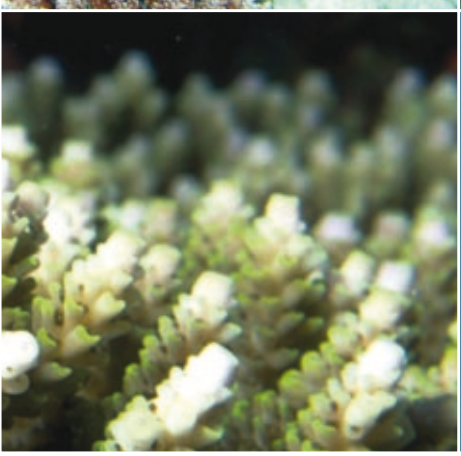
Emperor angelfish, *Pomacanthus imperator*





The largest coral atoll in the world

The Great Chagos Bank is the largest coral atoll in the world and possibly the healthiest. Coral reefs are crucial for the welfare, livelihoods, and even survival, of several hundred million people. 25% of fish species depend on them. The Indian Ocean region needs the rare, surviving, healthy reef ecosystem of the Chagos Archipelago.

Coral reefs cover only 1-2% of the Earth's surface, yet are home to 25% of the Earth's fish species.

Uncounted numbers of species occur only on reefs, many with no known terrestrial counterpart.

Many coral-based species contain unusual bioactive chemicals now being researched for pharmaceutical use.

The existence of these species depends on continuing functioning of a highly complex, interlocking ecosystem.

Corals are living creatures. They build reefs by extracting dissolved limestone from the seawater and depositing it over millennia in thicknesses which are now several kilometres deep.

Throughout the world, many island nations rest entirely on the results of coral growth.

But corals are very sensitive to environmental change and are easily killed. When that happens, the reefs decay and islands supported on them are subject to greatly increased erosion.

Coral islands depend on past coral growth for their existence, and on continued healthy growth for their maintenance and shore defences.

The rock is limestone, which is relatively soft and easily eroded if live corals do not continuously build them up.

In many parts of the world the complex reef ecosystem has already broken down. Scientists predict that 70% of the world's remaining coral reefs will be destroyed by the year 2050, by human activity. There are few parts of the world where reefs are in good, healthy condition, and in this respect, those in the Chagos are possibly the best example.

No-take fisheries conservation areas

Fishers have killed over 90% of all the fish in the planet's seas, most to eat, but fully 20% are discarded into the sea as waste.[1] Attempts to manage fisheries to sustain this bountiful source of protein have in the main been abject failures.[2] Fishers have systematically killed the larger animals such as whales and then moved down the size scale until only small and immature fish survive. When catching these becomes unprofitable, new species of fish are hunted in far away parts of the high seas using every modern technique. Species after species have been all but wiped out.

In the process, bottom trawl nets, ever bigger, have almost completely destroyed fish habitats. In these areas bare sand, gravel and mud is all that is left where once existed forests of vegetation and coral sheltering myriads of little fish and other marine animals providing food for the larger predators.

Nearly all has been lost, but in the last 30 years it has been shown conclusively that the setting up of no-take zones, from which nothing can be removed or extracted by humans, allows fish to recover remarkably quickly. Not only do the fish recover but also the fishers adjacent to the zones see their takes rise. For sustained recovery it has been shown that at least 30% of fish habitats need to be systematically protected.[3] This is commonly called the 'One Third Rule'.

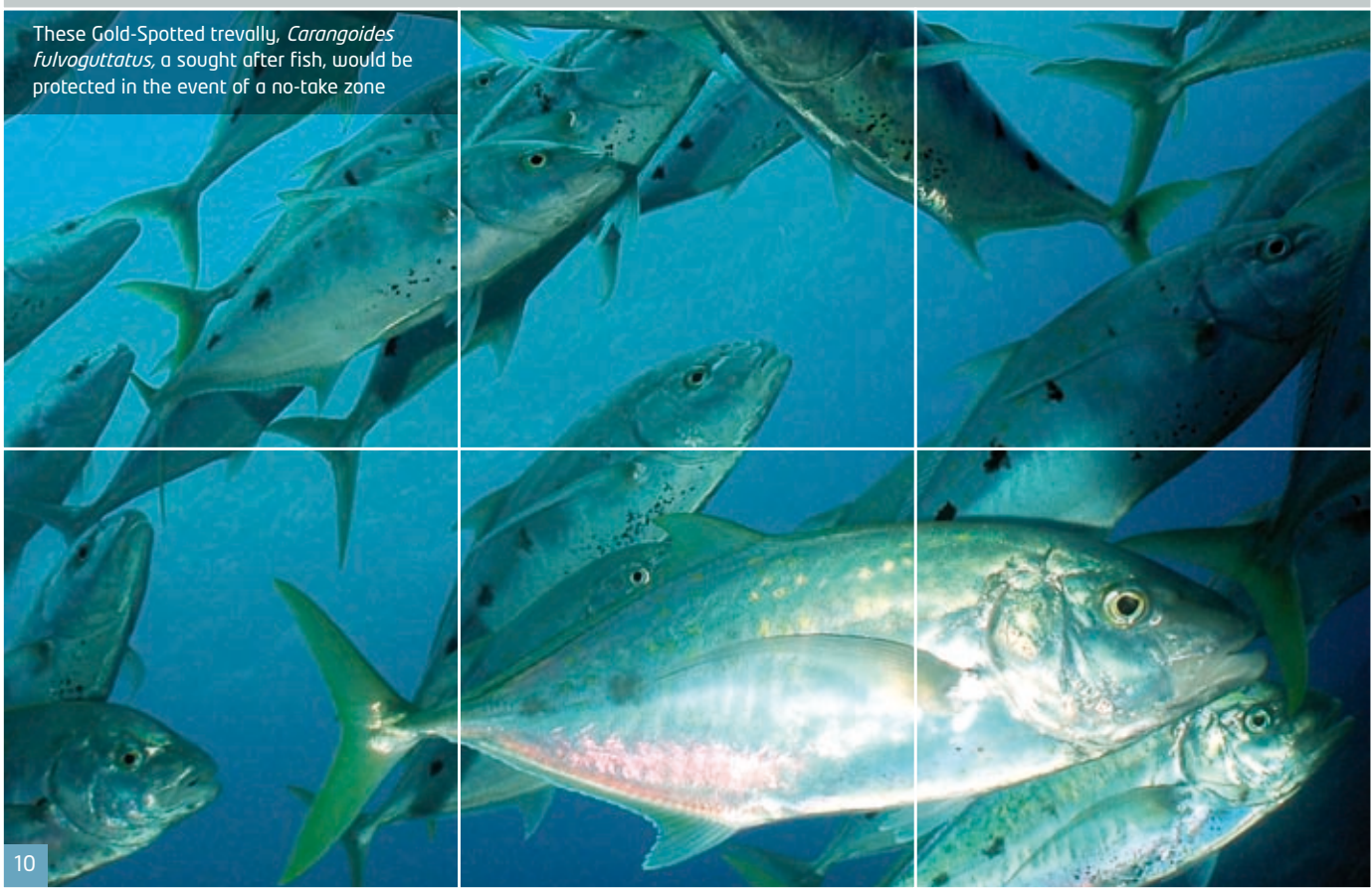
To its credit, the BIOT Government in drawing up the Chagos Conservation Management Plan accepted in principle the need for no-take zones. In 2007 a study funded by the Foreign and Commonwealth Office, based on information obtained during research in 2006, provided for the zones to be accurately delineated and this has been done. The necessary legislation will follow. The proposed no-take areas mainly adjoin islands which are already designated Strict Nature Reserves on account of their huge bird populations.

This is expected to be sufficient to conserve the fish, particularly for inshore fishers. The area thus protected is likely to ensure that good stocks of reef fish continue indefinitely.

[1] Roberts C. 2007. *The Unnatural History of the Sea,* Gaia Octopus Publishing Group
[2] Ludwig D, Hilborn R, Walters C. 1993. Uncertainty, resource exploitation, and conservation: lessons from history. Science 260:17
[3] Roberts CM, Hawkins JP. 2000 *Fully Protected Marine Reserves: a Guide,* WWF Endangered Seas Campaign, Washington

"Ocean Legacy project is looking at opportunities to protect surviving world-class marine systems. The Chagos Archipelago is a rare gem in an increasingly populated region whose shores and waters are already over-exploited and heavily degraded."

Pew Charitable Trusts, 2008



These Gold-Spotted trevally, *Carangoides fulvoguttatus,* a sought after fish, would be protected in the event of a no-take zone

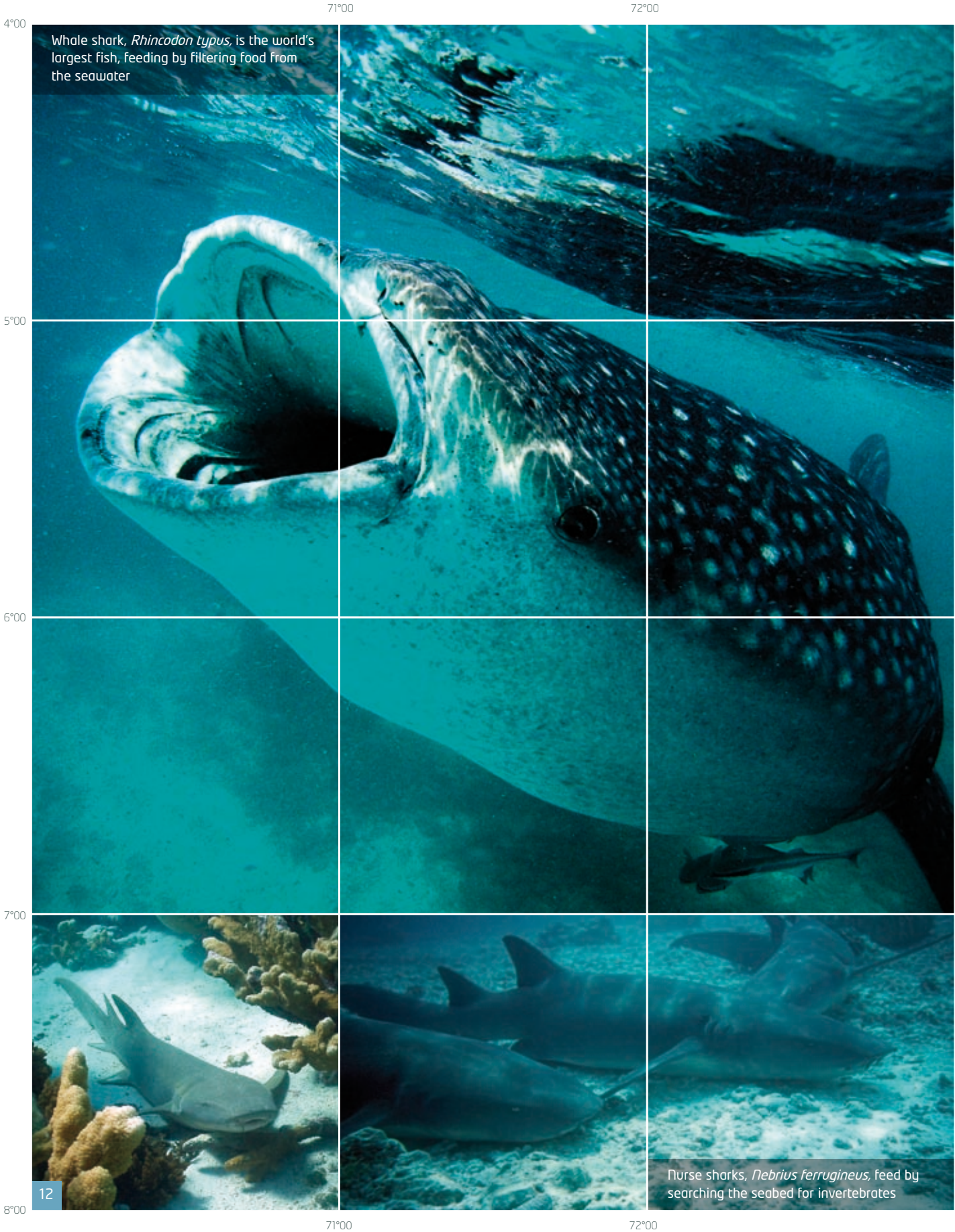
The Chagos oceans and fisheries

Adequate measures to manage the Chagos ocean area in accordance with official environmental commitments and on a sustainable basis have not yet been implemented. By way of example, only 3% of the Chagos shallow water area, which is the richest in biodiversity, is protected and virtually none of the deep sea is protected. (An indication of the pressure on Indian Ocean marine life is the fact that the shark population throughout the ocean is some 90% smaller than 30 years ago.)The strict 'no-take' fisheries reserve areas provided for in the official Conservation Management Plan have also not been implemented. Such reserve areas are proven to increase fish stocks in the surrounding seas (by providing a refuge for breeding and growth).

If such measures are implemented Chagos is likely be of great benefit to the vastly increased populations in the countries of the Indian Ocean basin where fisheries resources of reefs are heavily depleted. These benefits would result from the creation of a reserve in which fish stocks could recover, breed and replenish stocks in neighbouring areas.

"The Chagos Archipelago represents a magnificent conservation opportunity that could be of lasting benefit to humanity. There can be few places on this planet that represent better value for leveraging spectacular returns. What is needed is vision and a leadership initiative by Britain to create the Chagos as an iconic, pristine area held in trust for the future of the world community."

Professor Callum Roberts, Univerity of York, 2007



The massacre of Indian Ocean sharks

Sharks, being at the top of the food chain, are very important for the marine biodiversity of British Indian Ocean Territory (BIOT) waters. The UN's Food and Agriculture Organisation data show that in the Indian Ocean generally, shark numbers are down by about 90% over the last 30 years because of over fishing, and diver observation data in Chagos waters show that a similar decline has taken place here.[1]

In BIOT Administration, management measures prohibit targeted shark fishing, but unfortunately they are caught by poachers and as by-catch by licensed fishers of other species. If this happens, finning is expressly banned and the sharks must be landed whole or released.

Sharks fins, collected for soup

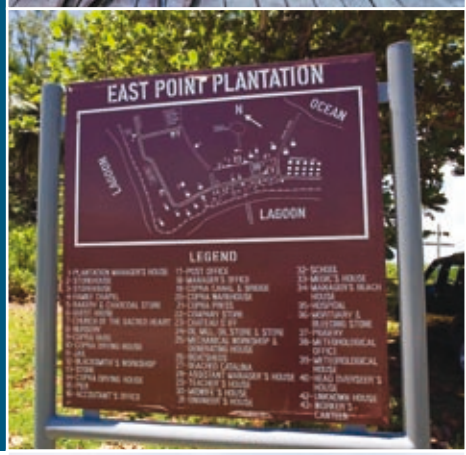
However, small fishing boats mainly based in Sri Lanka, continue to come to Chagos waters, risking a £100,000 fine and the confiscation of boat and equipment.

Shark fins are also an important part of the 'pay' of otherwise poorly paid crews of tuna fishing vessels and this tempts some to set the lines to "accidentally" catch sharks. The fins are removed and the bodies are dumped. Dried shark fins are a high-value commodity, sold on to traders and used to make shark fin soup in Japan and China.

The BIOT's patrol vessel Pacific Marlin, managed by Marine Resources Assessment Group Ltd, catches poachers, but with over half a million square kilometres to cover it has a difficult task. However, some dramatic arrests are made as can be seen from the disheartening photograph, but too late for these unfortunate sharks. In this case the fishing boat was destroyed.

[1] Anderson RC, Sheppard CRC, Spalding MD, Crosby R. 1998. Shortage of Sharks at Chagos. *Shark News,* newsletter of the IUCN Shark Specialist Group

The Chagossian people



The Chagos Conservation Trust has previously drawn attention to the environmental implications associated with human activity on these tiny, unpopulated islands. Account must be taken of the importance of safeguarding the unique, delicate and vulnerable ecology of the archipelago. This is not only because human activity would have an impact on important ecosystems and threatened species, but because any degradation of the environment could adversely affect human welfare in the wider region.

Some proposals (which have included progressively increasing exploitation and development of commercial tourism, fisheries and other extractive industries and the related infrastructure) are clearly not compatible with even the existing commitments to conservation.

However, the framework outlined for a Chagos Archipelago Conservation Area could well provide good employment opportunities. Such employment might involve scientific research staff, park rangers, and conservation and habitat restoration staff. It is hoped that this would be considered in a positive spirit.

History of the Chagos

The Chagos Islands were first 'discovered' in the 16th century, probably by the Portuguese Pedro Mascarenhas.
They were uninhabited

The Chagos and Maldives chain of islands was created after India slid north, millions of years ago, crumpling up the Himalayas in front of it. Upwelling lava from a hotspot deep in the earth's mantle created the bases of these islands; those of the Chagos were pushed up 45 million years ago. The islands' lava cores then began their long, slow subsidence, while reefs from the remains of living coral built up around them. Amazingly, the coral under Diego Garcia is about a mile deep.

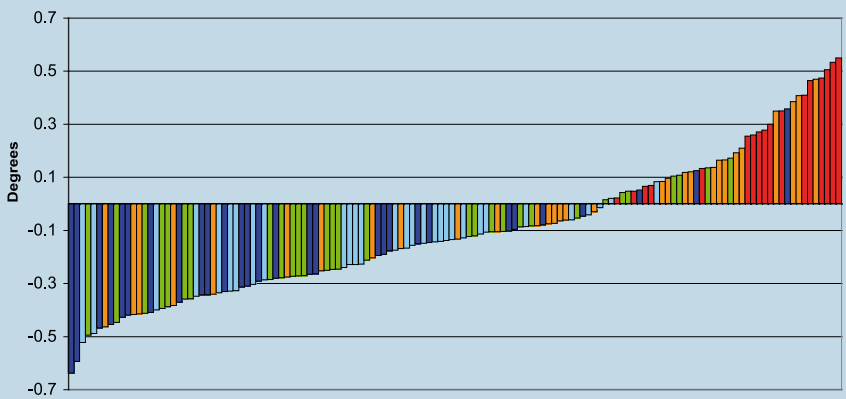
The French assumed sovereignty in the late 18th century and began to exploit the islands for copra, originally employing slave labour. However, the islands were never commercially important.

During the Napoleonic wars Britain captured Mauritius and Reunion from France. Under the Treaty of Paris in 1814, Britain restored Reunion to France and France ceded Mauritius to Britain together with its dependencies which comprised Seychelles and other islands, including the Chagos.[1] In the late 19th century Charles Darwin drew extensively on scientific surveys of the Chagos Archipelago for his theories on coral reefs.

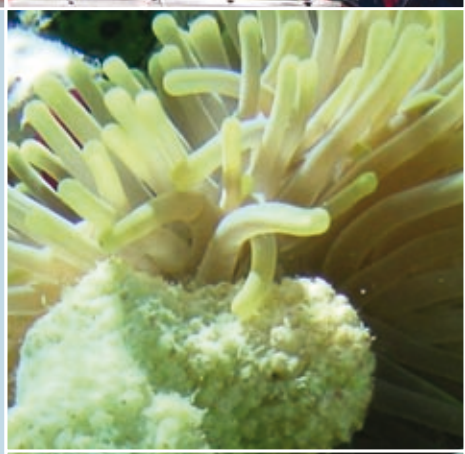
In 1965 the Chagos Islands were detached to become part of the British Indian Ocean Territory, with the full agreement of the Mauritius Council of Ministers and a grant paid to Mauritius. The Territory is administered by the UK Government through the BIOT Administration. There are no economic activities on the islands. UK/US agreements regulate the use of the Territory for defence purposes.

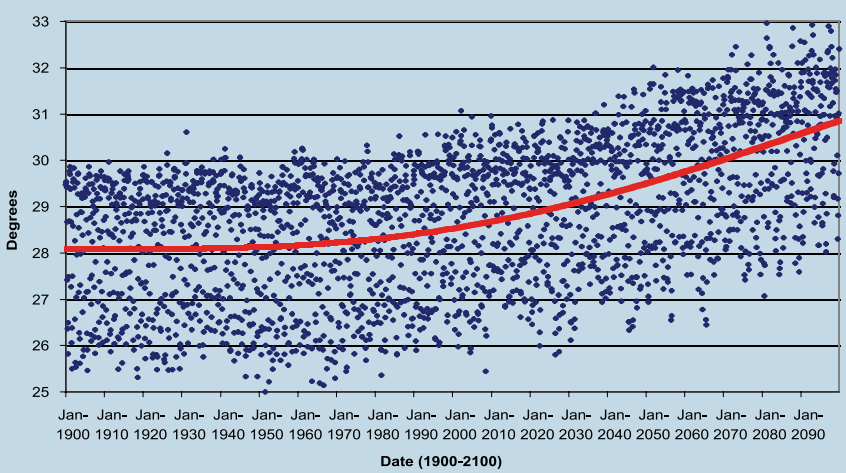
[1] Edis R. 2004. *Peak of Limuria: the story of Diego Garcia and the Chagos Archipelago,* CCT London

The BIOT Patrol Vessel Pacific Marlin has supported substantial research in Chagos



Chagos surface water temperatures showing warming 1871–2006



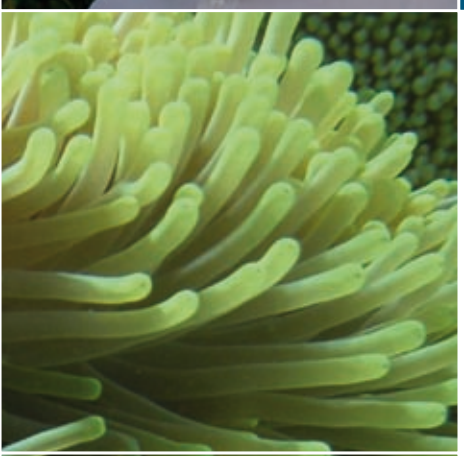


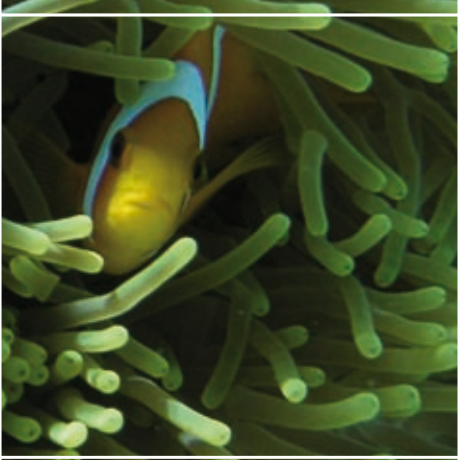
Past and forecast seawater temperatures in Chagos, 1900–2100

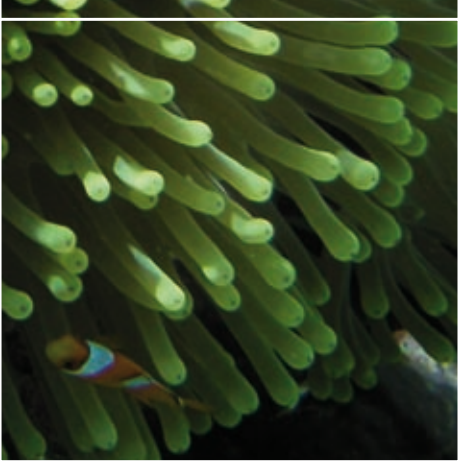
Anemone fish

Professor Charles Sheppard

Science and the Chagos







The Chagos will have key positive scientific roles to play in the coming years since its seas and coral reefs are the least affected by direct human impacts.

Chagos is providing:

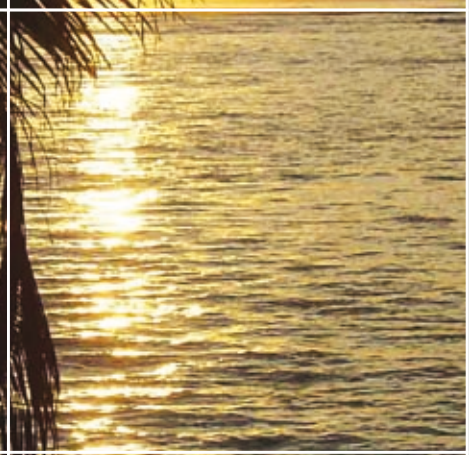
- A scientific control site to compare with other more impacted sites (especially for coral reefs).
- A means of filling gaps in global climate monitoring programmes (e.g. acidification, sea temperature, sea levels and gases). The Indian Ocean is as yet largely omitted from these programmes.
- Contributions to our understanding of the processes that collectively create global warming and climate change, the threats they pose and management options to counter them.

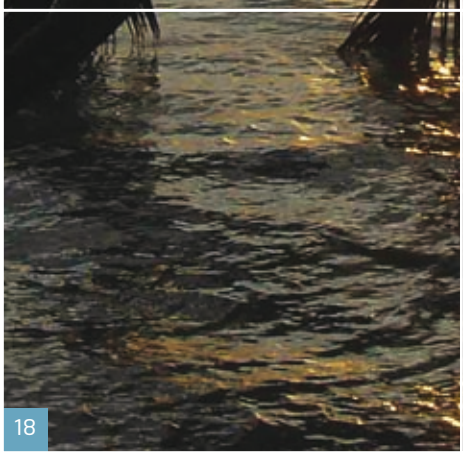
So far scientific monitoring and research have been carried out with official support, including the essential role of the BIOT Patrol Vessel. The present mechanism of expedition-type research visits has served well enough in the past but there is now a need for a small permanent facility which remains for authorised scientific work. Much new science requires equipment which cannot simply be flown out on a temporary basis but needs a non-humid, fixed location.

"Every ocean needs at least one set of reefs where no run-off, no dredging, no building, no fishing, no nutrient enrichment and no pollutant and pesticide release whatsoever takes place. For the Indian Ocean, the reefs of Chagos are the prime candidate, and perhaps are the only sensible possibility. In the late 20th century, there are now very few others which fit the bill."

Professor Charles Sheppard, University of Warwick and BIOT Conservation Advisor

Erosion on Ile Diamante, Peros Banhos





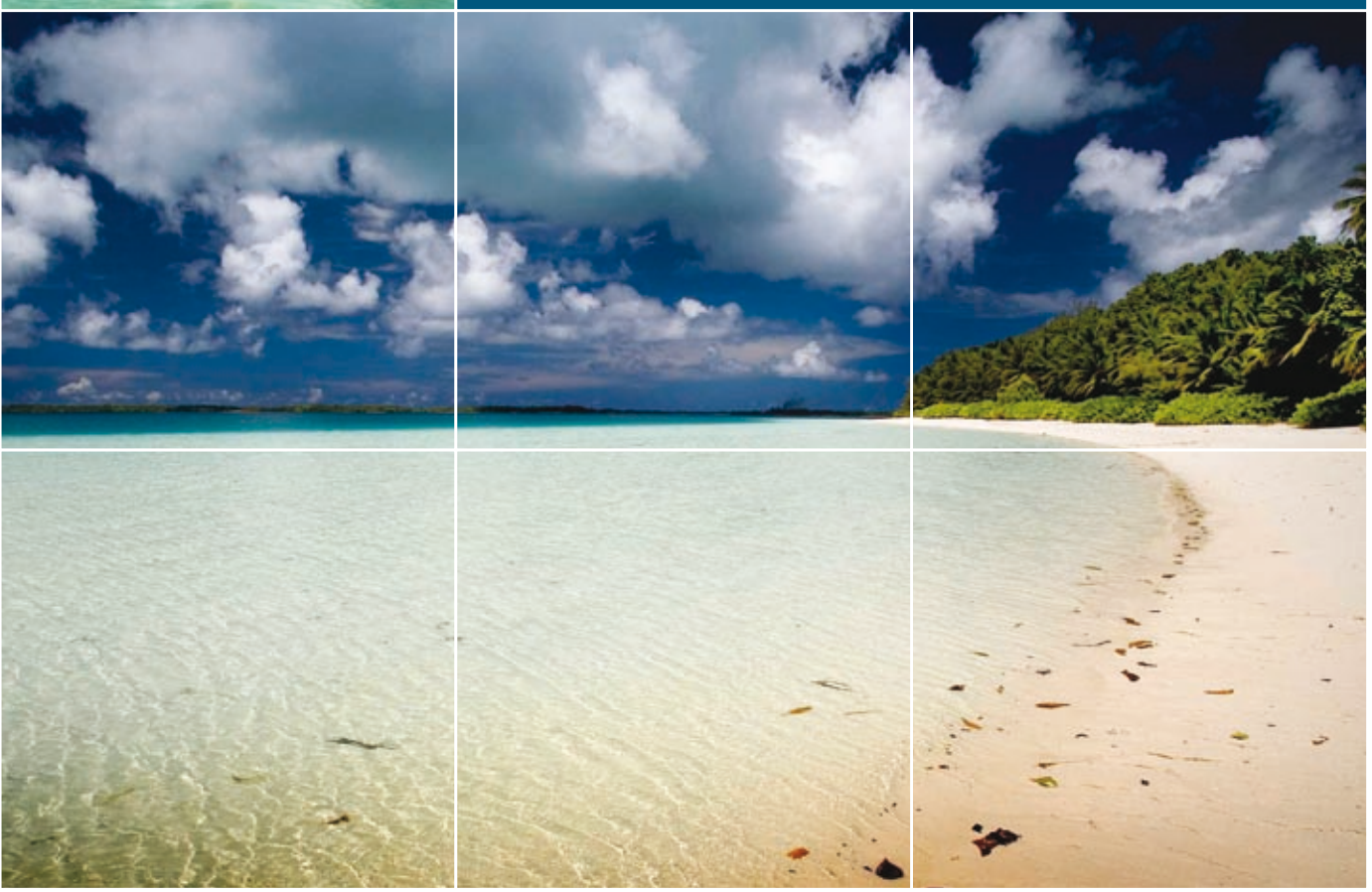
Erosion on Eagle Island, Great Chagos Bank

Chagos shores and island survival

Lining the ocean-facing edge of many coral reefs of Chagos atolls is a substantial ridge made of stony red algae, and a system of spurs of the same material projecting perpendicularly into deeper water. These are highly wave-resistant structures, and it is because of them that the reefs, and the islands behind them, can survive in strong wave conditions. The algae are mainly of the genus *Porolithon*, which deposit limestone in the manner of corals. They are crucial in enabling the reefs to resist erosion. On well-developed systems such as those of Peros Banhos and Salomon, the ridge may exceed 50 metres wide, and the perpendicular spurs may be more than 100 metres long, gradually descending into deeper water where they disappear at 5 metres depth or more.

The arrangement and sizes of the spurs and grooves acts as a very efficient wave break, which greatly reduces the energy of the waves as they reach the islands. It is this extremely effective energy dissipation which permits many islands and reefs to survive at all.

Chagos: climate change and island survival



The Chagos is very vulnerable to global warming

It is affected by:

Sea level rises leading to inundation of its low-lying islands (less than 2 metres above sea level);

Sea temperature rises leading to coral mortality;

Coastal erosion from loss of protective structure of reefs due to coral mortality;

Rising CO_2 levels causing ocean acidification and reduced reef growth.

The Chagos did suffer in the severe global warming spike in 1998, but because of the absence of any additional stressors arising from human impact, it has recovered more, and faster, than any other known coral reef system. In its natural state it is exceptionally resilient.[1]

[1] Sheppard CRC, Harris A, Sheppard ALS. 2008. Archipelago-wide recovery patterns since 1998 in the Chagos Archipelago, central Indian Ocean. Marine Ecology Progress Series 362:109–117

Invasive species

Although the marine environment of Chagos is generally in very good condition, some of the terrestrial environment where there was activity during the plantation era is degraded. The islands were naturally covered by native forest, but in most formerly inhabited places this forest is now dominated by introduced alien plants – especially coconut palms – with little of the natural forest remaining.

'Black rats'

In addition, rats, brought in when the islands were inhabited, have invaded many of the islands, with devastating impacts on seabirds. Rat predation on eggs and chicks is so intense that, on rat-infested islands in the archipelago, seabird populations, though diverse, are probably a fraction of their former size. Rats probably also affect native plants and invertebrates, as well as predating sea turtle eggs and hatchlings.

Madagascar fody, *Foudia madagascarensis*

Sleeping red foot booby, *Sula sula*

Graham Wynne, Chief Executive, The Royal Society for the Protection of Birds (RSPB)

Chagos natural treasures

"The Chagos are outstandingly important in global biodiversity terms. As the largest remaining coral atoll in the world and the most seabird species rich in the Indian Ocean, the RSPB welcomes the work of CCT to conserve this unique and fragile ecosystem for the benefit of all."

Graham Wynne,
Chief Executive, RSPB

The British Indian Ocean Territory (BIOT) is estimated to support several hundred thousand pairs of breeding seabirds.

BIOT has been recognised as an area of global importance by the designation of no less than ten Important Bird Areas to date, all receiving this status due to the numbers of breeding or congregating seabirds. These designations could change as bird populations fluctuate or as breeding colonies shift between islands, but the overall densities of birds remains extraordinarily high.

Over 33 seabird species have been recorded in the Territory. The numbers of certain species of seabirds are thought to be suppressed by the presence of rats and cats on several of the islands. As a general rule, ground nesting seabirds that have limited defence mechanisms to counter predators tend to avoid or breed only in low densities on islands where invasive species remain. In contrast, on rat-free island groups, such as the three islets in the mouth of Diego Garcia lagoon, spectacular numbers of seabirds breed.[1]

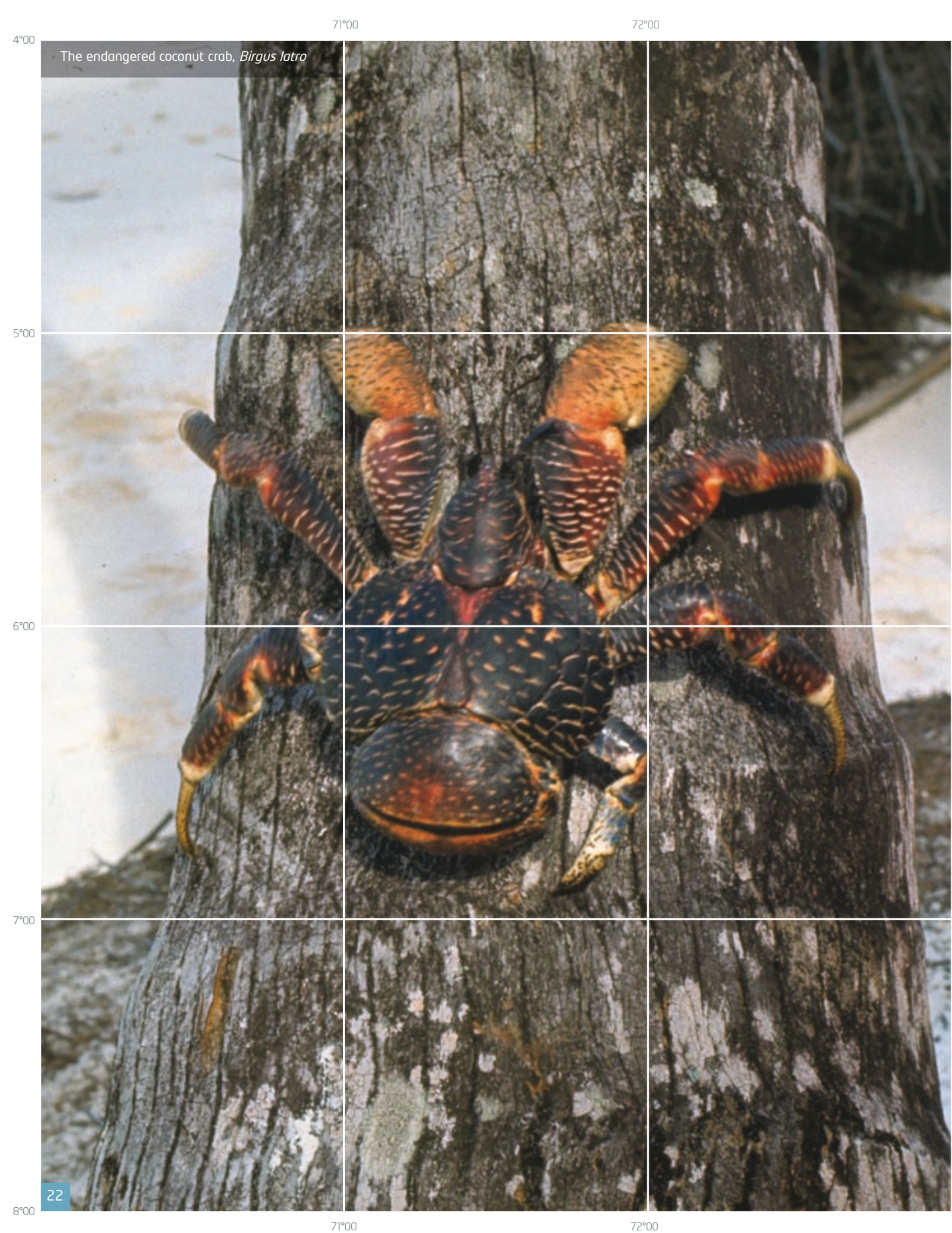
The main concentrations of the two burrow nesting shearwaters, the wedgetailed, *Puffinus pacificus,* and Audubon's, *Puffinus lherminieri,* are in the rat-free atolls of the Great Chagos Bank, as are the ground nesting brown booby, *Sula dactylatra,* and masked booby, *Sula leucogaster*. Five species of tern, Sternidae, breed in very low numbers on rat-infested islands but in huge densities in rat-free islands.

Sooty terns, *Sterna fuscata,* in particular, which cope with the depredations of terrestrial predators by nesting in intense densities, manage to breed on rat-infested islands where there is space for their large colonies.[2] The iconic bird of BIOT is the red-footed booby, *Sula sula*. This magnificent member of the gannet tribe is the success story of the Chagos. In the 1970s it re-colonised mainland Diego Garcia after an absence of some 100 years and now breeds in its thousands in the Barton Point Nature Reserve. It also is very abundant on other atolls from which people have departed.

[1] Symens P. 1999. Breeding seabirds of the Chagos Archipelago. In: Sheppard CRC & Seaward RD (eds), *Ecology of the Chagos Archipelago,* Linnean Society London pp257–272

[2] McGowan A, Broderick AC, Godley BJ. 2008. Seabird populations of the Chagos Archipelago, Indian Ocean: an evaluation of IBA sites. Oryx 42:424–429

Common noddy, *Anous stolidus*



The endangered coconut crab, *Birgus latro*

The coconut crab in action opening a coconut

Hard shells: the world's largest crab, and others

Coconut crabs, *Birgus latro,* thrive with strict protection in the Chagos, but have become extinct in many other places, including Mauritius. They are the largest land arthropods in the world and can have a leg span of more than 100 cms (3.3 ft), and adults can weigh over 4 kg (9 lb). They can climb trees of 6 metres (19.8 ft) or so and open coconuts with their claws, which are strong enough to lift objects of up to 29 kg (64 lb) in weight.

Hermit crab

Hermit crabs have no shell of their own and so use empty shells from molluscs and then change shells when they get too small. These are pictures of hermit crabs in the Chagos where there is sometimes a sort of second-hand shell stall where crabs will change around shells for new ones of a better fit.

Ancestral rhythms

The green turtle, a marine animal, comes onto land to breed. The hermit and coconut crabs, land animals, lay their eggs in the sea. Both are following ancestral breeding imperatives.

71°00 72°00

4°00

5°00

6°00

7°00

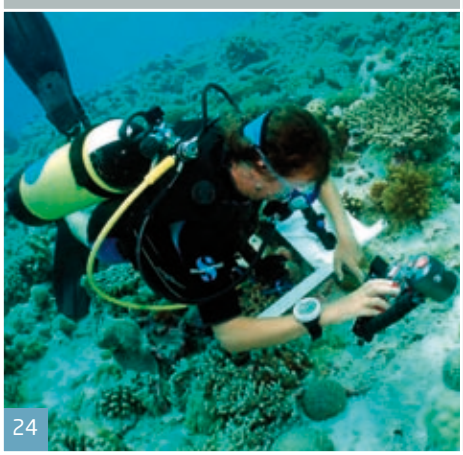
8°00

An inspiring example

The United States has recently created a magnificent marine conservation area in the Northwestern Hawaiian Islands which has aspects in common with these proposals for the Chagos Archipelago. Both involve some of the most unspoiled coral reef systems on Earth. Both cover around a quarter of a million square miles of ocean. In both, groups and individuals have worked over many years to make progress.

In Hawaii it required Presidents Clinton and Bush personally to make the essential and bold designations. And the role of the Pew Environment Group, with vision backed by resources, was finally conclusive.

The Pew Environment Group are now willing to work with the Government, the Chagos Conservation Trust, Chagos Environment Network and other organisations in Britain for protecting, in a similar way, in the Chagos Archipelago, the natural heritage of the planet and people.



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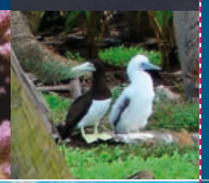

The Chagos Conservation Trust

The Chagos Conservation Trust (CCT) is a well-established, entirely voluntary, charitable society which promotes conservation and related science and education in respect of the Chagos Archipelago (the British Indian Ocean Territory).

The Chagos Archipelago is an exceptional natural asset for the planet, as one of the most pristine tropical marine environments still surviving. In our increasingly crowded world it provides a rare refuge for very vulnerable wildlife. Also, because it still has a mainly unspoilt and healthy environment, the Chagos provides us with a benchmark showing how the web of life functions in its natural state; and this is important in helping us to understand and deal with such problems as pollution, loss of biodiversity and climate change.

The British Government, through the BIOT Administration, is committed to conserving the environment of the Territory and has taken measures to put this into effect. It has designated a first Ramsar site and has agreed in principle on substantial further Ramsar designations on the basis of proposals from CCT. The Government has also declared a very large Environmental Zone and has undertaken to manage the area as if it were a natural World Heritage Site.

Clearly, however, there needs to be a means of engaging non-governmental interest and support for this remarkable treasure trove of marine and island nature. This is the function of the Chagos Conservation Trust.

The Trust monitors the status of the environment with the most expert scientific advice and provides a channel for bringing environmental problems to the attention of the British and BIOT Governments. It promotes and supports practical measures such as, in 2006, a major ship-based scientific survey. The Society's publications include CDs, factsheets and booklets on the fauna and flora of the Chagos and the book Peak of Limuria, the Story of Diego Garcia and the Chagos Archipelago. They represent a significant contribution to information on this little-known part of the world.

In face of the longer-term threats and uncertainties facing the Chagos environment, the Trust is concerned to continue to support and to strengthen the national and international framework for its protection, in co-operation and partnership with other organisations.

Join us and help to conserve the Chagos

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