Conserving marine biodiversity through a world-wide network of Marine Protected Areas

Final project report to the

AAGE V. JENSEN CHARITY FOUNDATION

REPORT PERIOD

December 2008 to November 2011
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EXECUTIVE SUMMARY

Project background

The global marine environment is under considerable stress, and facing a multitude of threats. Only 1.1% of the world's seas are under any form of protected area designation, compared to 11% of the earth's land surface. Worldwide, the main threat has been the over-exploitation of marine resources, leading to the collapse of fisheries and livelihoods, and population declines in marine mammals and birds. The use of drift and trawl nets, and long-lining, continue to have a devastating impact on wildlife populations. Seabird breeding islands have been ravaged by alien predators and competitors such as rats, cats and goats. Global warming is now believed to be affecting the marine environment, with declines in both fish stocks and seabird populations. BirdLife International's Global Seabird Programme, with the instrumental support from the Aage V. Jensen Charity Foundation, is working to address these threats and ensure that resources are most effectively targeted, by identifying marine conservation priorities and demonstrating effective approaches to conservation in the field.

The involvement of Aage V Jensen Charity Foundation to date

The Aage V Jensen Charity Foundation has been providing its invaluable support to this project through this single grant since December 2008. Financial support from the Foundation has made possible a range of highly important project activities towards the expected conservation outputs listed below.

Key activities and achievements in the last year

Major achievements were made during this third and final year of the project. Information on seabird breeding colonies has been used to identify marine Important Bird Areas (IBAs) in Antarctica, the Pacific and the rest of the world, including countries that were not initially envisaged by the project. Plans are advancing well for the launch and dissemination of all this information in a first global inventory of marine IBAs to coincide with the Conference of Parties to the Convention on Biological Diversity (CBD) in October 2012. All new data have been included in the BirdLife World Bird Database.

After BirdLife’s Global Procellariiform Tracking Database was presented at the 4th Biologging conference in Hobart, Tasmania, Australia and the 2nd World Conference on Marine Biodiversity, Aberdeen, Scotland, new scientists have joined those already contributing to the ongoing identification of international seabird “hotspots”. Furthermore, new data have allowed the partnership to fill gaps in species or regional coverage. The methodology developed to identify marine IBAs using satellite tracking data was approved in 2011 by a steering committee of leading seabird tracking experts. BirdLife has taken part in several key workshops related to marine components of the CBD Programme of Work on Protected Areas which have led to the designation of marine IBAs as Ecologically and Biologically Significant Areas (EBSAs).

In the field, conservation activities including surveys and invasive species eradications have continued at six priority sites in Asia and the Pacific to demonstrate successful approaches. These activities have taken place through the development of implementation partnerships with governments, civil society organisations, and local communities, especially in the Pacific.

Key conservation achievements and impact of the project in its lifetime

The BirdLife Marine IBA Programme has made major advances over the last three years, thanks to the invaluable support of the Aage V. Jensen Charity Foundation. At the beginning of the project, several partners were beginning to engage in marine IBA work, but knowledge exchange between them was limited. The implementation of this project has allowed BirdLife to develop a standardised marine IBA toolkit and coordinate and expand the work within the partnership in a consistent and comparable way. It has also allowed us to promote marine IBAs as inputs to international Marine Protected Area and marine spatial planning processes. This has seen a focus on working with the CBD to get marine IBAs recognised as EBSAs. It has also allowed us to support work in the European Union on the designation of marine IBAs as Special Protected Areas (SPAs) under the Birds Directive, where 41 sites in Spain have now been put forward. These and
other project results have conservation benefits at many levels, summarised here in relation to the BirdLife strategic areas.

**SPECIES:** Marine IBAs have now been identified for around two thirds of the world’s over 340 species of seabird, and for around three quarters of those that are threatened. Threatened species that have been a particular focus throughout the programme include the Endangered Japanese Murrelet (*Synthilboramphus wumizusume*) and the Critically Endangered Chinese Crested Tern (*Sterna bernsteini*).

**SITES:** Over 1600 seabird colonies have now been identified as IBAs. A further 400 IBAs have been identified in coastal waters during the breeding season, around 700 via seaward extensions around breeding colonies and another 400 pelagic sites on the basis of satellite tracking data; making a total of over 3100 IBAs identified. This important work represents the first ever identification of a world-wide network of marine sites of conservation importance. It is now guiding the identification of a baseline for establishing monitoring programmes at these sites, along with the demonstration of conservation activities and approaches by advancing actions on the ground.

**HABITATS:** The marine IBAs identified to date include a wide range of island, coastal and pelagic habitats. Through Geographic Information System (GIS) analysis it has been possible to assess which of a range of oceanographic variables (e.g. sea surface temperature, chlorophyll, salinity) are helping to determine the distribution of seabirds in marine IBAs. The identification and protection of this world-wide network of areas important for marine conservation is therefore helping to conserve a vast array of different marine habitats.

**PEOPLE:** This project has allowed BirdLife to expand marine IBA work into new regions. This has ultimately led to over 40 Partners engaging in marine IBA work, and has ensured that marine IBAs are included in all of the Birdlife regions’ workplans, and are an integral part of the overall Global Seabird Programme strategy. Furthermore, in line with BirdLife’s commitment to working for wildlife conservation with people, and for people, all conservation activities have taken place through building of ‘implementation partnerships’ with governments, civil society organisations, and local communities.

Co-funding secured as a result of the project: Building on the support received for this project, other significant grants were received from three sources: the Lenfest Ocean Programme (part of the Pew Charitable Trust), Boston Environmental Research and the David and Lucile Packard Foundation. These amount to over US$ 1 million, and the support from the Aage V. Jensen Charity Foundation was clearly significant in leveraging these funds.

**Next steps**

In the short term, important next steps include the submission of a layman’s version of the marine IBA toolkit to the CBD Subsidiary Body on Scientific, Technical and Technological Advice meeting in May 2012 and the launch of the first global inventory of marine IBAs at CBD Conference of Parties (COP) 11 in October 2012.

In the longer term, continuing to support the work of the Birdlife Partnership remains critical. BirdLife is committed to assessing the network of sites against climate change impacts, working on community-managed Marine Protected Areas in coastal marine IBAs, and engaging with Regional Fisheries Management Organisations (RFMOs) and other high seas user groups to identify strategies for the sustainable management of marine IBAs.
ANNUAL PROJECT REPORT

Project progress during the final year (1st January – 30th November 2011)

The overall goal of the project is to establish a foundation for global marine conservation, through the identification and strengthened protection of marine IBAs and marine ‘hotspots’. Progress against this goal continued during this final year of the project. Progress in detail is reported below against the 3 main outputs and 16 activities as described in the original proposal to the Aage V Jensen Charity Foundation.

Output 1: Identification of the first ever world-wide network of Marine IBAs based on information on seabird breeding colonies

Complete the identification of marine IBAs in Antarctica

The digital boundaries and text accounts for all sites identified have now been received. The report was submitted as a document to the sixth meeting of the Agreement on Conservation of Albatrosses and Petrels (ACAP) Advisory Committee which took place from 29 August to 2 September 2011 in Ecuador. Further discussions were held about extending the identification of IBAs to other parts of Antarctica, with the Ross Sea identified as a priority; however, discussions with external experts, and the securing of additional funding needed for this task, were not completed. BirdLife will continue these discussions, and look for additional funding sources, to complete the IBA inventory for Antarctica.

Complete the identification of marine IBAs in the Pacific

Priority seabird surveys in Fiji and Tokelau, and a further literature review from other Pacific Island Countries, Territories and States have led to the inclusion of additional sites into the Pacific marine IBA inventory. These include nine new IBAs in the United States Minor Outlying Islands and American Samoa.

Foraging range information has been compiled for seabird species that trigger IBA criteria, with background information held in the BirdLife Foraging Range Database. These allow colony-specific and species-specific foraging areas to be identified in a scientifically robust way, to determine final marine IBA boundaries. Five large-scale pelagic sites have also been identified in the region based on tracking data from seabirds in Australia, New Caledonia, New Zealand and Japan.

Compile all other marine IBA data, and publish a global marine IBA inventory and ocean-scale maps

Over 1600 seabird colonies have now been identified as IBAs. A further 400 IBAs have been identified in coastal waters during the breeding season, around 700 via seaward extensions around breeding colonies and another 400 pelagic sites on the basis of satellite tracking data; making a total of 3100 IBAs identified. Plans are advancing well for the launch and dissemination of all this information in a first global inventory of marine IBAs to coincide with CBD CoP11 in October 2012. Strategically this is an excellent arena in which to profile this work and present the sites as a way of assisting governments in their attempts to protect 10% of the marine environment by 2020.

Pilot research at key sites to extend marine IBA boundaries into off-shore waters

Trial work was undertaken to apply seaward extensions to all seabird breeding sites identified to date in the Pacific, with over 40 candidate marine IBAs identified for a range of species. This work was presented at the CBD EBSA regional workshop in November 2011 and a number of the sites were approved for inclusion in the EBSA network. This has proved to be an excellent policy endorsement of our approaches and gives us confidence to use the information in a similar way in other regions.

Presentation of data on marine IBAs to the public and decision-makers through the BirdLife World Bird Data Base

All new data on marine IBAs and breeding colonies that qualify as IBAs have been included in the BirdLife World Bird Database and will be made publically available as part of the module of the Datazone on BirdLife’s website.
Establish a baseline and programme of work for global marine IBA monitoring

Marine IBA monitoring work was not advanced as rapidly as was originally hoped. This was in large part due to the investment of more time and resources into the key stage of developing the tools for identifying marine IBAs, which was necessary to compile a comprehensive global list of sites. This has allowed us to advance marine IBA work in more countries than originally envisaged, which will give us important baselines for future monitoring, an activity that we will advance after the completion of this project.

Output 2: Marine ‘hotspots’ identified in international waters based on the satellite tracking of seabirds at sea

Promotion of the BirdLife Global Procellariiform Tracking Database amongst the world’s seabird researchers

The BirdLife tracking database was presented at the 4th Biologging Conference in Tasmania, Australia and the 2nd World Conference on Marine Biodiversity, Scotland. Both meetings were used as opportunities to communicate directly with seabird researchers as well as scientists focusing on the tracking of other taxa. 51 new individuals have registered on the tracking database’s website (www.seabirdtracking.org) since 2010 and more have been involved in the database through direct contact with BirdLife. In October 2011, BirdLife also collaborated with the seabird researchers at the French Centre National de la Recherche Scientifique, in order to access data in their database and provide the most complete estimates of seabird distributions possible. These distribution estimates were also used in RFMO discussions.

Map 1: Summary map from the Global Procellariiform tracking database (January 2012)

Extend and update the compilation of data from the satellite tracking of albatrosses and petrels

1645 new ‘tracks’ (paths taken by seabirds fitted with satellite transmitters) were submitted to the tracking database since the last report. These data represent 26 species, 8 of which were the first submissions for that species. As well as these 1645 tracks, approximately 400 other tracks have been made available to BirdLife and its analyses. The new data have allowed the partnership to fill
gaps in species or regional coverage resulting from new studies. These include the tropical Pacific and Japanese waters. BirdLife continues to work with data owners to encourage their input to the database which will continue to inform the CBD EBSA workshops.

**Workshops to develop standard methodologies for identifying marine ‘hotspots’ in international waters**

In September 2011, BirdLife convened a workshop with the University of Coimbra, Portugal, to explore the use of satellite tracking data in the development of habitat suitability models. The workshop helped to define and test a range of approaches to habitat modelling.

**Data analysis to identify global marine ‘hotspots’**

The methodology developed to identify marine IBAs using satellite tracking data as detailed in the previous report was approved in 2011 by a steering committee of leading seabird tracking experts. There have also been a number of opportunities to share the approach with other projects and researchers to standardise methods for identifying marine IBA globally. Methods to identify larger scale regional hotspots (which are more relevant to RFMO and fishery agencies) have also been developed. These have built on the methods developed by the Tracking Ocean Wanderers workshop in 2004, but now incorporate more accurate information about distributions, population sizes and behaviours. Tracking data holders approved collaborative work with Japan in 2011 to assist Japan’s analysis of seabird bycatch hot spots. This work played an important role in securing progress at the International Commission of Atlantic Tunas, which adopted strengthened seabird bycatch mitigation measures in November 2012. Further progress is anticipated at the Indian Ocean Tuna Commission in April 2012.

**Assessment of risks to the marine environment in these ‘hotspots’ and guidance to relevant stakeholders**

These analyses were undertaken ahead of the Joint Tuna Commission meeting in California, July 2011 where they were presented as maps and in relation to the areas managed by the world’s tuna commissions. With reference to the seabird by-cap mitigation measures applied by each of these commissions, the risk and conservation implications were outlined for albatross and giant petrel species. At a more coastal scale, we have initiated a programme of work to assess the impact of seabird bycatch in gillnet fisheries, undertaking a global review, and organising a workshop for May 2012.

**Output 3: Urgent action for marine IBAs promoted and advanced**

**Demonstration and promotion of BirdLife’s marine IBA work at the World Seabird Conference**

This Conference took place in year 2 of the project. Work has continued to advance the publication of a special issue of the journal *Biological Conservation* to publish the proceedings from the spatial ecology special session; 15 papers have been accepted by the journal and the issue should be published in early 2012.

**Promotion of BirdLife’s marine IBA work at the Conference of Parties to the Convention on Biological Diversity (CBD CoP10; meeting in 2010) and through active BirdLife participation in the marine components of the CBD Programme of Work on Protected Areas (for the 2012 deadline)**

The CBD EBSA regional workshop for the Northeast Atlantic took place on the 8 and 9 September 2011 in Port-Cros, France. BirdLife submitted a number of marine IBAs to this workshop, and attended to discuss how the sites could be used as EBSAs. 10 EBSAs were agreed at the workshop, 9 of which included seabirds as a qualifying feature. The CBD EBSA regional workshop for the South Pacific took place from 2225 November 2011 in Suva, Fiji. BirdLife submitted a number of marine IBAs to this workshop, and attended to discuss how the sites could be used as EBSAs. Out of 26 sites approved at the workshop, 10 include seabirds as a qualifying feature.

BirdLife has been invited to attend the CBD EBSA regional workshop for the Wider Caribbean and Central West Atlantic in February 2012 and will again be submitting sites to this workshop and advising on their use in EBSA designation. Finally, BirdLife has also been involved in a number of discussions to advance future regional EBSA workshops, particularly in the Western Indian Ocean.
Promotion of marine IBAs as environmentally sensitive areas with Regional Fisheries Management Organisations (RFMOs) and through the CMS Agreement on the Conservation of Albatrosses and Petrels (ACAP)

The partnership will undertake increased promotion of marine IBAs with RFMOs and ACAP once the marine IBA identification is complete, and in the meantime continues to work with RFMOs and ACAP to raise awareness of environmentally sensitive areas in relation to seabird bycatch.

Preparation of seabird island restoration plans to advance alien eradications, and the building of implementation partnerships with governments and civil society organisations (particularly in the Pacific)

Planning and preparations were completed for the eradication of 5 mammalian threats from 9 islands. These operations involved two aerial rodenticide bait applications, the use of specialist hunters and dogs in eliminating goats from two islands, a cat trapping and neutering campaign for 4 islands and the application of rodenticide by hand to 7 islands, eliminating three species of rodent. All activities were completed by BirdLife partners with technical assistance from the BirdLife Pacific Secretariat and other local assistance. For all islands, biosecurity and monitoring plans have also been produced and local people trained in quarantine practices and data collection. The complexity of these operations requires multiple partnerships and in all instances provincial and national governments, other NGOs as well as local communities have been involved in the planning and implementation. Without this support it would be difficult to proceed with the eradications and the pest free status could not be maintained, as biosecurity is dependent on local support.

The development of supporting partnerships has continued across all sites, spearheaded through 6 Local Conservation Groups (LCGs). In Fiji, 5 LCGs have supported protection initiatives for the 12 predator-free seabird islands in the country. This has included maintaining local biosecurity controls also supported by the BirdLife Fiji Programme through training, and awareness-raising. The LCGs have agreed protection mechanisms for 9 of the 12 islands, ranging from traditional controls on harvesting and access to formal state protection which is currently being ratified for one site (Vatu I Ra). In Palau, the Kayangel Atoll LCG have similarly been trained in and are maintaining local quarantine controls and, through the BirdLife Partner (Palau Conservation Society), submitted a successful application to join Palau’s Protected Area Network. Through this, Kayangel State has been given funds (for the 2012 financial year) which will support the employment of a local conservation officer and on-going quarantine controls.

Urgent action at marine IBAs undertaken by BirdLife at six priority sites to demonstrate conservation approaches (in Asia and the Pacific)

Pacific: For two islands in Fiji, an entire Atoll in Palau, and three islets in New Caledonia, three rodent species, feral cats and goats have all been removed. This provided safe habitat for a diversity of native wildlife including the Endangered Micronesian Megapode Megapodius laperouse, the Vulnerable Fairy Tern Sterna nereis, the Critically Endangered and endemic Fijian Crested Iguana Brachylophus vitiensis, and many other nationally and regionally significant habitats and wildlife populations. Knowledge of the conservation status and threats facing seabirds in the region has continued to advance with surveys conducted on 16 islands in Fiji’s Yasayasa Moala and Lau Island groups. This confirmed the presence of the Collared Petrel (Pterodroma brevipes), Lesser Frigatebird (Fregata ariel), Brown Booby (Sula leucogaster) and Red-Footed Booby (Sula sula) populations resulting in new IBAs being proposed. Information collected on invasive species threats is contributing to the understanding of individual island management requirements and national and regional priorities.
Asia: BirdLife Partners in Thailand, Malaysia, the Philippines and Vietnam conducted wintering surveys for the Chinese Crested Tern (*Sterna bernsteinii*) in order to confirm the wintering distribution of the species. There had been no sightings of this species in South East Asia for almost 80 years, until one bird was found in Indonesia in 2010. No further sightings were recorded. However, throughout 2011, the BirdLife partner in Hong Kong and the BirdLife China Programme held a number of discussions with experts on conservation strategies and public awareness activities for the protection of the species. Between January and April 2011, the BirdLife Partner in Japan (Wild Bird Society of Japan) conducted surveys in order to obtain more data on the distribution of the Japanese Murrelet (*Synthliboramphus wumizusume*). A resulting article was published, stating that approximately 1000 birds of the species were known to inhabit the area.

Have there been any conservation benefits that have resulted from the project that were not anticipated?

Firstly, wintering surveys in Asia for the Chinese Crested Tern were originally conducted to confirm their wintering distribution, but public awareness was also raised during the surveys; engagement and support were far greater than expected and this bodes well for future conservation efforts. Secondly, The BirdLife Partner in Spain has successfully worked with the Government to put forward for protection all of the marine IBAs identified as SPAs under the EU Birds Directive. All sites are now in the stage of public consultation and should result in being the first examples of marine IBAs directly becoming Marine Protected Areas. Several other partners (Portugal, UK) are now exploring the possibilities of proceedings against their governments for failure to designate enough SPAs based on marine IBA information.

Were any problems encountered that mean that changes were required to the project?

The only change to the timing of project activities relates to marine IBA monitoring work which was not advanced as rapidly as was originally hoped. This was due to the investment of more resources into the key stage of developing the tools for identifying marine IBAs, necessary to compile a comprehensive global list of sites. This is the first time that such an ambitious programme has been undertaken and the amount of time necessary for such an innovative project was difficult to predict. However, this has allowed BirdLife to advance marine IBA work in more countries than originally envisaged, which will give us important baselines for future monitoring, an activity that we will advance after the completion of this project.
**PROJECT COMPLETION OVERVIEW**

The overall project goal is to conserve marine biodiversity through a world-wide network of marine protected areas. Excellent progress has been made over the past three years. A wide range of seabird data can now be used to identify IBAs in the marine environment. This has led to the identification of around 3000 sites that BirdLife can promote for consideration within Marine Protected Area design. BirdLife has achieved notable successes in getting these sites recognised as priorities for conservation under the CBD, and already has examples in Europe of where these sites are informing future SPA designation; meanwhile, the practical conservation work on the ground has built on this foundation, with impressive results achieved in Asia and the Pacific in a short period.

**Output 1: Identification of the first ever world-wide network of Marine Important Bird Areas based on information on seabird breeding colonies**

The Marine IBA Programme has now identified sites in many parts of the world, and at least one model project is underway in each BirdLife region. To date over 1600 seabird breeding colonies have been identified as IBAs. These have been supplemented by the identification of sites at sea, both adjacent to breeding sites, during the non-breeding season, and in pelagic areas far from land.

**Complete the identification of marine IBAs in Antarctica**

A publication on the IBAs of the British Antarctic territories which includes 104 sites has been put together as a result of the three year project: http://www.birdlife.org/datazone/userfiles/file/IBAs/AntPDFs/IBA_Antarctic_Peninsula.pdf. While additional work is needed to complete coverage of the whole Antarctic region, this represents major progress towards this very challenging objective.

**Complete the identification of marine IBAs in the Pacific**

The first marine IBA inventory for the Pacific, based upon review of available literature from 25 Pacific Islands Countries, Territories and States, has been completed. Data are now available to inform marine IBA identification from all countries except Vanuatu, the Solomon Islands and Papua New Guinea. Furthermore, the project has supported the compilation of preliminary site information for seabird colonies in New Zealand. Information on the foraging ecology of Pacific seabirds has been collated for the BirdLife foraging range database to allow the application of a species-and site-specific method for determining marine IBA boundaries. As a result of the project, a total of 120 sites that support nationally and internationally significant seabird populations have now been identified in the Western South Pacific. For all terrestrial IBAs in the region that support seabirds, seaward extensions have been drawn around 80 sites to define marine IBA boundaries. The combined area captured within these marine IBAs approaches 670,000 km².

BirdLife was instrumental in defining boundaries for 26 EBSAs in the Western South Pacific designated by members of the Secretariat for the Pacific Regional Environment Programme (SPREP) under the CBD. Collectively these sites cover all pelagic marine IBAs identified in Areas Beyond National Jurisdiction in the region and marine IBAs based upon seaward extensions around key breeding colonies in Fiji, Palau, Tonga, the Phoenix Islands, and the Cook Islands.

**Compile all other marine IBA data, and publish a global marine IBA inventory and ocean-scale maps**

Over the last three years, several national and regional marine IBA projects have been undertaken. These include the following.

- A draft marine IBA list for the Western Indian Ocean was confirmed at a regional workshop from 26-28 October 2011 in Kenya.
- Marine IBAs were identified using satellite tracking data to feed into the CBD EBSA workshop for the Northeast Atlantic. Marine IBAs were also identified to feed into the process of identifying CBD EBSAs in the South Pacific.
- The Barrow to Baja project (involving Partners in the Pacific and North America) has identified priority marine IBAs in the Eastern Pacific from Barrow (Alaska) to Baja (Mexico).
- A review was undertaken of progress to identify marine IBAs in the EU for a report to the European Commission.
- A draft inventory of marine IBAs for Japan has been compiled.
- BirdLife partner Forest and Bird has completed the first draft inventory of marine IBAs for seabirds in New Zealand.
- Desk studies have been conducted to identify seabird breeding sites that qualify as IBAs in Argentina, Chile, Peru, Brazil, and Oman.
- An EU-funded (‘LIFE’) project undertaken by partners in the Baltic updated IBA maps, qualifying species and site boundaries.

This information will be included in a first global inventory of marine IBAs to coincide with the CBD Conference of Parties in October 2012, an excellent arena in which to profile this work and present the sites as a way of assisting governments in their attempts to protect 10% of the marine environment by 2020.

**Pilot research at key sites to extend marine IBA boundaries into off-shore waters**

BirdLife has reviewed over 2000 references on seabird foraging behaviour and used more than 1000 of these to compile a seabird foraging range database. This includes information on foraging range, dive depth and habitat preferences. Over 4000 data entries for more than 250 species of seabirds are now included in the database. Complete assessments have been made for over 40 species with this information stored in online foraging factsheets (www.seabird.wikispaces.com). Testing on how to use the information in the database has been undertaken in France, Italy, Peru, Reunion, Japan, Pacific and the UK, resulting in proposed seaward extension distances agreed for over 100 species.

**Presentation of data on marine IBAs to the public and decision-makers through the BirdLife World Bird Data Base**

New information on IBAs has been added to the World Bird Data Base (WBDB) for: Antarctic IBAs, Pacific IBAs and 7 new Pacific territories, together with draft information on offshore marine IBAs in New Zealand, complete IBA inventories from projects in Spain and Portugal and updated information for Southern Baltic sites.

Map 2: Countries where work on marine IBAs is underway, planned or possible
Establish a baseline and programme of work for global marine IBA monitoring

Marine IBA monitoring work was not advanced as rapidly as was hoped because of the necessary investment of resources into marine IBA methodology development and identification. This has allowed IBA work to be developed in more countries than originally envisaged, which will give us important baselines for future monitoring. However some advances in monitoring have been made:

- Aves Argentina has undertaken monitoring assessments at seabird IBAs, by working through historical data to identify seabird population trends.
- In the Pacific, monitoring has been undertaken of seabird sites where eradications of invasive species has taken place, to assess the effectiveness of these actions.
- A draft plan for monitoring key breeding sites in South-East Asia was developed during the Asian marine IBA workshop.

Output 2: Marine ‘hotspots’ identified in international waters based on the satellite tracking of seabirds at sea

The BirdLife Global Procellariiform Tracking Database has seen a significant expansion during the course of this project. It is now publically accessible and many new data have been submitted, with a range of scientists participating who had not previously done so. The database is now recognised as the largest seabird tracking database in existence, has been heralded as an example that other taxa (i.e. other than birds) should follow, has been used to provide input to a range of policy mechanisms, and has prompted many seabird researchers to request BirdLife to expand the database to include all seabirds (beyond Procellariiforms).

Promotion of the BirdLife Global Procellariiform Tracking Database amongst the world’s seabird researchers

The Tracking Database was launched on a web-based system (www.seabirdtracking.org) to improve its profile, to provide a better service for the data providers, and to improve access to the data for external researchers. It was launched at the World Seabird Conference in 2010.

Extend and update the compilation of data from the satellite tracking of albatrosses and petrels

Since May 2010 the tracking database has received 1835 tracks included in 54 datasets covering 25 species. These represent data from 23 different breeding sites.

Workshops to develop standard methodologies for identifying marine ‘hotspots’ in international waters

Workshops have included: the World Seabird Conference held in Canada in September 2010, a workshop hosted by the Centre National de la Recherche Scientifique in France in July 2009, a workshop with the University of Coimbra in Portugal in September 2011 to explore the use of satellite tracking data in the development of habitat suitability models, and the EU LIFE Yelkouan Shearwater Project & Europe-Africa Seabird Conservation Workshop: Integrating BirdLife International Seabird Priorities for the Mediterranean Region”, held in Malta in October 2009.

Significant developments on a number of parts of the Marine IBA toolkit covering satellite tracking analysis, habitat modelling, and seaward extensions using foraging ranges have also taken place. The toolkit was submitted and presented to the European Commission in spring 2011 and was very well received. Meetings were held in October and December 2010 as part of the Global Ocean Biodiversity Initiative (GOBI). These have helped significantly to advance the methodologies for identifying EBSAs in the global marine realm.

Data analysis to identify global marine ‘hotspots’

The methodology developed to identify marine IBAs using satellite tracking data was approved by a steering committee of leading seabird tracking experts, and has led to the identification of over 400 pelagic marine IBAs. A draft analysis of marine hotspots within the New Zealand Exclusive Economic Zone and a draft analysis of tracking data collected for Cory's and Yelkouan Shearwater (Calonectris diomedea and Puffinus yelkouan) in the Mediterranean have been undertaken, led by partners and other seabird scientists.
Assessment of risks to the marine environment in these 'hotspots' and guidance to relevant stakeholders

In 2010, a paper illustrating environmental risk caused to Procellariiform seabirds by longline tuna fisheries in the Atlantic was completed for the International Convention on the Conservation of Atlantic Tuna (ICCAT). This was submitted to both the Agreement on the Conservation of Albatrosses and Petrels (ACAP) 5th advisory committee meeting and to the ICCAT Intercessional meeting of the Sub-Committee on Ecosystems. Furthermore, BirdLife has played an important role in securing progress at the International Commission of Atlantic Tunas which adopted strengthened seabird bycatch mitigation measures in November 2012 and further progress is anticipated at the Indian Ocean Tuna Commission in April 2012. An analysis of overlap between albatrosses and fishing effort for the tuna RFMO in the South Pacific is also underway. Finally, a programme of work has been initiated to improve mitigation options for reducing gillnet bycatch, which will be an important management tool for many marine IBAs worldwide, with a workshop to be held in May 2012.

Output 3: Urgent action for marine IBAs promoted and advanced

BirdLife has worked widely and intensively through the CBD to get marine IBAs recognised as EBSAs in need of protection, and 40 marine IBAs have been recognised as EBSAs to date. Having this CBD ‘seal of approval’ should see the management of these sites promoted and advanced in a range of processes. Significant progress has been made in Europe in ensuring that marine IBAs are used as a key input to government efforts to identify a network of SPAs under the EU Birds Directive. Discussions are ongoing with the Bureau of the Convention on Wetlands (Ramsar Convention) to get marine IBAs designated under this process. Reports on marine IBAs and distribution of seabirds based on satellite tracking data have been submitted to a number of RFMO meetings as well as to the meetings of the Agreement on the Conservation of Albatrosses and Petrels.

Demonstration and promotion of BirdLife’s marine IBA work at the World Seabird Conference

Several BirdLife Secretariat and Partner staff attended the World Seabird Conference and presented at and organised appropriate sessions at this major event. The BirdLife marine IBA team led and/or co-led on 5 papers and workshop sessions during the conference. The proceedings from the spatial ecology sessions that took place during the conference are to be published in a special issue of the journal Biological Conservation.

Promotion of BirdLife’s marine IBA work at the Conference of Parties to the Convention on Biological Diversity (CBD CoP10; meeting in 2010) and through active BirdLife participation in the marine components of the CBD Programme of Work on Protected Areas (for the 2012 deadline)

Promotion of BirdLife’s work on marine IBAs has taken place through the following:

- As an active member of the Global Ocean Biodiversity Initiative (GOBI) and a member of its scientific steering committee, BirdLife attended 4 GOBI meetings.
- Successful promotion for recognition of IBAs as EBSAs at CBD regional workshops in the North East Atlantic and South Pacific; EBSAs were also promoted at CBD CoP10 in Nagoya, Japan.
- Presentation of marine IBA work at an Expert Workshop on Criteria for Marine Protected Areas on the High Seas (October 2009).
- Production and distribution of a marine IBA leaflet at the CBD Subsidiary Body on Scientific, Technical and Technological Advice in Nairobi in May 2010.
- Attendance of CBD CoP10 in Nagoya, Japan, in October 2010. Marine IBA work was presented at 2 side-events and a new marine IBA leaflet was distributed.
- Invitation of GOBI to a series of 6 regional EBSA workshops planned prior to CBD CoP11 by the CBD Secretariat. BirdLife has provided significant input to the list of proposed workshops to ensure we can provide the most useful information to these meetings, and encourage partners to be involved.

Promotion of marine IBAs as environmentally sensitive areas with Regional Fisheries Management Organisations (RFMOs) and through the CMS Agreement on the Conservation of Albatrosses and Petrels (ACAP)

BirdLife was well represented at the fifth Advisory Committee meeting to ACAP in 2010. ACAP signatories have a remit to prioritise and protect breeding sites for ACAP-listed species, and IBAs
are being promoted as the best way to do this. BirdLife will undertake increased promotion of marine IBAs with RFMOs and ACAP once the marine IBA identification is complete, and in the meantime continues to work with RFMOs and ACAP to raise awareness of environmentally sensitive areas in relation to seabird bycatch.

Preparation of seabird island restoration plans to advance alien eradications, and the building of implementation partnerships with governments and civil society organisations (particularly in the Pacific)

The eradication of introduced mammalian predators on 28 Pacific Islands was undertaken by civil society organisations and local communities. As a result, technical and management capacities for seabird conservation, including invasive alien species management, were developed to a high level among eight staff of four NGOs in four countries. This activity has provided a safe breeding habitat for 12 threatened species (see table below). Furthermore, strong partnerships with local and national governments, communities and other civil society groups have developed. As a result, all treated islands have some form of ongoing protection beyond that provided by BirdLife partners. This includes bio-security which in most instances is maintained by landowners and local communities, supported by state agencies.

<table>
<thead>
<tr>
<th>Species</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polynesian Ground Dove (Gallicolumba erythroptera),</td>
<td>Critically Endangered</td>
</tr>
<tr>
<td>Hawksbill turtle (Eretmochelys imbricata)</td>
<td>Critically Endangered</td>
</tr>
<tr>
<td>Fijian Crested Iguana (Brachylophus vitiensis);</td>
<td>Critically Endangered</td>
</tr>
<tr>
<td>Micronesian Megapode (Megapodius lapereuse)</td>
<td>Endangered</td>
</tr>
<tr>
<td>Green turtle (Chelonia mydas)</td>
<td>Endangered</td>
</tr>
<tr>
<td>Fairy tern (Sterna nereis)</td>
<td>Vulnerable</td>
</tr>
<tr>
<td>Blue lorikeet (Vini peruviana)</td>
<td>Vulnerable</td>
</tr>
<tr>
<td>Bristle-thighed curlew (Numenius tahitiensis)</td>
<td>Vulnerable</td>
</tr>
<tr>
<td>Atoll Fruit dove (Ptilinopus coralesis),</td>
<td>Near Threatened</td>
</tr>
<tr>
<td>Palau Ground Dove (Gallicolumba canifrons),</td>
<td>Near Threatened</td>
</tr>
<tr>
<td>Beach Thick-knee (Esacus giganteus)</td>
<td>Near Threatened</td>
</tr>
<tr>
<td>Tahiti petrel (Pseudobulweria rostrata).</td>
<td>Near Threatened</td>
</tr>
</tbody>
</table>

In New Caledonia the marine IBA process was an important element in the advocacy and adoption of World Heritage Sites. The restoration of seabird sites by the BirdLife partner (Société Calédonienne d’Ornithologie) and partnerships with state agencies has led to the state taking an active role in management, including restoration, of seabird areas. A similar situation has occurred in Palau, with the work of the Palau Conservation Society in Kayangel enabling the Kayangel State to gain formal protection for high biodiversity areas and support for their ongoing management.

The involvement of local communities in the restoration of these seabird islands has seen the development of livelihoods based on sustainable use of the islands’ natural resources. Handicrafts and coconut products are currently the main income sources, and opportunities for low impact eco-tourism are also being developed.

Urgent action at marine IBAs undertaken by BirdLife at six priority sites to demonstrate conservation approaches (in Asia and the Pacific)

In the Pacific, over 80 islands have been surveyed across four countries. The information collected on seabird presence, population status and threats has provided critical information in identifying management priorities for the region. Furthermore, the project has already made an important contribution to the BirdLife Pacific island restoration programme: 28 islands have been treated for 5 species of introduced mammalian threat. Monitoring activities have revealed positive seabird and other biological responses at these sites. Seabirds have begun to establish on islands where they were absent prior to the eradication of invasive species. As the islands remain free of alien predators, the functioning of ecosystem processes are expected to improve as seabirds re-establish and other forest wildlife becomes increasingly abundant. These operations also provide an important reference for future work.
In Asia, conservation activities for the Chinese Crested Tern (*Sterna bernstein*) were undertaken and public awareness activities took place in China; these are essential activities although the species’s status remains precarious and much more work is needed to ensure its survival. Wintering surveys confirmed the absence of wintering individuals in Malaysia, the Philippines, Thailand and Vietnam, where there had been no sightings for almost 80 years. Furthermore the distribution of the breeding Japanese Murrelet (*Synthliboramphus wumizusume*) was recorded around potential candidate marine IBAs in Japan.

**Long term sustainability of the project work initiated with the AVJCF grant**

Building on the success of project activities so far, some next steps and future support for the programme include:

- The BirdLife International Pacific Secretariat has secured approximately US$ 120,000 to continue work on marine IBA identification and promotion for regional conservation planning; and to implement seabird research for two priority species, Beck’s Petrel (*Pseudobulweria becki*) in Papua New Guinea, and Collared Petrel (*Pterodroma brevipes*) in Fiji.

- A strong focus in the coming months is to propose some of the 41 sites that meet Ramsar (Convention on Wetlands) criteria for nomination as Ramsar sites.

- The tracking database now has a permanent home which will allow its future expansion. Many seabird scientists are keen that Birdlife extends the database beyond Procellariiforms and becomes the “home” for seabird satellite tracking data globally.

- Subject to the acquisition of adequate funding, further eradication operations will be completed for 4 islands in French Polynesia, 3 in New Caledonia, 2 in the Cook Islands and up to 3 in Fiji.

- The BirdLife Pacific Partnership will host a symposium at the BirdLife 2013 World Congress where it will profile its experience and success in seabird conservation and island restoration practices.

- In Asia, more wintering surveys will need to be conducted to examine the occurrence and distribution of the Chinese Crested Tern (*Sterna bernstein*), especially in Indonesia, which has recently hosted the only wintering record of this species in the last 80 years. The breeding status of the Japanese Murrelet (*Synthliboramphus wumizusume*) will continue to be investigated in 2012.

- A layman’s version of the marine IBA toolkit will be submitted to the CBD Subsidiary Body on Scientific, Technical and Technological Advice meeting in May 2012 and the launch of the first global inventory of marine IBAs will take place at CBD Conference of Parties in October 2012, in order to inform and assist governments in their attempts to protect 10% of the marine environment.
Background information

MAPS

Map 1: Summary map from the Global Procellariiform tracking database (January 2012)

Map 2: Countries where work on marine IBAs is underway, planned or possible
Map 3: All seabird IBAs in the World Bird Data Base

Map 4: Screenshot of map showing marine IBAs agreed at the Western Indian Ocean Marine Science Association workshop in October 2011
LINKS

- Marine IBA leaflet prepared for World Seabird Conference and CBD COP10: http://www.birdlife.org/community/2010/10/oceans-day-at-nagoya/
- Marine IBA toolkit: www.birdlife.org/eu/pdfs/Marinetoolkitnew.pdf
- Publication on marine IBAs in the EU: http://www.birdlife.org/eu/pdfs/MarinepublicationEU.pdf

Captions for gallery (see annex 1)

- An exhibition of seabird and Chinese Crested Tern in Xiangshan
- Representative from BirdLife International and Zhejiang Wild Bird Society, expert from the U.S.A. and local government officers with teams of volunteers set up during the opening ceremony of the 14th China Fishing Festival
- A talk for 300 primary school students in Xiangshan:
  - Black\-Naped Tern (Tan Suryadi Irvan)
  - A talk about Critically endangered birds in China given in the 11th China Ornithological Society Meeting held in Lanzhou, China
  - Eradication Training
  - Feral goats in Monu, Fiji (S. Cranwell)
  - Setting up rat traps in Fanna Palau (Yalap Yalap)
  - Sooty terns in Teuaua French Polynesia (Lucie Faulquier)