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Chagos News

The Periodical Newsletter of the
Chagos Conservation Trust

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EDITORIAL

Progress

Our Chairman reports overleaf on the many activities of the CCT Committee. This is a very interesting and wide ranging article which will bring all readers fully up to date with our activities. This issue also has a fascinating article by our long standing historian and former Chairman Nigel Wenban-Smith on early flights to Chagos in *Guba.* There are also contributions about keeping Chagos pristine, Chagos birds and news from the US of America about our presence there.

AGM

Our Annual General Meeting will be held at 1815 on Tuesday 18 November in the Rutland Room at Over-Seas House, Park Place, St James's Street, London SW1A 1LR. Full details on back page.

Obituary

Regret to report the death of Ron Edwards who was a very early and loyal supporter of our charity. He wrote a very interesting article A Sub-Lieutenants "Treasure Island" about his visit to Diego Garcia in September 1941 published in Chagos News 4.

Website

We are constantly updating and improving our website www.chagos-trust.org Please look from time to time and send items and suggestions for inclusion.

Chagos News

Back copies from 16-31 are now on our website. If you want earlier copies please email me johntopp@johntopp.org.uk News 32 will be put on the website in about 3 months.

Editor

Richard Martin, now our Treasurer, started Chagos News in July 1993 and produced the first two issues. He was then posted to the Cape Verde Isles so I inherited the job. In Chagos News 4 I asked for a volunteer to take over. Twenty eight issues later it is time for a new mind on the subject. Anne Sheppard, the wife of Professor Charles Sheppard, has kindly taken on the task. Please send future articles Anne.Sheppard@warwick.ac.uk Thank you for your support.

John Topp

DECISION TIME FOR THE CHAGOS?

The months ahead could prove to be an important period in the history of the Chagos Archipelago (The British Indian Ocean Territory). The House of Lords will make a ruling on the final appeal by the British Government in the case of the Chagossian people and it seems more than likely that the Government will then need, whatever the ruling, to take decisions which could have a significant effect on the future for the Chagos environment.

The Chagos Conservation Trust's hope is that the British Government will rise to the occasion and develop, in consultation, a policy framework for BIOT which does justice both to the great environmental importance of the whole Chagos area and to decisions in regard to the Chagossians. We accept that the framework must also be compatible with security requirements. Professor David Bellamy's words, which I repeatedly quote, remain particularly apt at the moment:

"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-focussed 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."

The Chagos Conservation Trust agrees with David Bellamy's general approach. It is very good that this approach seems to be shared by those Chagossians who state that they want to 'set the conservation of the Chagos at the heart' of their plans for the future.

The Trust submitted evidence to the House of Commons Inquiry into the governance of the UK Overseas Territories, in which BIOT figured rather prominently. Both our initial evidence and our further evidence, submitted at the invitation of the Committee, are printed in full in the report (dated 18 June 2008). The following is an extract from the Committee's Report on BIOT:

'Environmental considerations

The Great Chagos bank is one of the world's largest atolls.[133] It has "the most pristine tropical marine environment surviving on the planet" and is "Britain's greatest area of marine biodiversity".[134] The Chagos Conservation Trust, a Trust dedicated to the conservation of the Chagos Archipelago's environment, argued that the issue of human resettlement needed to take full account of the environmental implications.[135] While it expressed sympathy for the Chagossians,[136] it argued:

[The lack of human habitation] is the main reason why the ecology of the Chagos is nearly pristine and full of diverse life, a rare surviving example of nature as it

should be; where human pressures do not conflict with environmental needs and lead to degradation and impoverishment.[137]
Therefore, the Trust recommended:
[…] even as the legal arguments continue it is not too soon for the British Government and other concerned bodies to begin to draw up a long-term framework for sustaining the environmental integrity of the Chagos Archipelago while taking the possibility of human habitation into account.[138]
68.
Mr Gifford told us that consultation was beginning between the Chagos Refugees Group's resettlement team and the Chagos Conservation Trust and that a joint plan was evolving to pursue the Chagos Management Plan and to train Chagossians as "conservation guardians".[139']

RAISING AWARENESS OF THE IMPORTANCE OF THE CHAGOS

CCT was established to promote conservation and scientific and historic research and 'to advance education concerning the Chagos Archipelago.' To take 'education' first, this is clearly a moment for raising awareness of the environmental importance of the Chagos Archipelago. The fact is that very few people, not least those with an influence on policy, are aware of the greatness of the ecological asset that the archipelago has become. Sadly, the past half century has seen the destruction or degradation of most other coral island ecologies around the world and this has made the Chagos even more exceptional.

Please let us know of any ideas you have for arranging articles, talks or other educational activities on the subject of the Chagos Archipelago. CCT can provide (free for members) a PowerPoint presentation. And for a short background history Richard Edis's' Peak of Limuria (published by and available from CCT) remains unmatched. We may also be able to arrange for a CCT member to give a talk or to write an article. Contact: chagostrust@hotmail.co.uk.

Meanwhile CCT Executive Committee members, including Pete Raines and Sam Purkis (whom we welcome as our CCT US member on the Committee), have been doing admirable awareness-raising work. We plan a focussed exercise on this, with a new publication, in the autumn; and we will keep you informed.

THE CONSERVATION POLICY FRAMEWORK
Anyone who speaks for CCT about the Chagos natural environment and about conservation tends to be asked the question: So what in practice does CCT propose? Answers to that sensible question are set out in our paper entitled 'BIOT/CHAGOS Conservation Framework (Discussion Paper)'. You will find the Discussion Paper on the CCT website (www.chagos-trust.org). It is subject to 'continuous improvement,' and suggestions from members are of course particularly welcome.

THE CHAGOS ENVIRONMENT NETWORK
With awareness-raising particularly in mind, a prestigious 'Chagos Environment Network' was formed at a meeting in the Linnean Society on 22 April 2008. Its current

members are CCT, the Linnean Society, Pew Environmental Group, The Royal Society, ZSL, RSPB (subject to ratification) and Professor Charles Sheppard in his capacity as organiser and lead scientist for the BIOT scientific expeditions.

The interest of the Pew Environmental Group in Chagos conservation is most encouraging. Their essential concern is for the creation of large-scale marine protected areas, on which they have already had striking success elsewhere in the world.

We are also pleased that CCT now has its own (still small) presence in the USA with the CCT US chapter. Its organisation, with the help of Coral Cay Conservation, of a CCT exhibition booth at the International Coral Reef Symposium in Florida was a splendid way to start off.

Generally, as you will see from the Policy Framework paper, CCT considers that 'A greater US contribution to environmental conservation within BIOT should be encouraged, in the co-operative spirit of the existing bilateral agreement'.

SCIENTIFIC MONITORING AND RESEARCH

The 2006 Scientific monitoring expedition was carried out very effectively with excellent official support, including the essential role of the BIOT support vessel. This present mechanism of expedition-type research visits has served well enough in the past but much new science requires equipment which cannot simply be flown out on a temporary basis but needs a non-humid, fixed location. Some equipment can be moved, but only at great expense and inconvenience.

There is now a need for a modest scientific facility which remains on one or more of the BIOT islands for authorised scientific work.

Importantly the Royal Society and the Linnean Society are taking an interest in the scientific significance of the Chagos. However practical progress has been limited due to the ongoing Chagossian legal case and to funding requirements. CCT's policy framework paper simply says 'A small, fixed scientific research facility should be established' Discussions continue.

At least three marine science priorities have been identified. These are (a) continued monitoring of the recovery taking place in Chagos, with a view to feeding this back into good management, (b) research into the 'connectedness' of Chagos' biota, namely its place in the Indian Ocean and its role in acting as a stepping stone between islands and mainland coasts, and a source area for larvae for all those highly overexploited parts of the Ocean, and (c) research into issues of erosion and climate change, including warming and sea level rise. Of these, the first continues on an ad-hoc basis. For the second, substantial progress has been made: in this, the technique used is genetic, and information is available (or soon will be available) for several species of invertebrates, two species of seabirds, two turtles, coconut crabs and two dozen species of reef fishes. For the third priority - issues of climate change, sea level rise and erosion - plans are currently being developed. Several key scientists have been identified who can shed substantial light on these issues, and who we hope will participate in forthcoming studies. Chagos is unusual

here (as it is in so many ways) in that geochemical techniques amongst others have been shown to be particularly useful, and can be used for wider Indian Ocean benefit.

CHAGOS HABITAT RESTORATION AND MANAGEMENT

Terrestrial issues of rat eradication and restoration of natural vegetation are also being explored. Scientific monitoring should pay particular attention to 'sentinel' species including seabirds, turtles, corals, reef fish, sharks, native plants. In the Indian Ocean most of these are on the decline. Sea-birds are subject to numerous threats and some are at a small fraction of historic levels. The Chagos is a vital refuge and breeding ground for them.

Yet, even in the relatively 'pristine' Chagos, biodiversity suffers from invasive species and the effects of past habitat destruction. The islands which were previously inhabited are to a large extent infested by rats (Rattus rattus, the black or 'ship' rat) which came in on ships. They have a seriously detrimental impact on biodiversity, particularly birds and turtles whose eggs they eat. Moreover much of the islands' native hardwoods were cut down and lost to coconut plantations and invasive plant species, such as 'Dodder'.
The Trust is in the early stages of drawing up proposals for a strategy on 'Chagos Habitat Restoration and Management: The Way Ahead'. We envisage this as a collective effort of leading experts, based on existing scientific knowledge drawn from the 1996 and 2006 Expeditions, the 2006 operation on Eagle Island and other sources. Dr Chris Hillman has made a contribution and others have offered to support. For the time being Professor Charles Sheppard is the contact point: (email:charles.sheppard@warwick.ac.uk).

William Marsden

Chairman, Chagos Conservation Trust

GUBA

On 9 June 1939, the cruiser HMS *Manchester* arrived in Diego Garcia lagoon and then spent five days anchored off Minni-Minni estate; she was en route from Trincomalee to Mombasa. But why such a long stopover? It seems a long way to have travelled merely to send a RC Church party ashore and to give her two Walrus aircraft opportunities for short exercise flights. Another entry in the ship's log[i] provides the clue. At 0600 on 14 June we read that "Flying boat *Guba* arrived from Cocos Islands" and, at 0800, that "Guba took off". The *Manchester* herself departed at 1634, heading for Zanzibar.

It's a story that deserves to be better known – an element of Chagos history that escaped the notice of the author and editors of 'Peak of Limuria'. Yet it received contemporary publicity in the London *Times*, as well as featuring in the memoirs of one of Australia's most distinguished pioneer aviators, Captain (later Sir) Gordon Taylor[ii]. This remarkable man, who had played a major role in devising and developing the instruments required for long distance flying, also possessed an unquenchable

determination to demonstrate the commercial potential of long haul routes, as well as their importance to Australian security. In 1937, with a business partner in Perth, he proposed establishing an air service route across the Indian Ocean, for which they would need both governmental backing and a suitable seaplane for their proposed route – Port Headland-Cocos Keeling-Diego Garcia-Seychelles-Mombasa.

It did not take long for Taylor, a personal friend of R.G.Casey, Treasurer in the Commonwealth government, to secure political backing in Canberra, although the latter wanted to share the risks and expense with the British. However, the Australian Prime Minister's approach was given short shrift in London, partly, it seems, because the British government were busy fending off requests from Imperial Airways for a subsidy to develop an Indian Ocean route of their own and partly because the Australians based their case on the notion that development of Taylor's route would buttress British claims to sovereignty over the various islands involved[iii]. Meanwhile, Taylor himself was scouring Europe and the United States in search of a suitable plane. Only one manufacturer, Consolidated of San Diego, had begun making a long range patrol flying boat, the PBY, a design which exactly suited Taylor's purpose. Better still, one of the first to come off the production line had been sold to a wealthy American naturalist, Richard Archbold, who was using it to collect new plant specimens for the Smithsonian Museum from the interior of New Guinea.[iv]

"With Archbold as my objective," wrote Taylor, "I went on home down the Pacific and finally located him in a remote part of New Guinea, by cable from Sydney. Soon afterwards his aircraft, *Guba*, flew down to Australia and I was able successfully to negotiate its charter for the Indian Ocean flight.

"The timing for this charter forced me to accept a rather terrifying financial risk. Archbold was making his plans to return to the United States, *Guba* was leaving again for New Guinea, and to be sure that I would not lose this aircraft had to come to terms immediately with Archbold's representative. I had no promise of support from the Australian government, merely an awakened interest through Mr Casey; so, with a shaking hand, I took on the charter myself, well knowing that I hadn't the sort of money to fit such a venture at all reasonably into my private affairs. I had already spent rather a lot of money running down a suitable aeroplane around the world, but I had to accept the chance of this charter to strike at the right, and possibly the only, moment for success.

"It proved to have been the right move.

"With a world war threatening in Europe, and likely to spread in unpredictable dimensions throughout the world, the need for a reserve route to the United Kingdom and operational bases in the Indian Ocean was recognised by the Australian Government. Charter of the *Guba* fitted very well into the needs of the times and it was not long before the Australian and British governments joined in taking on my commitment and appointing me to undertake the flight and survey."

In fact, the British had eventually agreed to meet half of the governmental costs, up to a limit of £3,500 (their share of the final bill worked out at £3,464.0.10d). Much more importantly, they arranged for HMS *Manchester* to be on hand at Diego Garcia, in case of any difficulty arising during *Guba's* long stage (1472 nautical miles) from Cocos Island[v]. The vessel also put in place a single mooring off East Point and landed supplies of aviation fuel and lubricants. As things turned out, that leg of the journey was uneventful, with Taylor in radio contact from take-off until he spotted *Manchester's*

lights dead ahead 14 hours later, as dawn broke. The previous leg of the flight had been a different matter altogether. A vast storm had arisen, obscuring the stars on which accurate navigation depended and producing violent turbulence at all altitudes; the wind and rain at the cloud base (500 feet) removed any possibility of seeing the islands, while the turbulent cloud heads extended well above the plane's maximum altitude of 12,500 feet. By the time dawn broke and occasional gaps appeared in the cloud, the plane had used all the fuel that could be allocated to a methodical search, based on an initial position estimated from dead reckoning. The remaining fuel had been allocated for emergency diversion to Batavia, which was successfully reached. Of course, the laconic entry in the British warship's log offered not a hint of the drama just played out.

The rest of Taylor's flight passed without a hitch and radio communications with HMS *Liverpool* during the flight to Seychelles enabled him to be warned of bad weather in Mahé, though it turned out to be fine! The *Guba* went on her way to take part in a world fair in New York, before being sold to Imperial Airways for use as a cargo transport in West Africa during the war, and was finally broken up in 1944. Taylor, having proved his point, put in a vigorous report to the Australian and British authorities, recommending that proper radio, weather reporting, fuel depots and staging facilities be installed at the islands he had visited; and also that both countries' Air Forces undertake further proving flights. Whitehall received 100 copies of this report, but decided to take no further action on it[vi].

Readers of *Peak of Limuria* will already be familiar with the role played by Diego Garcia during the war which ensued so soon after *Guba's* flight. Taylor too enjoyed being vindicated by events:

> "When the England-Australia air route was sealed off by Japanese occupation of the whole area between India and Australia, air communication was maintained with the United Kingdom by aircraft operating through Cocos Island between Colombo and Perth.
> "After the war His Majesty's Stationary Office publication, *The Wings of the Phoenix*, referred to the Indian Ocean operations:
> The irregular chain of tropical islands which extend from Madagascar to Ceylon were mobilised as ports of call for the flying boats; the Maldives, Diego Garcia, and the Seychelles, etc.
> The coral reefs at the chain of bases, low green islets sheltering lagoons, the palm-covered Seychelles, and blue anchorages that were calm for flying boats, composed the most fantastic as well as the largest area of operations of the war.
> Catalinas from the remote bases flew hundreds of hours to maintain contact with lifeboats packed with survivors to guide rescue vessels to them. In all, the flying boats of 222 Group were responsible for saving more than 1,000 lives in the Indian Ocean, a figure which alone is witness to the far-sightedness of those who planned the island bases."

How Taylor must have chortled as he quoted those words!

While this story shows that an Australian was the first long distance flier to reach Diego Garcia, the Canadian, Alex Jardine, who made the first flight there from Colombo in 1941 was no less a pioneer. Jardine's flight on the North-South route to Mauritius was made without any radio guidance in a Catalina, the PBY 5, developed from the much

more basic PBY 2; whereas Taylor at least had the benefit of radio contact with *Manchester* for his East-West crossing. Both men deserve to count equally in the Chagos hall of fame.

Nigel Wenban-Smith

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[i] NA. ADM 53/109697

[ii] *The Sky Beyond*, publ. 1963, Cassell Australia Ltd, Melbourne. Captain (later Sir) Gordon Taylor, earned his MC with the Royal Flying Corps in the First World War, before returning to Australia, where he became navigator to Charles Kingsford Smith and the latter's partner in increasingly daring long range flights, including, in 1934, the first and only crossing of the Pacific in a single-engined plane. Even more celebrated was the courage he showed in saving Kingsford Smith and their radio operator in 1935. Their three-engined 'Southern Cross' (a Fokker FVII-3M) was forced to turn back halfway across the Tasman Sea, following damage to the starboard wing motor. In due course, the port motor began to lose oil pressure. As the plane was gradually forced down, there was only one thing to do and Taylor did it. Clasping the outer case of their thermos flask, he clambered out to the dead motor, drained some of its oil into this container, delivered it to be poured into an improvised container by the radio operator, repeating the process several times before crawling back into the fuselage himself. He then had to crawl out along the port wing to top up that engine. That entailed having to shut down the port motor, but also to restart it when the plane was in danger of descending into the sea. With pressure restored the plane could just keep flying. But oil loss required the whole procedure to be undertaken several more times, before the plane managed, just, to reach Sydney airport. For this extraordinary feat Taylor was awarded the George Cross.

[iii] NA. CO 323/1457/44

[iv] *Guba* (meaning 'squall' in a Papuan dialect) was a PBY-2, from which the PBY-5 Catalinas were developed. Her first owner, Richard Archbold, was also an aviator keen to break endurance records and began by using her to make the first coast-to-coast crossing of North America. So it was no wonder that he and Taylor got on well. In fact Archbold and his own crew accompanied Taylor on the Indian Ocean crossing, with Archbold charging nothing for the hire of his plane and Taylor charging nothing for his services. Archbold even did a little botanising during his stopover at Diego Garcia.

[v] NA. DO 35/522/4

[vi] NA. AVIA 2/2826

To keep Chagos pristine, prepare for invasion

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Chagos is the most isolated atoll archipelago in the world, with a highly diverse marine environment and vast coral reefs. The area suffered severe coral bleaching and mortality in 1998 due to high sea surface temperatures, with over 80% reduction in coral cover down to a depth of 40m. However, recovery has progressed faster than anywhere else in the Indian Ocean. Coral cover now exceeded 70% on several reefs, and Chagos coral recruit densities are at least 10 times higher than at most other reefs in the central and western Indian Ocean.

This indicates high ecosystem resilience, an ability to absorb and respond to stress without losing structure, functions and services. The most important factor contributing to this is likely to be the very low levels of direct impact from human activities. With the exception of Diego Garcia, Chagos has no permanent human settlement, and thus suffers few of the stresses that many reefs are subjected to, such as sewage runoff, sedimentation, overfishing, and other destructive resource use. As other parts of the

Central and Western Indian Ocean region are faring much worse, Chagos is invaluable as a source of larvae, and a unique biodiversity refuge.

Alien Invasions

While isolation has kept Chagos relatively pristine it may also have made it more vulnerable to the introduction of non-native species. It has been shown that biogeographically isolated communities are particularly susceptible to introductions, and surveys in Hawaiian ports have documented over 100 species not native to the area, in some cases making up a fifth of the total number of species. The natural barriers that have contributed to the development of the wide range of ecosystems and species found in the world have over the past few hundred years increasingly been overcome by growing movements of people and commodities, helping species travel vast distances to new habitats. While most species moved away from their native range are unable to cope with the conditions in an environment they are not accustomed to, there are also frequent cases where species have become successfully established. In some cases where natural controls such as predators or parasites of an introduced species are lacking, the species may multiply rapidly, taking over its new environment, often drastically altering the ecosystem and out-competing native biota. Such species are called "introduced invasive species" (or "alien invasive species"). The Convention on Biological Biodiversity ranks the introduction of non-native species as one of the most significant threats to biodiversity.

Although Chagos biogeographical isolation may make it vulnerable to species introductions it is unique in the sense that the vectors for spread of invasive species are currently very few, essentially limited to Navy/Military operations and recreational yachts. However, the drastic if temporary change in reef biota during the decade after the mass bleaching in 1998 may have lowered the introduction threshold – many invasive introduced species are 'colonising' species that benefit from the reduced competition that follows habitat degradation.

The situation now…

IUCN's Global Marine Programme, with the support of the Total Corporate Foundation, set out to undertake the first surveys on this subject in Chagos in 2006, as part of the Chagos 2006 Expedition. Methods developed and piloted in the Seychelles building on existing protocols for surveys of non-indigenous species in ports and the work of the Globallast programme (www.globallast.org), were further adapted, in order to detect non-indigenous, potentially invasive species present, and to assess the current status and risk for invasions.

A total of ten days were spent sampling in and around Diego Garcia, especially the port area, the most likely point of first introduction due to the movement of navy and supply ships, and two weeks around the Great Chagos Bank, Peros Banhos and Salomon, where recreational yachts as well as sea cucumber poaching boats may constitute a vector for introductions. In total 27 sites were surveyed. Methods used were designed to capture species from numerous groups of animals and plants, with a particular emphasis on phyla with species known to translocate, and included scraping hard substrates and taking sediment cores for identification of dinoflagellate cysts and infauna. Sampling was also photo-documented extensively.

At the time of writing analysis of the samples is still in progress – the process is tedious and requires a team of expert taxonomists. However, based on fine sorting of over 700 individual specimens, no introduced species have been detected. An analysis of sampling strategy and site selection is being carried out to verify whether this may account for the lack of detection, but if the results are verified it would be the first survey of this kind that has not detected any introduced or cryptogenic (of unknown origin) species, including surveys around Australia, in several parts of the Pacific, and in the Seychelles. It would be another affirmation of the unique status of the Chagos environment, and a key feature worth protecting and preserving.

…and in the future?

But many challenges remain. Climate change is likely to contribute to increased rates of introductions and invasions. Physical-environmental differences between source and recipient areas may be reduced and natural barriers between source and recipient areas lowered as a result of global warming. Increased sea surface temperature may lower the thermal barriers that have contained certain species in the past, and climate change related ecosystem degradation, such as coral bleaching may pave way for opportunistic species. In addition, changed weather and current patterns may lead to new distribution patterns.

Future developments in Chagos may also change this. Intense boat traffic has already introduced non-native species to most parts of the world, including inhospitable environments as the Antarctic, and one of the most notorious invaders in island environments, the rat, is common on some Chagos islands (with devastating effects on e.g. bird populations). A recent rat eradication programme on Eagle Island failed, illustrating the difficulties in managing non-native species AFTER they have become established. There is a continued but comparatively moderate risk associated with the ships and planes supplying Diego Garcia and the recreational yachts visiting the area. More worrying would be possible permanent resettlement in the archipelago, which could significantly increase the risks of species introductions and invasions. A recent plan for resettlement, the "Howell Report", while setting "conservation at the heart" of its plan, fails entirely to consider non-native species introductions, prevention and mitigation options, although permanent settlement as envisaged would inevitably lead to a higher risk of introductions, including as a result of increased trade. This is a considerable flaw. While the risks associated with climate change are hard to predict and need to be addressed on a global level, much can be done to minimize the direct impact of human activities.

The Chagos Conservation Management Plan aims to "maintain or restore BIOT as an intact, functioning coral reef/atoll system dominated by native species, and to maintain the resilience of the Chagos ecosystem" and "eradicate, control at non-damaging levels and prevent further establishment of populations of non native species which could threaten biodiversity". These are important aims in a world where very few areas remain pristine, and future management and development of Chagos needs to be sensitive to this in order not to compromise its status as a unique environmental refuge. For the sake of the entire Indian Ocean it would be better if marine invaders were not allowed to do to Chagos reefs what mammalian invaders, that is rats and humans, have already done to some of the islands.

ROYAL NAVY BIRDWATCHING SOCIETY EXPEDITION ACTIVITY

Major **Peter Carr** BSc Hons AIEEM RM

The Royal Navy Birdwatching Society (RNBWS) mounted two expeditions to Diego Garcia, British Indian Ocean Territory, in May 2005 (BIO301) and November 2007 (BIO401), sponsored by RNBWS, the RSPB and the Overseas Territories Environmental Programme (OTEP). The aim of the two expeditions was to assess the breeding population of sea birds within Barton Point Important Bird Area (IBA). As a secondary task the two expeditions undertook a full ornithological survey of Diego Garcia collected other taxon records as the opportunities arose.

THE IMPORTANT BIRD AREA PROGRAMME

The IBA programme is a global initiative coordinated by BirdLife International[vi] Its aim is to identify, protect and manage a network of sites that are important for the long-term viability of naturally occurring bird populations across the geographical range of those bird species for which a site-based approach is appropriate (Sanders, 2006). IBAs should as far as possible:

- Be different in character or habitat or ornithological importance from the surrounding area.
- Exist as an actual or potential Protected Area, with or without buffer zones, or be an area that can be managed in some way for nature conservation.
- Alone or with other sites, be a self-sufficient area that provides all the requirements of the birds that it is important for and that use it during the time they are present.

To be accepted as an IBA a site must fulfil criteria defined by BirdLife International. BIOT has had ten sites nominated and accepted for IBA status. In addition to Barton Point, these are Danger Island, Sea Cow, North, Middle and South Brother and Nelson all on the Chagos Bank and Petite Ile bois Mangue, Ile Parasol and Ile Longue from Peros Banhos. All of these sites were selected due to their congregations of seabirds (Carr, 2004, 2006) and were based upon counts of seabirds supplied by two Joint Services Expeditions in the early 1970s (Baldwin, 1975; Bellamy, 1979) and the seminal work of Symens (1999) covering the 1996 scientific expedition to BIOT published in Ecology of the Chagos. Latterly, McGowan, Broderick & Godley (2008) have reviewed the IBA status of BIOT post the 2006 scientific expedition and have recommended two further sites for inclusion, Petite and Grande de Coquilage from Peros Banhos.

BARTON POINT IMPORTANT BIRD AREA SURVEY

Barton Point IBA is made up of 14 km of the north-eastern arm of Diego Garcia, running from the deserted settlement of Minni Minni to Barton Point itself and the three islets of

West, Middle and East that lie in the mouth of the lagoon.. This previously inhabited part of the atoll was left to nature in the early 1960s and made out of bounds to personnel serving on Diego Garcia in the early 1970s. Possibly as a result of this lack of disturbance, seabirds have re-colonised this part of Diego Garcia after being absent for the better part of a century.

RNBWS personnel counted all of the seabirds in 116 10m x 30m quadrats in the Barton Point IBA in May 2005. It was very apparent during this survey that Red-footed Booby *Sula sula* were at all stages of breeding and that the quadrat counts would only give a snap-shot at that point in time of the breeding numbers and not a total annual breeding population. To gain a more accurate estimate of the total annual breeding population, a further survey needed to be undertaken sometime later in the year. To achieve this, November 2007 a further 105 quadrats were counted using exactly the same methodology as in May 2005. Together, the two counts proved Red-footed Booby breeds continuously in the Chagos and have a peak of breeding between January and July.

These results have implications when calculating breeding populations of Red-footed Booby in the Chagos based upon counts from one visit. It is possible that previous estimates of the breeding populations for this species from throughout the Chagos have been underestimated. For Barton Point IBA, the **annual** breeding population is now estimated to be in excess of 4500 pairs.

Brown Noddy, *Anous stolidus* was also shown to breed throughout the year. In May 2005 there were a minimum of 128 pairs synchronously breeding on the ground on West Island; in November 2007 there were an estimated 20 pairs asynchronously breeding in trees on mainland Diego Garcia. In BIOT, historical records show that Brown Noddy have been found in large numbers: at all stages of breeding in February and March (Symens, 1999); synchronised, terrestrial breeding with large chicks in May (Hutson, 1975); again with eggs in May (Carr, 2007) nest building in July (Bruner, 1995) and synchronised terrestrial breeding with eggs and small chicks in August (Carr, 1998).

Based upon the two expedition's results and the limited historical breeding records it is not possible to specify an exact breeding period for Brown Noddy in BIOT. It is probable that, similar to elsewhere in the world, it has a sub-annual breeding strategy. Again this has implications when assessing IBA status based upon breeding numbers from repeat counts of specific months.

THE DIEGO GARCIA ORNITHOLOGICAL SURVEY

The two expeditions found 14 new species of bird for the Chagos. These new species were, Gull-billed Tern, *Sterna nilotica*; Saunders's Tern, *Sterna saundersi*; White-cheeked Tern, *Sterna repressa*; Yellow Wagtail, *Motacilla flava* (all first recorded May 2005); Black-crowned Night-heron, *Nycticorax nycticorax*; Indian Pond-heron, *Ardeola grayii*; Common Moorhen, *Gallinula chloropus*; Common Snipe, *Gallinago gallinago*; Pectoral Sandpiper, *Calidris melanotos*; Ruff, *Philomachus pugmax*; Parasitic Jaeger,

Stercorarius parasiticus; White-throated Needletail, *Hirundapus caudacutus*; Common Swift, *Apus apus* and Fork-tailed Swift,.*Apus pacificus.* These new additions bring the number of bird species recorded in BIOT to about 93 species.

Without doubt the majority of the new species were overshooting and lost migrants that would eventually make their way back north or die and from a conservation aspect are of little importance. However, two of the species deserve further attention. There were 5-8 Common Moorhen present in three different locations on Diego Garcia in November 2007. This is potentially a small breeding population establishing itself and deserves monitoring in the future, particularly in the reed-bed adjoining the Fuel Point. Black-crowned Night-heron is noted for its vagrancy worldwide (Hancock & Kushlan, 1984). It may be that the three individuals found in November 2007 were vagrants destined to move on; it could be that they are the first of their species to colonise Diego Garcia.

The two expeditions also found several other species that had been recorded fewer than five times previously in the Chagos. Some of these species had not been seen since the Joint Services expeditions of early 1970s. The recording, and in most cases photographing, of Garganey, *Anas querquedula*; Glossy Ibis, *Plegadis falcinellus*; Great Egret, *Casmerodius albus*; Little Egret, *Egretta garzetta*; Common Ringed Plover, *Charadrius hiaticula*; Kentish Plover, *Charadrius alexandrinus*; Eurasian Curlew, *Numenius arquata*; Redshank, *Tringa tetanus*; Marsh Sandpiper, *Tringa stagnatilis*; Terek Sandpiper, *Xenus cinereus*; Grey-tailed Tattler, *Heteroscelus brevipes* and Oriental Pratincole, *Glareolum maldivarum,* greatly assists in building up the ornithological picture of this under watched area.

OTHER TAXON RECORDS

One new species of Odonata (dragonfly) for BIOT was recorded, a stunning female Picturewing *Rhyothemis variegata* thought to be of the nominate sub-species that occurs in India, Thailand, Sri Lanka and other southern Asian countries. The identity of this known wanderer has been confirmed by the British Natural History Museum Entomology Department. The Lesser Green Emperor *Anax guttatus* has been recorded on the outer atolls before ((Barnett & Emms, 1997), at least three individuals were recorded on Diego Garcia, a new atoll record.

No report of Diego Garcia would be complete without a mention of cat *Felis silvestris* and rats *Rattus sp.* A programme of cat eradication has been ongoing and is bearing fruit. Only two sightings were made of cat were made in 2007. One extremely wary individual broke cover out of bushes at the Landfill Site and very quickly disappeared and the second record was of paw prints in the inter-tidal mud at the southern end of the Barachois Sylvaine. Rat numbers would be impossible to estimate. Whilst none were noted in the accommodation area, probably as a result of an extensive control programme, once passing the bottom of the airfield an indication of their number is that one rat would be seen every 10 metres if one stopped and observed - every 5 metres when in Barton Point IBA.

CONCLUSION

Much is still unknown about the birds of BIOT and this is of particular concern regarding the internationally important breeding seabirds. To conserve a species one has to understand the species requirements. It is hoped that the publication of the two expedition reports in *Sea Swallow*, the RNBWS annual journal and the publishing of a paper on the breeding phenology of Red-footed Booby may marginally improve upon this impoverishment of critical understanding.

The finding of 14 new species of bird (and a single dragonfly) and the recording of several species seldom recorded in BIOT, from a scientific and conservation stance is of little importance. The publication of these records does however contribute to the growing understanding of what bird species are present, when they occur and in what numbers; significant information when looking at an ecosystem holistically. It also potentially starts the audit trail for colonisation.

For a minimum financial investment and with little impact upon the environment and personnel of Diego Garcia the two RNBWS expeditions have provided data that is significant in BIOT conservation terms.

The CCT at the 11th International Coral Reef Symposium, Florida

Sam Purkis

With 2008 designated the International Year of the Reef (IYOR), there exists considerable opportunity with which to publicise the plight of the Chagos and its exceptional coral reefs. Held only every four years, the International Coral Reef Symposium provides the opportunity for scientists, managers, policy makers, and concerned members of the public, to gather and discuss the state of the world's reefs. A keystone event for IYOR, the symposium was held this year in Ft. Lauderdale, Florida, and was attended by more than 3,000 participants from 114 countries. At the forefront of discussion were the implications of changing climate, ocean acidification, over fishing, and coral bleaching. The prognosis for our reefs was undeniably poor, but the symposium carried the message of 'Reefs for the Future', demanding swift and decisive action to curtail the calamitous degradation of coral ecosystems that has been witnessed over the past decades. Several presentations were made on science conducted in the Chagos, much of which arising from the 2006 expedition led by Dr. Charles Sheppard.

An exhibition booth for the Chagos Conservation Trust was present at the 5-day symposium. The primary purpose of the booth was to raise awareness about the Chagos archipelago, not least its importance as one of the few remaining remote and largely pristine coral reef ecosystems. Chagos brochures were distributed to many of the conference participants, six copies of the Peak of Limuria were sold, and seven new members were recruited to the trust. In total, nearly $400 was raised for the CCT. The booth also provided a means with which to advertise the recently launched CCT US, a

chapter of CCT UK. This message was particularly pertinent considering that the symposium was hosted in North America for the first time in thirty years, and many of the new members recruited to the trust are US-based. While part of the public conscious in the UK, the archipelago receives little attention in the United States, despite the existence of the military base on Diego Garcia. The purpose of CCT US is to generate awareness about this exceptional archipelago in America.

The booth was kindly sponsored by the National Coral Reef Institute and manned by CCT members Sam and Charlotte Purkis, John Turner, and Simon Harding and Jan-Willem van Bochove of Coral Cay Conservation. For more information on the 11th International Coral Reef Symposium, please visit http://www.nova.edu/ncri/11icrs/index.html, while background to the International Year of the Reef can be obtained: http://www.iyor.org/.

To learn more about the US chapter of the CCT, contact Sam Purkis (purkis@nova.edu, Acing Chair CCT-US), Stephen Snell (Stephen.f.snell@saic.com, ActingVice-Chair CCT-US), or Carol Garner (carolgarner@columbus.rr.com, Acting Secretary CCT-US).

(From left to right) Simon Harding, James Goodman, and Sam Purkis at the CCT booth in Ft. Lauderdale

(From left to right) Simon Harding, John Turner, Sam Purkis, Charlotte Purkis stand in front of the CCT booth

AGM

Our Annual General Meeting will be held at 1815 on Tuesday 18 November in the Rutland Room at Over-Seas House, Park Place, St James's Street, London SW1A 1LR.

In accordance with the constitution those present will elect members of the Executive Committee, a Chairman, a Treasurer and a Secretary.

One third of the members of the Executive Committee stand down each year, and this year five are standing down:

Geoff Hilton
Simon Hughes
Charles Sheppard
Michelle Taylor
Sam Purkis.

Nominations for office must be received by the Secretary by email to simonhughes@hughes-mccormack.co.uk or by mail to Ground Floor Flat, 29 Champion Hill, London SE5 8AL at least seven days before the meeting.

We have invited the BIOT Commissioner and after the meeting there will be a good opportunity for mingling with other members and guests over drinks and buffet snacks (at a modest cost for those attending).