# IMPORTANT AREAS FOR SEABIRDS

Guiding marine conservation in the Pacific



# Seabirds are sentinels

Seabirds tell us about the state of our oceans and our islands, reflecting human impacts like climate change, fishing, and invasive species. Seabirds rely on particular sites, which are also important for other wildlife. Safeguarding these places protects the livelihoods and cultural heritage of Pacific islands and peoples, and helps governments to meet the commitments they have made to biodiversity conservation.

#### Overview

The Pacific is important for seabirds, and seabirds are important for the Pacific. For millennia seabirds have provided benefits to people such as food, feathers and nutrients for farming (seabird quano). Seafarers use seabirds for navigating and locating fish schools.

There are 62 seabird species that regularly use the tropical Pacific. Some are abundant and breed in enormous colonies on remote atolls, others are poorly known, rare and highly threatened. All seabirds require the protection and effective management of important sites that they rely on, both on land for breeding and at sea for feeding.

The occurrence of seabirds can identify key sites for conservation. The 104 terrestrial sites and 99 marine sites described in this document (p.12–13) are among the Pacific's most exceptional places for seabirds and other wildlife. Conserving this network will safeguard seabirds, protect important habitats, and help governments meet international commitments under multi-lateral agreements (p.6–7).

Fishermen use seabirds to locate schools of fish near the surface Henry Wolcott/Marine Photobank







Colonies of Sooty Terns can number hundreds of thousands of individuals Daniel Fernandez

The current condition of these sites varies across the region: at some, seabird populations are stable or increasing; while at others, they are declining rapidly. Strikingly, many sites lack sufficiently up-to-date information to reliably assess their condition (p.13).

The major threats on land are invasive species and unsustainable harvesting of seabirds for food. At sea, over-fishing and pollution are affecting most sites, but the magnitude of their impacts on seabirds is poorly understood. Climate change is an emerging threat affecting seabirds both on land and at sea (p.14–17).

More action is needed to safeguard these sites (p.22–23) although there are some encouraging examples of interventions and recent successes. Local community groups, governments and non-governmental organisations have successfully improved the condition of some of the region's most spectacular sites, benefiting seabirds, other wildlife, and local people (p.18–21).

## How seabirds and BirdLife can help meet biodiversity conservation targets

Governments of Pacific island nations have committed, under several multi-lateral agreements to reducing negative human impacts on the environment and providing greater levels of protection and conservation action for wildlife. BirdLife data can help to track progress towards these targets.

#### Who are BirdLife?

BirdLife International is a Partnership of 117 national conservation organisations and the world leader in bird conservation. National BirdLife Partners in New Caledonia, French Polynesia, Fiji, Palau and the Cook Islands are working together on shared programmes to deliver conservation for the benefit of nature and people in the tropical Pacific.











BirdLife is working with five Partners across the tropical Pacific

#### Convention on Biological Diversity

The Strategic Plan for Biodiversity 2011–2020 includes 20 global 'Aichi Biodiversity Targets'. Conserving important seabird sites helps countries achieve their national Aichi targets, and contribute to the global effort. Selected targets that BirdLife data and actions on seabirds at their most important sites can contribute to are:



Aichi Target 1: People are aware of the values of biodiversity

**Aichi Target 5**: Loss, degradation and fragmentation of forest and other habitats is at least halved and, where feasible, brought close to zero

Aichi Target 6: Overfishing and destructive fishing practices are eliminated

Aichi Target 8: Pollution is brought to levels not detrimental to biodiversity

**Aichi Target 9**: Invasive alien species are prioritised and controlled or eradicated, and introduction pathways are controlled

Aichi Target 10: Pressures on vulnerable ecosystems impacted by climate change are minimised

**Aichi Target 11**: At least 17% of land and 10% of sea, especially important biodiversity areas, are conserved through effectively managed protected areas

Aichi Target 12: Extinction of threatened species is prevented, and their conservation status improved

**Aichi Target 14**: Ecosystems that provide essential services and livelihoods are safeguarded and/or restored, with equitable access

**Aichi Target 17**: All parties have implemented effective, participatory and updated national biodiversity strategies and action plans

**Aichi Target 18**: Traditional knowledge and practices relevant to conservation and sustainable use of biodiversity are integrated in the implementation of the Convention

**Aichi Target 19**: Knowledge, the science base and technologies relating to the status, trends and value of biodiversity are improved and shared



BirdLife Partners engage with local communities at important sites for seabirds helping to raise awareness about the species living there and the threats they face (Aichi Target 1). Supported by BirdLife and NatureFiji-MareqetiViti, the Local Conservation Group at Nabukelevu in Kadavu, Fiji, have signed an agreement prohibiting forest clearance in order to protect their forest resources and the services they provide to people and wildlife (Aichi Targets 5 and 14).



Jez Bird



BirdLife Partners are helping to restore island ecosystems by eradicating invasive alien species such as the on-going operation with Te Ipukarea Society in the Cook Islands to remove rats from Suwarrow Atoll, an internationally important nesting site for seabirds (Aichi Target 9). The seabird sites identified in this report, both on land and at sea, represent important biodiversity areas. Their inclusion within protected area networks is central to achieving Aichi targets 5,6,11 and 12.

Andre Seale/Marine Photobank

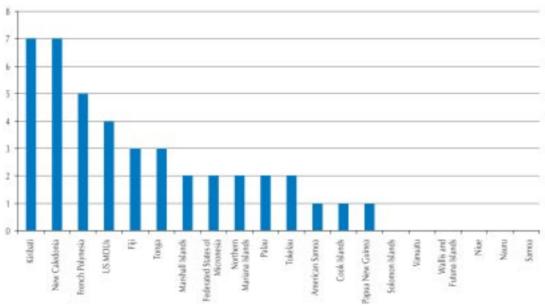
# How seabirds and BirdLife can help meet biodiversity conservation targets

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#### Ramsar Convention on Wetlands

The Convention on Wetlands—called the 'Ramsar Convention'—calls for its member countries to identify their Wetlands of International Importance in order that they maintain their ecological integrity and plan for their sustainable use. 42 of the most important sites for seabirds qualify as 'Ramsar Sites'. BirdLife and BirdLife Partners are working with national focal points to designate sites.





#### Number of sites that meet Ramsar Convention on Wetlands criteria

Source: Analysis of data held in BirdLife's World Bird Database (2012).

Rich Baxter





#### The Micronesia Challenge

The Micronesia Challenge is a commitment by the Federated States of Micronesia, the Republic of the Marshall Islands, the Republic of Palau, Guam, and the Commonwealth of the Northern Mariana Islands to preserve the natural resources that are crucial to the survival of Pacific traditions, cultures and livelihoods. The overall goal of the Challenge is to effectively conserve at least 30% of the near-shore marine resources and 20% of the terrestrial resources across Micronesia by 2020. Protecting the most important sites for seabirds, on land and at sea, constitutes an important step towards delivering this goal.



#### The Coral Triangle Initiative

The Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security is a multilateral partnership between six governments including Papua New Guinea and Solomon Islands to work together to sustain extraordinary marine and coastal resources by addressing crucial issues such as food security, climate change and marine biodiversity. The Plan of Action includes five strategic goals and 10 targets, many of which relate to the conservation of important sites for seabirds in the region such as improving the status of seabirds and managing an effective network of Marine Protected Areas.



#### The Pacific Oceanscape

The Pacific Oceanscape is a framework adopted by the Pacific Islands Forum to protect, manage and sustain the cultural and natural integrity of the ocean for present and future generations and for the broader global community. The framework based on six strategic priorities aims to increase Marine Protected Area investment within the region.

#### Other multi-lateral agreements

The United Nations Educational, Scientific and Cultural Organization (UNESCO) encourages the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity. World Heritage Sites include some of the most important sites for seabirds in the tropical Pacific like the lagoons of New Caledonia.

The **Convention on the Conservation of Migratory Species of Wild Animals** (also known as CMS or Bonn Convention) aims to conserve avian migratory species throughout their range such as through the conservation of important migratory sites for seabirds.

The **United Nations Convention on the Law of the Sea** (UNCLOS) provides a regulatory framework for the use of the world's seas and oceans including guidelines for the environment.

The **Western and Central Pacific Fisheries Commission** (WCPFC) was established by the Convention for the conservation and management of highly migratory fish stocks in the Western and Central Pacific Ocean (WCPF Convention) and includes resolutions on the incidental catch of seabirds.









# BirdLife identifies the most important sites for seabirds

One major BirdLife initiative is the Important Bird Area (IBA) programme, which seeks to identify, monitor and conserve the most important sites for the world's birds and other biodiversity.

# What are Important Bird Areas?

Important Bird Areas are sites considered essential for the conservation of the world's birds. They are generally small enough to be conserved in their entirety and may already be managed as protected areas. A site will qualify as an IBA if it meets globally agreed criteria. Important sites for seabirds are IBAs if they:

- hold significant numbers of globally threatened species
- are one of a set of sites that together hold a suite of restricted-range species or biome-restricted species
- have exceptionally large numbers of migratory or congregatory species.

Since IBAs are identified, monitored and conserved by organisations and individuals working together on the ground, the IBA Programme can be a powerful way to build national and local institutional capacity and to set an effective conservation agenda.



Some IBAs protect large colonies of seabirds Daniel Fernandez



IBAs are often locally owned and managed BirdLife Pacific



IBAs can help educate people about the environment Steve Cranwell





IBAs are designated for birds, but are important for other wildlife Alexander Safonov



Some IBAs hold threatened species Hadoram Shirihai



Many IBAs overlap with Protected Areas Kevin Davidson



IBAs maintain important services for people like fish stocks WideScenes Photography



IBAs form a network protecting species year round Rich Baxter



IBAs can be on land or at sea Octavio Aburto-Oropeza/Marine Photobank

## Seabirds exploit the oceans in different ways

The tropical Pacific supports large colonies of resident seabirds that collect food in seas nearby to feed their young. Other species, which breed elsewhere, stop to refuel on migration. Key sites, whether for breeding, feeding or for migration, have all been identified as Important Bird Areas.

#### How are the most important seabird sites identified?

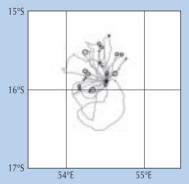
BirdLife's global IBA criteria were applied to seabird population estimates to confirm which sites in the Pacific hold internationally significant numbers. This ensures that the most important sites are included within the network, and that sites are comparable from one country to another, and between regions worldwide. The types of site identified include:

- Breeding sites. These capture critical sites for reproduction. Seabird breeding colonies that
  qualify as IBAs are identified using population estimates from surveys conducted by local
  conservation groups, researchers, government agencies and non-governmental organisations.
- 2. Seaward extensions. These capture key areas around the breeding colonies that are used for feeding, resting and social interactions. The extensions are determined by the foraging range and overall numbers of the species present: species that forage far from their colonies require larger extensions than those that feed nearby, and birds travel further from bigger colonies so colony size also affects the size of extensions.

**Example** – Studies have mapped the distance seabirds' travel 15°S from breeding sites to feed. Results are used to identify seaward extensions to breeding colonies appropriate for the species and number of individuals found at the site. These Masked Boobies were tracked from their breeding island as they foraged over the surrounding oceans.

**Source**: Kappes, M.A., Weimerskirch, H., Pinaud, D., Le Corre, M. (2011) Variability of resource partitioning in sympatric tropical boobies. *Mar Ecol Prog Ser* 441: 281–294

Tracking data for Masked Boobies shows that they will forage hundreds of kilometres from breeding sites Sue Waugh









**Example** – The area between Grande Terre and the Loyalty Island off the east coast of New Caledonia is a migratory bottleneck. Hundreds of thousands of Short-tailed Shearwaters move through between September and October on their return journey to Australia. Surveys conducted by Société Calédoienne d'Ornithologie (SCO) counted over 21,000 birds in one day. This area is used every year by Shorttailed Shearwaters and is a marine Important Bird Area.

Short-tailed Shearwaters on migration
John Aitchison

Example – The entire global population of Pycroft's Petrel (Vulnerable) breeds on a few islands in northern New Zealand but leaves after the breeding season. Only recently, by fitting small tracking devices to some birds, have scientists been able to understand where they go during the non-breeding season. The population travels to a remote area of the Pacific south east of the Hawaiian Islands in an area beyond national jurisdiction. Safeguarding threatened species like this throughout their ranges and during all stages of their life-cycles is key to their survival.

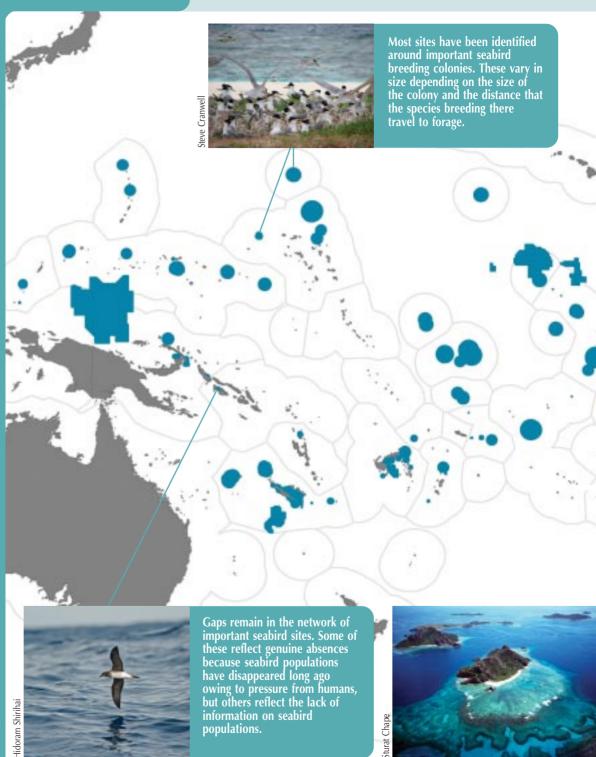


Matt Rayner

- 3. **Migration bottlenecks**. Many species that breed to the north or south of the region use the tropical Pacific during their non-breeding season, either residing in one site for the whole of their winter, or simply passing through on migration. Bottlenecks are used by large numbers of migrating seabirds at certain times of year.
- 4. **Sites in the open ocean**. These are hotspots of seabird activity that lie far from breeding colonies, used either by species which make long foraging journeys when breeding or those that have migrated into the region for the winter months. They are identified using data from satellite tracking devices deployed on seabirds to determine their at-sea movements.

# Seabirds rely on land and sea

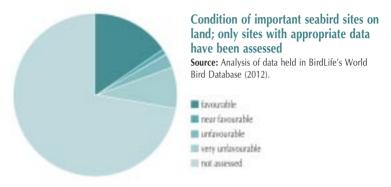
A total of 104 sites on land and 99 sites at sea have been identified to date that support internationally important populations of seabirds. While there are likely to be gaps in this network, these sites will help to focus much needed conservation efforts. Many sites are assessed as being in poor condition.



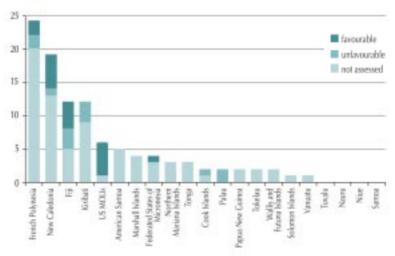


Some sites have been identified in the open ocean, far from land, based on tracking data. This site captures the areas used by Pycroft's Petrel during its non-breeding season. **4att** Rayner Important Bird Area Land EEZ boundary 690 1,380 BirdLife Partners in Palau, New Caledonia, Fiji, the Cook Islands and French Polynesia have helped to identify and monitor sites in their countries. The presence of civil society conservation organisations in these countries is reflected by the high number of sites identified owing to the level of research and monitoring. Seabird breeding sites occur on many remote, uninhabited atolls at sea level, but also on populated high islands like Tahiti in French Polynesia and Grande Terre in New Caledonia. Large colonies of terns, noddies, boobies and frigatebirds occur on atolls, while species of threatened and poorly known petrels breed in smaller numbers on the larger islands.

Regular monitoring of seabird numbers at breeding sites allows assessment of population trends over time. However, many are not currently monitored, meaning trends at three quarters of sites cannot yet be assessed. For those sites where data exist, 17 are classified as having favourable or very favourable status, but 12 have unfavourable or very unfavourable status because their seabird populations are declining.



BirdLife Partners have completed more bird surveys than have occurred in other countries. As a result they tend to have the most sites identified and the highest proportion assessed. Although over half of assessed sites have favourable status this probably isn't true across all sites. Unassessed sites have rarely received conservation attention and more are likely to have unfavourable status.



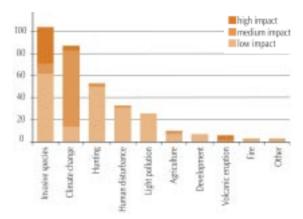
Condition of important seabird sites on land by country Source: Analysis of data held in BirdLife's World Bird Database (2012).

### Seabirds face threats on land and at sea

On land the biggest threat to sites is invasive species, while at sea seabird populations are most affected by overfishing and pollution. Climate change is a serious emerging threat that will likely affect important terrestrial and marine sites.

# Threats to important seabird sites on land

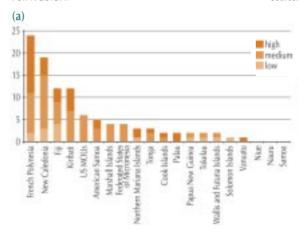
Invasive species, particularly cats and rats, pose the most serious threat to seabird breeding colonies because they eat adults, chicks and eggs and alter habitats. Invasive species are causing rapid declines in seabird populations at 33 sites (32%). Altogether invasive species are present at 88 of the 104 sites on land (85%), but represent a potential threat at all sites because they are easily transported by humans from one location to another so there is a risk of invasion or reinvasion.



Number of land sites threats occur at and their level of impact

(b)

Source: Analysis of data held in BirdLife's World Bird Database (2012).



high medium low

Level of threat facing important seabird sites on land by country (a) and the proportion of sites under different levels of pressure (b)

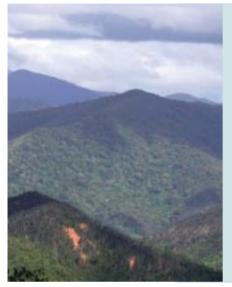
Source: Analysis of data held in BirdLife's World Bird Database (2012).

Invasive mouse eating a seabird chick Ross Wanless





Climate change threatens 87 sites on land (84%) owing to predicted changes in weather and sea-level rise. Colonies on low lying atolls only a few meters above sea level are particularly vulnerable.



Example: On Grand Terre, New Caledonia, Gould's Petrel (Vulnerable) breeds in burrows on the steep mountain slopes of the interior. Introduced pigs digup chicks in burrows and cats predate adults resulting in population declines. A known colony of 125–250 pairs in the Dent de Saint-Vincent IBA was reduced to 20 pairs in three years because of introduced black rats.

Tim Waters



Low lying land such as the islets of Kiritimati lagoon are at threat from rising sea level WideScenes Photography

Seabirds have long formed a component of people's diets in the Pacific and can be harvested sustainably. However, when eggs and adults are removed at a rate faster than can be naturally replaced, population declines occur. Many seabird colonies have been devastated by hunting in the past. Unsustainable harvesting is causing significant seabird population declines at three sites (3%), but may be affecting a further 50 (48%) at lower levels.

Other threats to seabird breeding sites include disturbance, light pollution (which attracts nocturnal birds causing deadly collisions), agricultural expansion, and fire.

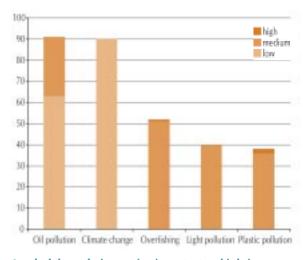
Example: Unregulated and illegal hunting at seabird colonies can cause rapid population declines and force species to abandon the site due to disturbance. Helen Island, in southwest Palau, was estimated to support over 90,000 breeding seabirds in 1979. An increase in hunting—the shooting of adults and removal of eggs—reduced overall numbers to around 6,000 by 1992, by which time seven species had completely deserted the island. During the early 1990s, a permanently manned ranger station was established by the Helen Reef Project to prevent illegal harvesting of the islands seabirds and marine resources. By 2005 invasive rats had been eradicated, poaching had ceased and seabird numbers had increased to over 30,000.



Jez Bird

# Seabirds continue to face threats when they leave land

Although climate change may alter the location and availability of seabird feeding sites in the future, the greatest current threats at marine sites are from pollution and over-fishing. Pollution in several different forms is currently the biggest threat to seabirds in the tropical Pacific. Oil pollution is a well-known problem in the marine environment. Oiled birds are unable to fly and can be poisoned if they ingest oil when trying to clean themselves. Large oil spills can kill thousands of marine animals in short periods. Pollution from plastic is also increasing at sea. Seabirds eat plastic mistaking it for food and this can be lethal to both adults and chicks. Light pollution is a serious threat to some seabirds, whereby certain species become disorientated by artificial light which can lead to fatal collisions with ships and fixed marine or coastal structures.



Level of threat facing marine important seabird sites Source: Analysis of data held in BirdLife's World Bird Database (2012).

Plastic pollution is an emerging threat. It is building up on beaches at breeding colonies and plastic discarded at sea can be mistaken for food and fed to chicks leading to starvation Steven Siege/Marine Photobank







Predatory fish and dolphins can push smaller fish to the surface where seabirds can access them. Overfishing of predatory fish species such as tuna may disrupt this relationship Alexander Safonov patsOn.livejournal.com

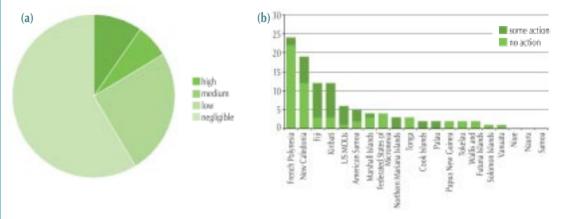
The interactions between seabirds and fisheries in the tropics are not well understood. Although few seabirds are thought to be killed as by-catch within the region, there may be other impacts. Many seabirds rely on predatory fish like tuna to force small prey fish to the surface within their reach. Overfishing may therefore be affecting this relationship and making it harder for some seabirds to find food.

### Conservation has begun but much more is needed

Conservation actions are now being implemented at a number of sites throughout the region. For example, invasive species have been eradicated from some islands, and the level of formal protection given to sites is increasing, but most sites still receive negligible attention.

#### Conserving sites on land

In 2012 BirdLife Partners in the Cook Islands, Palau, Fiji, French Polynesia and New Caledonia started a four-year Invasive Species programme aimed at reducing the environmental and social impacts of invasive species. The eradication of invasive species from islands allows seabird colonies to recover, improves crop yields and reduces health risks to local people.



Level of action happening at important seabird sites on land (a) and how the effort is spread across countries (b) Source: Analysis of data held in BirdLife's World Bird Database (2012).

**Example:** In 2008 Société Calédonienne d'Ornithologie (SCO), the BirdLife Partner in New Caledonia, eradicated invasive black rats and Pacific rats from three islets in the North-West lagoon IBA. After this successful eradication Fairy Tern (Vulnerable) nested on the islands for the first time, with the islet of Tiam'bouène holding 28 nests.

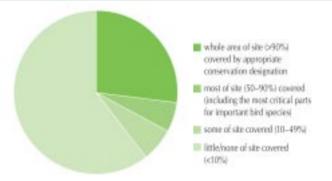
Tim Rumble





Giving threatened sites some formal protection offers a mechanism for increasing conservation activities on the ground. This was the case at Helen Island (see page 14) when it became part of Helen Reef Conservation Area. Rangers employed at the site have eliminated unregulated hunting pressure and seabird populations are now recovering.

Community consultation and building support for conservation is the first step. BirdLife Partners are helping communities to establish Local Conservation Groups at important sites so that shared resources can be managed sustainably to improve livelihoods and conserve wildlife.



# Proportion of important seabirds sites on land protected by legal designation

**Source:** Analysis of data held in BirdLife's World Bird Database and UNEP World Conservation Monitoring Centre's World Database for Protected Areas (2012).



**Example:** Nabukelevu is an extinct volcano in west Kadavu, Fiji. Forest here supports many threatened species, and captures and cleans rainwater providing a year-round water supply to local communities. Supported by BirdLife and NatureFiji-MaregetiViti, the Local Conservation Group have signed an agreement that no forest will be cleared in the coming years. Instead there is a programme to improve the productivity of existing farmland and diversify local livelihoods. Honey production has begun and a Sandalwood nursery is selling saplings for replanting. In 2012 the Local Conservation Group helped with a project to study Collared Petrels (Vulnerable) at the site; the first locally led study of this species on Kadavu.

Diversification of income is enabling local communities to become guardians of their environment BirdLife Pacific

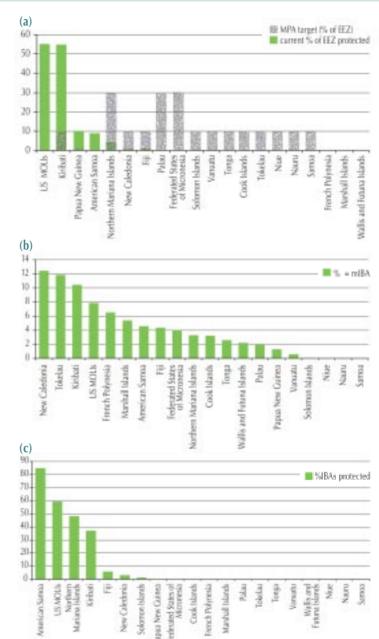
# Marine Protected Areas can help to protect seabirds

Marine Protected Areas which include marine Important Bird Areas will improve the conservation status of seabirds and wider biodiversity if they are managed appropriately.

#### Conserving sites at sea

Marine Protected Areas (MPAs) can help conserve seabirds and the marine environment if they overlap important sites and if they are managed effectively. In the tropical Pacific, governments have set targets for protecting 10–30% of their Exclusive Economic Zones; however, with the exception of Kiribati, these have not yet been achieved.

Using birds as sentinels, some 99 important marine sites have been identified that warrant improved management and protection. So far only 19 of these are included within existing MPAs. If each country was to protect the marine IBAs in their Exclusive Economic Zones, it would be a step towards achieving international targets and adequate protection for the marine environment.

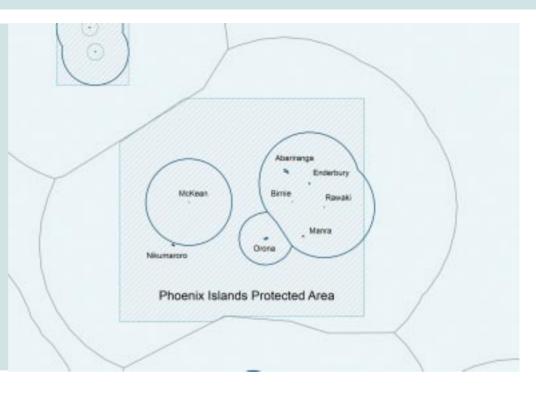


Marine protection by country a) how close countries are to achieving internationally agreed targets (10% = CBD; 30% = Micronesia Challenge), b) proportion of EEZ identified as marine Important Bird Area, c) proportion of IBAs currently protected

**Source:** Analysis of data held in BirdLife's World Bird Database and UNEP World Conservation Monitoring Centre's World Database for Protected Areas (2012). Data on protected areas are supplied by national governments; if governments have not supplied information to UNEP the country total presented may be inaccurate.



**Example:** Kiribati has designated the largest protected area in the Pacific covering 50% of their Exclusive Economic Zone. The Phoenix Islands Protected Area (PIPA) includes all eight atolls and over 400,000 km<sup>2</sup> of ocean in the Phoenix Islands. The PIPA includes several important sites that support over a million breeding seabirds of 19 species. These sites are protected along with the marine environment down to the seabed over 4,000 m deep. In 2010 the Phoenix Islands Protected Area became the largest UNESCO World Heritage Site on the planet in recognition of its pristine nature.





Example: Locally Managed Marine Areas can help to protect important sites for seabirds. They help to raise awareness about the sustainable use of resources. In Papua New Guinea villages sustainably manage their marine resources in line with local customs. 'No take' zones and fishing regulations are adhered to. Strong community traditions combined with ownership over resources can conserve the marine environment for the benefit of people and biodiversity.

### More action is needed to secure seabird survival for the future

Conservation works: we can reverse declines in seabird populations, but more investment in conservation action and research is needed to understand the status of seabirds and their most important sites, the threats they face and how they are best addressed.

#### Conservation action needed

Conservation actions should be implemented now to tackle some of the worst threats on land and at sea:

- Invasive species should be controlled at or eradicated from more sites to protect seabird colonies. Successful eradications allow seabird populations to recover whilst biosecurity helps prevent reinvasion and colonisation of new islands.
- The expansion of MPAs to meet government targets should include marine IBAs to ensure that they contain the most important sites for biodiversity. Appropriate management of MPAs such as reduced fishing activity and reduced shipping to avoid light and oil pollution is needed to protect birds and other wildlife.
- The establishment of Local Conservation Groups at important sites has encouraged site protection and sustainable use of natural resources. Continued expansion of the network of Local Conservation Groups in the region is important for delivering future conservation gains.
- Multi-lateral conventions provide a strong framework for governments in the region to protect and sustainably manage marine resources. Work towards national targets must continue, and will be facilitated by implementing recommended conservation actions at important sites for seabirds.
- Some threats such as marine plastic pollution and climate change need to be addressed through regional and global initiatives. They cannot be tackled through conservation at the site scale alone.

Steve Cranwell







Philippe Bacchet

#### Research needed

Research is needed to fill gaps in the existing network of important seabird sites, to understand the condition of sites and the threats impacting them and to show us how to act:

- Searches of under-surveyed regions in Vanuatu and Papua New Guinea will help to establish current distributions of Pacific seabirds and discover nesting sites for the most threatened species, such as Beck's Petrel (Critically Endangered).
- Satellite tracking studies, like those that have helped illustrate the migrations taken by seabirds from New Zealand and Australia, are needed for rare species in the tropical Pacific. This will help to identify overlap between their ranges and potential threats at sea.
- We need to understand the actual impacts on seabird populations from interactions with human activities at sea. The population-level effects of over-fishing, light pollution and plastic ingestion on seabirds are poorly understood but could be important.
- Monitoring of important sites to provide current population estimates will enable assessment of their condition and the need for conservation actions. Regular monitoring at some sites helps to track the success of conservation actions and guide improvements.

#### BirdLife Partners across the tropical Pacific











**NEW CALEDONIA** 

FRENCH POLYNESIA

FIJI

PALAU

**COOK ISLANDS** 



BirdLife International is a partnership of people for birds and the environment. As a worldwide community, we are the leading authority on the status of birds and their habitats. Over 10 million people support the BirdLife Partnership of national nongovernmental conservation organisations and local networks. Partners, operating in more than 100 territories, work together on shared priorities, programmes, and policies, learning from each other to achieve real conservation results. The BirdLife Partnership promotes sustainable living as a means of conserving birds and all other forms of biodiversity.

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