

IMPORTANT BIRD AND BIODIVERSITY AREAS

A global network for conserving nature and benefiting people



Partnership for
nature and **people**

IBA
BIRDLIFE IMPORTANT BIRD
AND BIODIVERSITY AREA
*Four decades of
conservation action*

Important Bird and Biodiversity Areas

Important Bird and Biodiversity Areas—IBAs—constitute the largest and most comprehensive global network of sites that are significant for the global persistence of biodiversity. Over the past four decades, IBAs have been extremely influential in helping governments and others to target conservation effort effectively and to identify the most important sites for designating as protected areas.

Introduction—what are IBAs?

Important Bird and Biodiversity Areas (IBAs) are sites of international significance for the conservation of the world's birds and other biodiversity. They also provide essential benefits to people, such as food, materials, water, climate regulation and flood protection, as well as opportunities for recreation and spiritual fulfilment. Since the late 1970s, over 12,000 IBAs have been identified in virtually all of the world's countries and territories, both on land and at sea. Many hundreds of protected areas have been designated as a direct consequence of their recognition as IBAs. IBAs have also had considerable and increasing relevance in developing responses to a number of wider environmental issues, such as habitat loss, ecosystem degradation, sustainable resource use and climate change.

Why birds?

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The resources needed to comprehensively assess species richness and endemism patterns across all biodiversity are enormous. Birds provide a useful proxy for wider biodiversity because:

- Their distribution and ecology is much better known than other comparable wildlife groups.
- Their taxonomy is well known and relatively stable.
- Bird populations are readily surveyed.
- Birds are widespread, occurring almost everywhere.
- Many bird species are specialised and have specific habitat requirements.
- Birds are mobile and responsive to environmental changes.
- There are enough bird species to show meaningful patterns, yet not so many as to make identification itself a significant challenge.
- Birds are also unparalleled in their popularity—with local experts from every corner of the world documenting their distribution and status.



The global IBA network identified for birds overlaps with the distributions of many other taxonomic groups. PHOTO Alexander Safonov, patsOn.Livejournal.com

IBAs form the core of a network of sites for all wildlife: Key Biodiversity Areas

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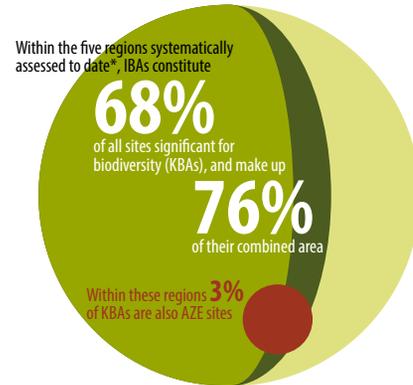
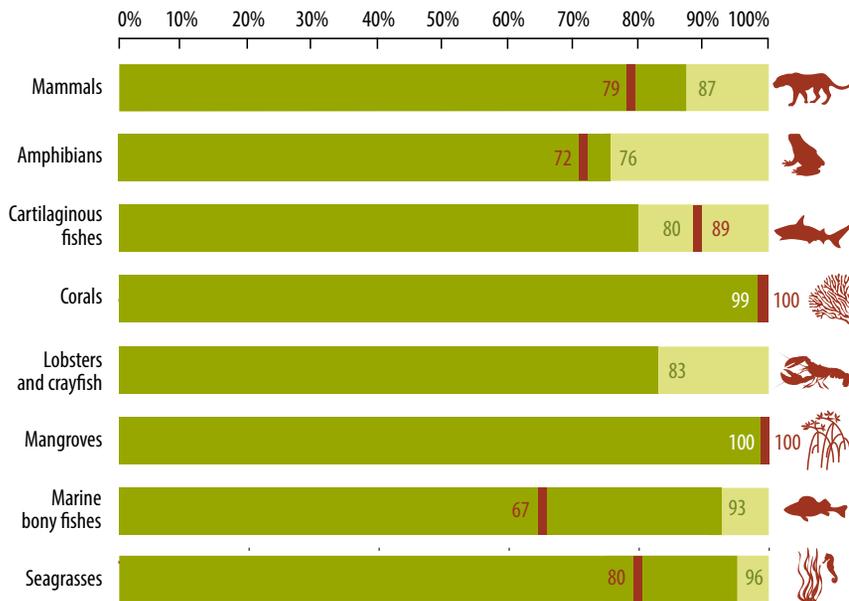
The IBA approach has been extended to a number of other taxa, leading to the identification of Important Plant Areas, Prime Butterfly Areas, Important Mammal Areas and Key Biodiversity Areas for Freshwater Biodiversity. To bring these different approaches under a single umbrella, a ‘Standard’ for the identification of Key Biodiversity Areas is being developed through a consultation led by IUCN, building, in particular, on the IBA criteria and experience in their application.

IBAs comprise c.80% of KBAs identified to date, and will form the backbone of a globally comprehensive set of KBAs. For example, in five global biodiversity hotspots spanning all or part of 74 countries and territories in which globally important terrestrial sites have been systematically identified for birds, mammals, reptiles, amphibians and plants, 68% of the resulting 1,993 KBAs are IBAs, while these sites cover 76% of the total area of the KBA network in these hotspots.

Data demonstrate the significance of IBAs for other biodiversity

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IBAs are important not just for the conservation for birds, but for biodiversity more broadly. For example, the global IBA network overlaps with the distributions of 76% of amphibians, 87% of mammals, 83% of lobsters and crayfish and over 99% of corals.



* In five regional biodiversity hotspots, the network of IBAs has been complemented by the identification of sites for other species groups. This analysis shows how the number of globally significant terrestrial IBAs identified for birds (1,359) in these hotspots have been supplemented by additional KBAs triggered by mammals, reptiles, amphibians and plants (634). Globally, IBAs comprise around 80% of all KBAs identified to date, while about half of AZEs are also IBAs.

The relationship between IBAs, KBAs and AZEs across five hotspots in which important sites for biodiversity have been identified. SOURCE

Analysis of BirdLife data (2014).

Conserving IBAs is critical to preventing extinctions

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For some species, their very existence now depends on the effective conservation of the single remaining site in which they occur. Such sites—those holding $\geq 95\%$ of the global population of a Critically Endangered (CR) or an Endangered (EN) species—are the focus of the Alliance for Zero Extinction (AZE), of which BirdLife is a founding member. For birds, AZE sites are a critical subset of IBAs—the last line of defence in preventing imminent avian extinctions. To date, 588 AZE sites have been identified for mammals, birds, some reptile groups, amphibians, conifers and corals. Some 200 of the 920 ‘trigger’ species are birds and 21% of AZE sites are triggered by birds alone, 4% are triggered by both birds and other taxa, and around 25% are triggered by other taxa but also qualify as IBAs for other bird species. Despite the critical importance of AZE sites, only 22% are fully protected, while 27% are partially protected and 51% remain unprotected.

Percentage of species in various groups whose distributions overlap with the global IBA network. The dark green bars and figures indicate the percentage of each group as a whole and the red lines and figures show the percentage for globally threatened species within each group. SOURCE Butchart *et al.* (in review).

Global science and local expertise

Using a standardised set of criteria applied to information collected locally, the BirdLife Partnership—a unique global network of national conservation organisations—has produced the foremost worldwide inventory of sites of biodiversity importance.

How are IBAs identified?

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The global network of IBAs has been identified using a set of four internationally agreed criteria. These are based upon globally threatened species, groups of species with a restricted range (defined as less than 50,000 km²), species assemblages confined to a single biome, and congregations of one or more species. For each criterion, lists of 'trigger' species and associated thresholds have been developed and IBA qualification requires the confirmed presence of one or more populations or sets of species that meet these thresholds under any criterion.

1. Species of global conservation concern



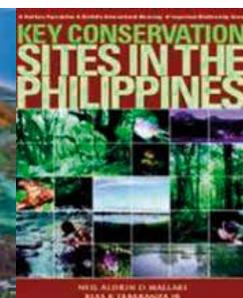
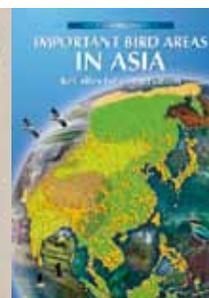
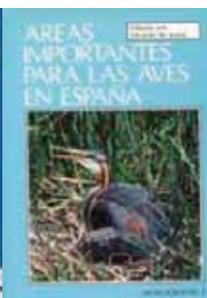
2. Assemblages of restricted-range species



3. Assemblages of biome-restricted species

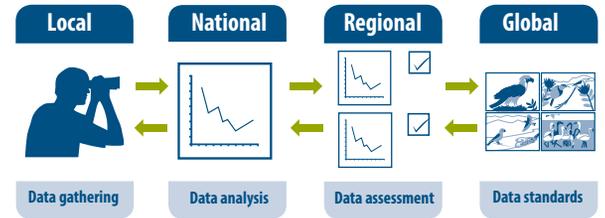


4. Congregations



How are the data collected?

While the means of site selection are set globally, the entire process is founded upon locally collected, ground-truthed data that are analysed nationally, in terms of both the sites' significance for biodiversity and for their conservation management potential. The involvement of the appropriate government agencies as early as possible in the process has been key to many of the conservation successes of the initiative. Regional coordination ensures quality control, equitability and experience-sharing. The data are held in an online database, where the BirdLife Partner organisations have responsibility for their national data sets.

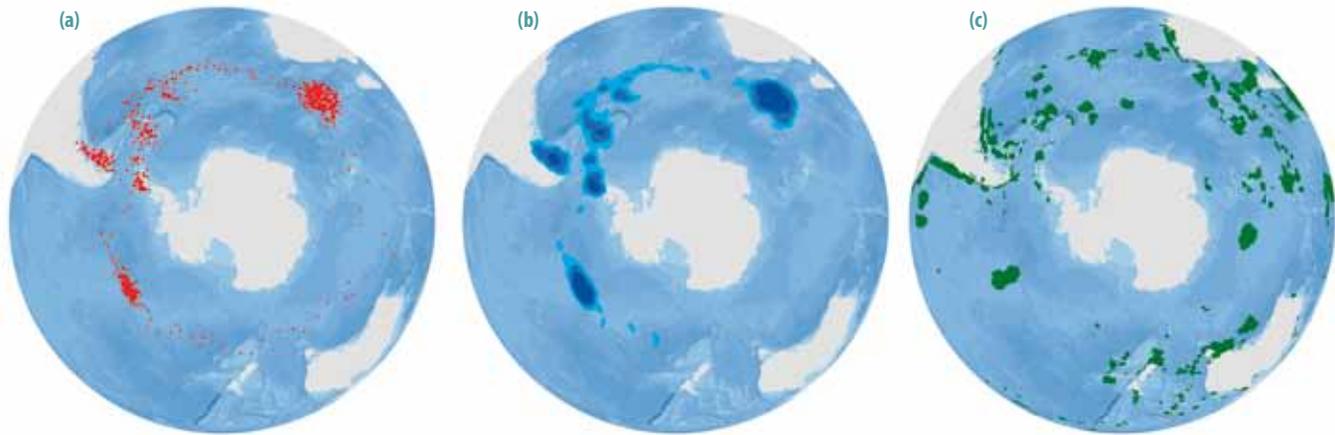


IBA identification is a local-to-global process.

How are IBAs identified at sea?

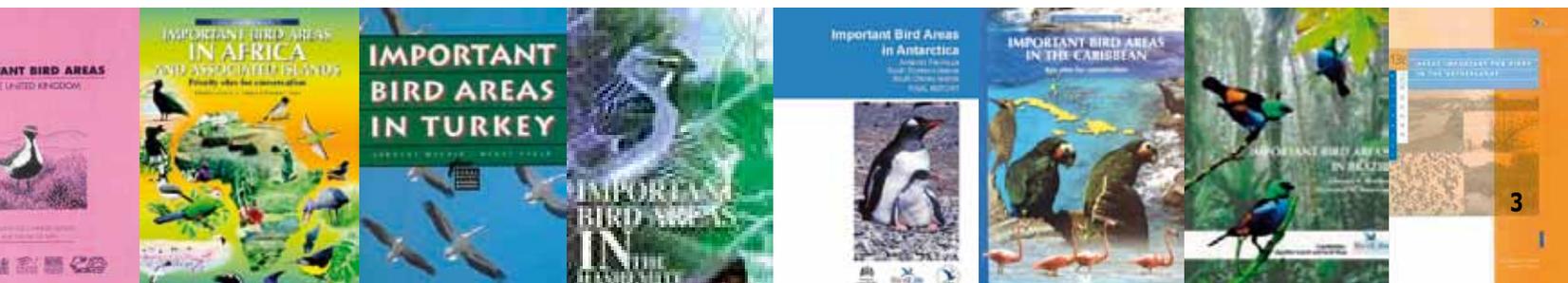
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In recent years, considerable advances have been made in the identification of IBAs in the marine environment. Although using the same set of criteria, the unique circumstances of identifying sites at sea has meant that dedicated techniques have had to be developed. These have been applied to both the key foraging areas around seabird breeding colonies—the colonies themselves, for the most part, having already been identified—as well as the more remote areas on the high seas, the significance of which is only now becoming appreciated. To date, over 2,000 marine IBAs have been identified.



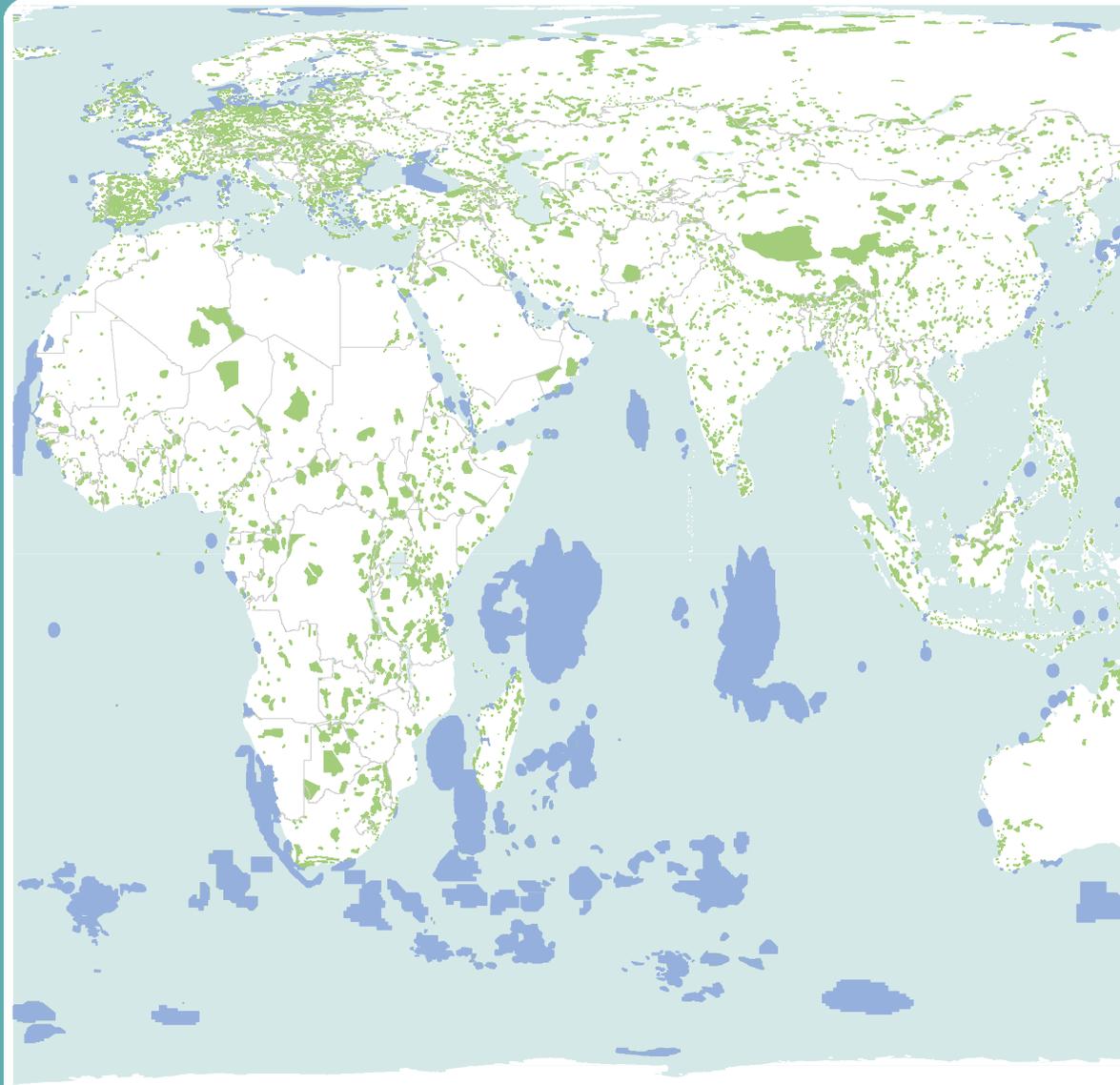
Seabird tracking data have been used to identify many Marine IBAs. In this example, tracking data for (a) Grey-headed Albatross *Thalassarche chrysostoma* are used to identify foraging hotspots (b). Similar information from several other species, along with data on their relative abundance and conservation status, is then used to delineate the final IBA boundaries (c). Data courtesy of the British Antarctic Survey, Coordinate System: South Pole Orthographic, Projection: Orthographic, Mapping and analysis Esri, DeLorme, GEBCO, NOAA NGDC and other contributors

Over the past four decades, some 130 regional, national and sub-national publications, identifying IBAs in more than 200 countries and territories, have been published by the BirdLife Partnership in a variety of languages, in hard copy and, increasingly, online.



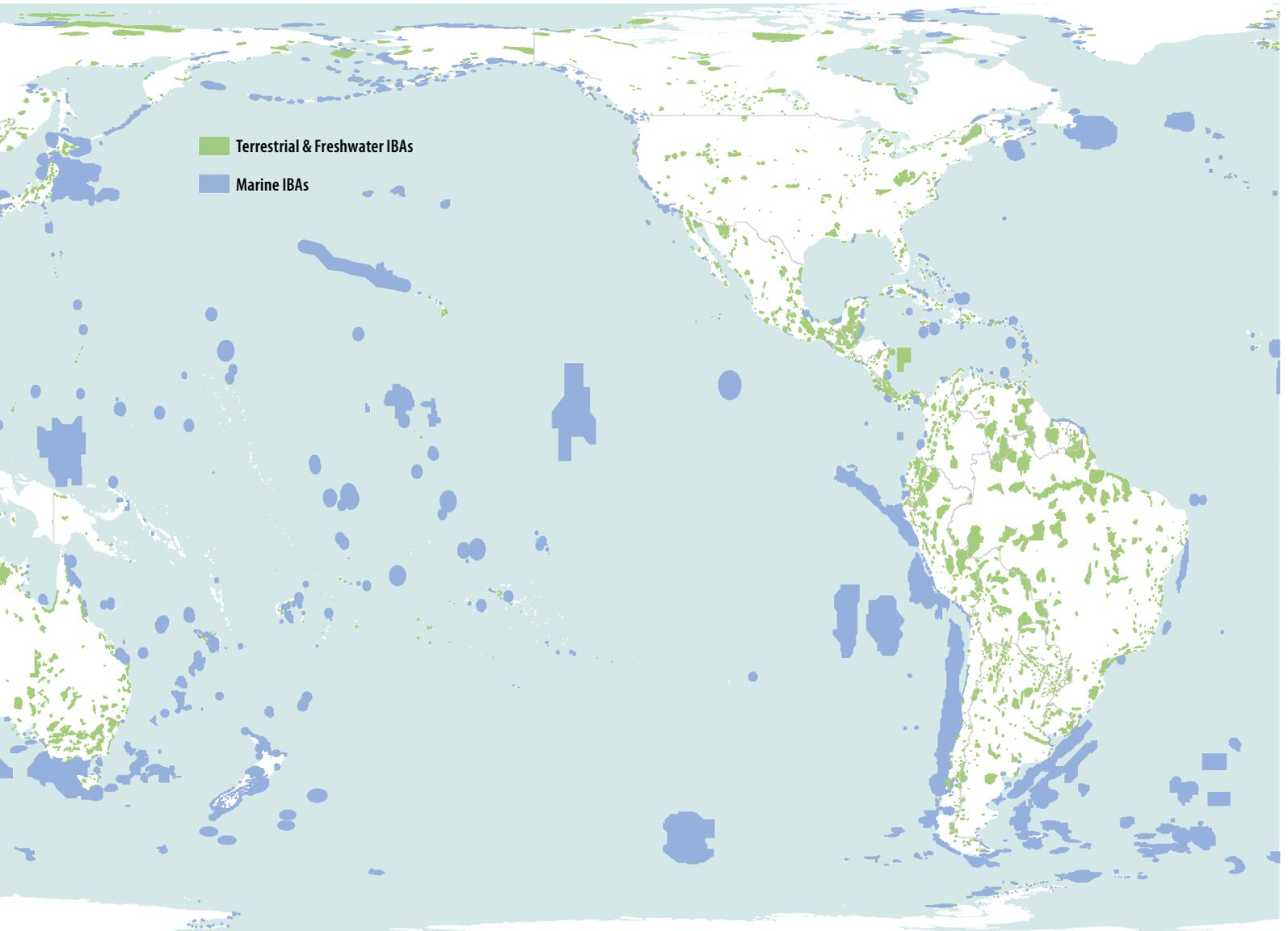
More than 12,000 IBAs have been identified

Over the last four decades, the BirdLife Partnership has identified IBAs worldwide, with over 12,000 sites identified, documented and delineated in over 200 countries and territories, as well as on the high seas.



The map shows the full IBA network including those sites identified using the global criteria and thresholds (p.2) and also 2,004 sites, mainly in Europe, that qualify solely at the regional/sub-regional levels, under lower numeric thresholds. The process of IBA identification is still underway in some areas, including Antarctica, Chile, New Guinea, New Zealand and in the marine environment, and therefore more sites are likely to be recognised in these areas in due course. For the sake of comprehensiveness and simplicity, the map includes a number of sites whose status is currently treated as 'proposed' and so have yet to be formally recognised as part of the IBA network. This mainly applies in the marine realm.

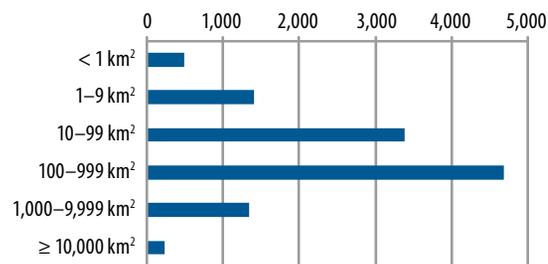
To find detailed information on every IBA, please visit the BirdLife IBA factsheets at www.birdlife.org/datazone/site



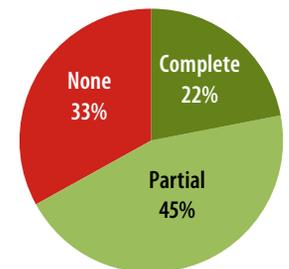
■ Terrestrial & Freshwater IBAs
■ Marine IBAs

Number of confirmed IBAs	11,589
Number of proposed marine IBAs	852
Total area	26,343,181 km ²
Mean area	1,910 km ²
Mean area terrestrial/marine	904/7,867 km ²
% of world's surface	5.2%
% of terrestrial/marine surface	7.4/4.2%
Smallest	0.01 km ²
Largest terrestrial/marine	337,920/610,000 km ²

Area (km²) distribution of global IBA network



Coverage of IBAs by protected areas



An unrivalled source of data for evidence-based conservation

The detailed information that BirdLife has amassed for over 12,000 IBAs worldwide is an unparalleled data resource.

Systematic monitoring of the condition, pressures and responses at these sites, following a standardised protocol, is now being applied at many thousands of IBAs worldwide. The resulting data promote rapid and effective responses to emerging threats and provide up-to-date information to decision-makers.

Data collected through IBA monitoring provide an early warning of threats

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IBAs worldwide are monitored using simple, standardised methods for scoring their state (condition) based on the key species and habitats within them, the pressures (threats) that impact them, and the conservation responses in place (such as action plans and management activities). Such monitoring, carried out by local groups, volunteers, government staff and BirdLife Partners, generates data for IBA indices that provide powerful tools for quantifying conservation efforts and measuring their impact.

The primary importance of this monitoring is to identify threats to sites in order that these may be addressed as swiftly and effectively as possible.



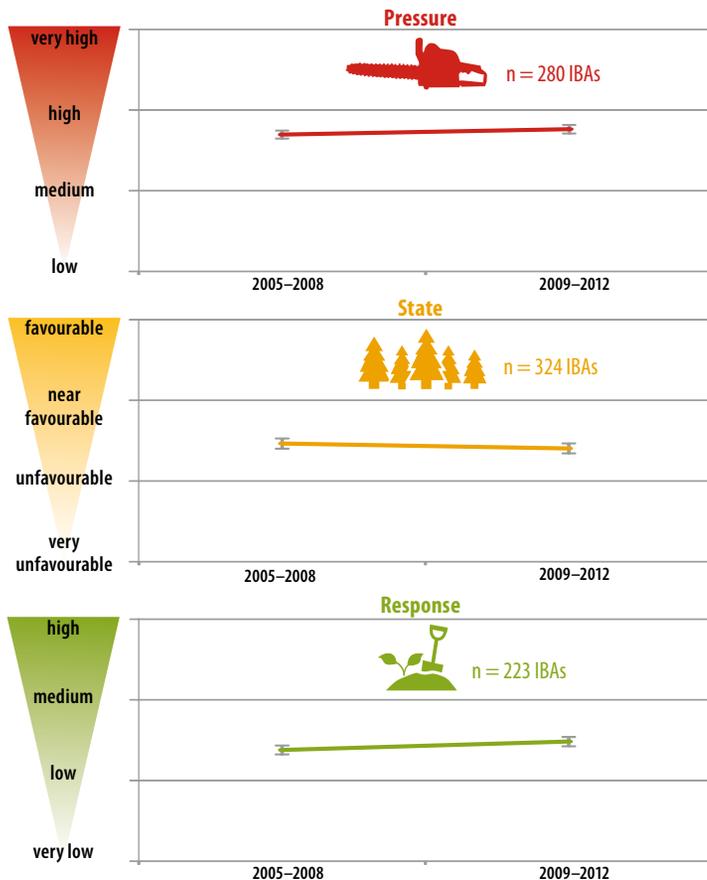
In Africa, IBA monitoring is now well established and providing governments, businesses and civil society with vital information on the changing status of the region's biodiversity. PHOTO Lota Melamari



IBA monitoring suggests worrying trends despite increased conservation effort

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IBAs are now monitored in many countries worldwide, with over one-quarter having some monitoring data. However, a robust comparison of trends over time requires the same set of sites to be repeatedly assessed. For a sample of over 200 sites in 24 countries across four continents, such data for two time periods (2005–2008 vs 2009–2012) show that, despite a substantial improvement in the responses being implemented for biodiversity at IBAs, pressures are continuing to increase and the state of the sites is continuing to decline. Although additional data are needed, with regular repeat assessments from a larger number of sites, these findings point to worrying trends, despite a welcome increase in conservation effort.



Mean \pm SE pressure, state and response scores at IBAs. Data are shown as means, with standard errors, for IBAs with one or more data points in each of the two time periods.

BirdLife's Data Zone—underpinning evidence-based conservation

Along with many other data, information on IBAs is made available through the Data Zone of BirdLife's website. Here, search facilities enable ready access to the overwhelming majority of BirdLife's data holdings on every individual IBA, as well as providing much explanatory background material, analyses and presentations of all the topics covered in this publication. These are accessible by case-study subject area and by country profile. There is also a reference list of the more than 130 regional, national and local IBA publications that have been published over the past four decades, some of which are available for download. The Data Zone is underpinned by BirdLife's databases for sites and species which house extensive and complex datasets derived from a worldwide network of data providers, many of them volunteers. See www.birdlife.org/datazone



The Country Profile section of BirdLife's Data Zone provides summary statistics for species and IBAs, including maps, tables and graphs synthesising available IBA monitoring data for the country.

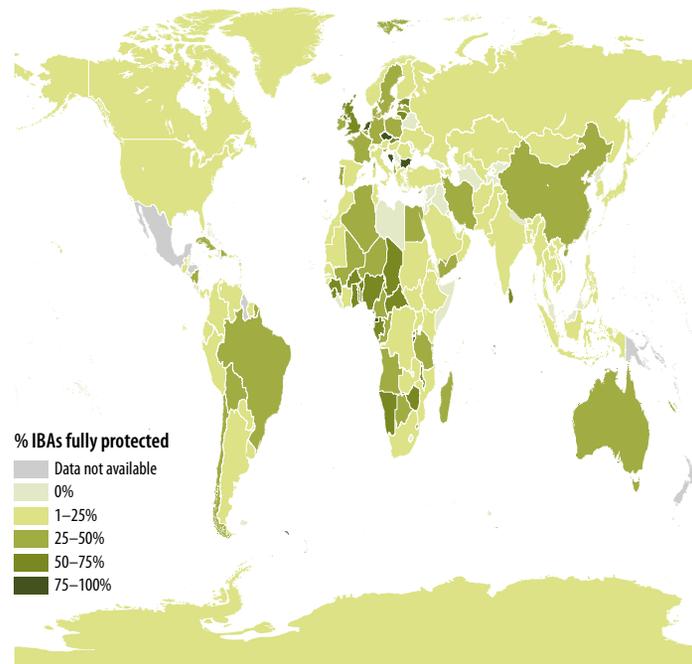
IBAs form the basis for effective protected-area networks

By 2020, Parties to the Convention on Biological Diversity have committed to conserving at least 17% of terrestrial and inland water and 10% of coastal and marine zones, “especially areas of particular importance for biodiversity”, through protected areas and related measures. IBAs represent the largest systematically identified network of such sites. Targeting protected area network expansion at currently unprotected IBAs is therefore an effective way to help governments to achieve this target.

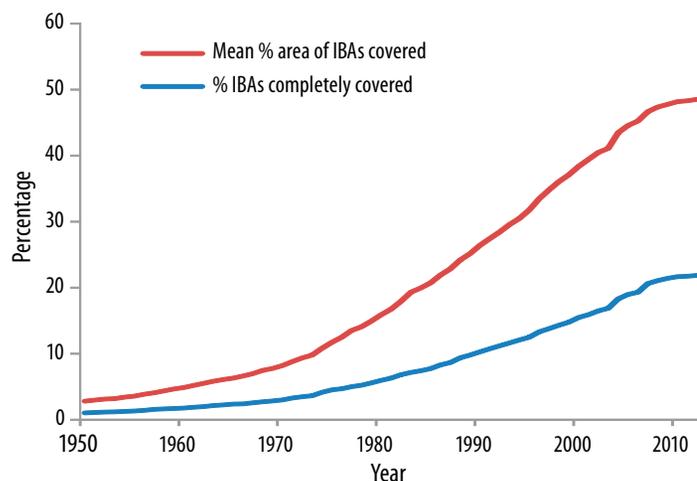
Helping governments to design protected-area networks

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Around the world, the publication of national IBA inventories has enabled Governments to improve and expand their protected-area networks. For example, the identification of IBAs in Tunisia prompted the country’s government to designate protected areas covering 29 hitherto unprotected sites. In Europe, the means of designation of Special Protection Areas as part of the Natura 2000 network was strongly influenced by BirdLife’s IBA inventories, with some governments treating IBA inventories as an initial blueprint for establishing their protected-area networks. IBAs have similarly been used to identify ‘shadow lists’ of potential Ramsar sites (wetlands of international importance) in many parts of the world. Nevertheless, many IBAs still lack legal protection and adequate management. The IBA Protection Index shows that 80% of IBAs are inadequately covered by protected areas and one third are entirely unprotected. These sites should be considered as potential priorities for appropriate forms of statutory recognition and protection.



Percentage of IBAs that are fully protected by country.

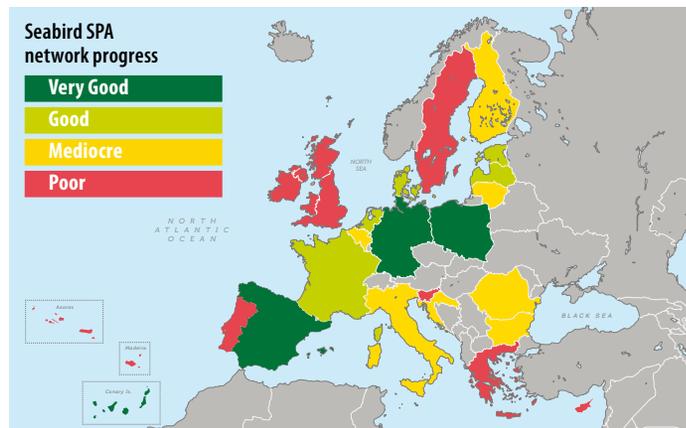


IBA Protection Index 1990–2013. The IBA Protection Index measures the degree to which IBAs are covered by protected areas and provides a useful metric to judge the degree to which protected areas adequately cover areas of importance for biodiversity. N=11,220 sites in 220 countries and territories.

Natura 2000 at sea: good progress but more to do

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Marine IBAs can help EU Member States to target expansion of the Natura 2000 network in the marine environment. A recent assessment by BirdLife rated countries on their progress in developing a network of marine Special Protection Areas. The assessment was based on the proportion of marine IBA area that is legally protected and the proportion of a country's total marine area protected for seabirds. Fifteen of the 23 countries assessed are failing to protect seabirds adequately, with the UK, Ireland, Portugal, Greece, Sweden, Cyprus, Malta and Slovenia being the poorest performers. By contrast, the progress of Spain, Germany and Poland is ranked as "Very Good", as the Natura 2000 network overlaps extensively with marine IBAs and a significant proportion of marine area is protected. Indeed, Spain has recently designated 39 new sites, covering coastal, inshore and offshore areas, meaning that 5% of its marine area is now protected for seabirds.



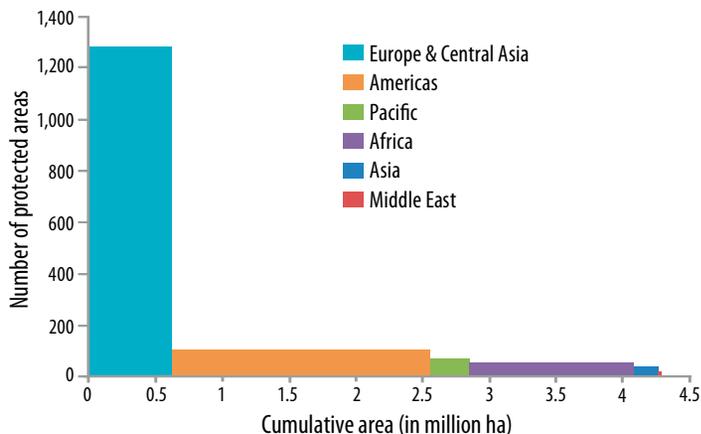
Progress in the designation of marine Special Protection Areas (SPAs) in the EU, based on level of overlap between marine IBAs and SPAs.

Iraq's Central Marshes IBA was nearly destroyed during the 1990s. An ambitious restoration project involving Nature Iraq (BirdLife in Iraq) has seen the site rejuvenated and it was designated Iraq's first National Park in 2013. PHOTO Mudhafar A. Salim



BirdLife Partners manage over 4 million hectares of protected areas tinyurl.com/casestudy596

More than half (63) of BirdLife Partners own or manage protected areas. In all, BirdLife Partner organisations have management responsibility for at least 1,553 protected areas, covering more than 4 million ha. The majority of these (83%) occur in Europe, but sites in Africa and South America tend, on average, to be much larger (e.g. Kaboré Tambi in Burkina Faso is 155,000 ha). Some partners own or manage up to 500 sites, with 16 Partners managing more than 20 sites and five with over 100.



Number (y-axis) and area (x-axis; in ha) of protected areas owned or managed by the BirdLife International Partnership, shown by region. Data from 115/120 Partners.

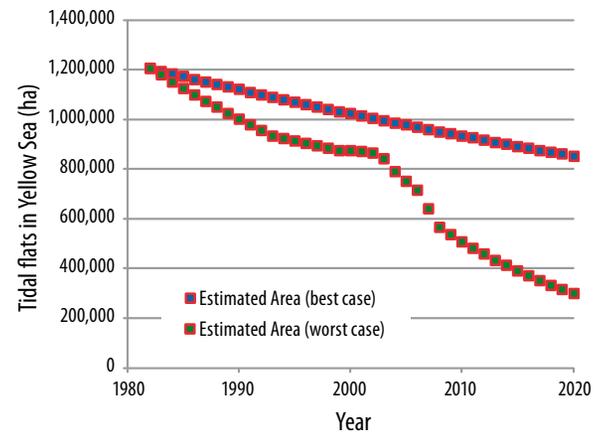
Effective protection of IBA networks can help conserve migratory species throughout their life-cycles

Migratory species are particularly reliant upon coherent ecological networks of habitats that can sustain them at all stages of their life-cycle. Populations of many migratory species are declining as a result of a combination of pressures operating at different stages of their migratory cycle. Networks of IBAs and protected areas can make a crucial contribution to the conservation of migratory birds and other biodiversity, but for some species broader landscape-scale measures are also essential.

Threats operating at key sites can drive population declines: habitat destruction in the Yellow Sea is impacting migratory waterbirds

tinyurl.com/casestudy606

The East Asian-Australasian Flyway supports at least 50 million waterbirds, many of which depend on a network of intertidal habitats. Concentration of their populations at key stopover sites while on passage means that some migratory waterbird species are particularly vulnerable to site-based threats. Land reclamation is destroying intertidal habitat at an alarming rate in East Asia. A recent analysis calculated that China and South Korea had 'reclaimed' 51% and 60% respectively of their coastal wetlands since 1980. This scale of habitat loss is driving declines in migratory birds as well as other intertidal biodiversity, and impacting the livelihoods of millions of people who depend on intertidal ecosystem services. Construction of the South Korean Saemangeum seawall in 2006 destroyed 28,000 hectares of intertidal habitat, including two estuarine IBAs. Monitoring indicated that damage to this site resulted in the global population of Great Knot *Calidris tenuirostris* declining by 24% (90,000 individuals), with similar declines in a number of other shorebird populations.



Estimates of loss of intertidal flats in the Yellow Sea (including Bohai Sea) interpolating between years and extrapolating to 2020. SOURCE MacKinnon et al. (2012) IUCN situation analysis on East and Southeast Asian intertidal habitats, with particular reference to the Yellow Sea (including the Bohai Sea). IUCN Species Survival Commission Report No. 47.

Ensuring adequate protection is key to maintaining effective ecological networks

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To conserve migratory species effectively, it is important to understand how well the ecological network that supports them is functioning and take appropriate action to try to address any gaps. Over 3,000 'Critical Sites' for waterbirds have been identified in the African-Eurasian region as part of the collaborative 'Wings Over Wetlands' project. The vast majority of these sites are IBAs, while the remainder are proposed to be recognised as such. Only about half of these Critical Sites have most or all of their area protected, while even among the 'top twenty' of these sites, which support the greatest numbers (each holding internationally important concentrations of between 13 and 49 waterbird species), several have little or no protection. Many Critical Sites also lack adequate management, which is likely to impinge upon site quality, and/or are not monitored, which restricts the ability to detect and respond to threats. These are issues which must be addressed if widespread declines in waterbird populations in this region are to be reversed.

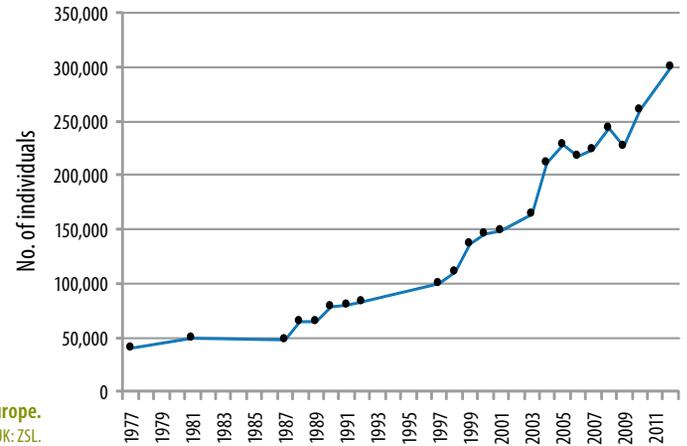
Effective protected area networks can help promote species recovery

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Common Crane *Grus grus* suffered a substantial population decline and range contraction in Europe prior to the 19th Century, with drainage and development causing wetland habitat loss, and unsustainable hunting also taking its toll. However, through improved protection of remaining habitat at key breeding, passage and wintering sites, including designation of Special Protection Areas under the EU Birds Directive, the species has since made a remarkable recovery. A steady population increase has been recorded in Europe since the 1960s, and the species has recolonised a number of European countries, including the Czech Republic, France, the Netherlands, the UK, Denmark and parts of Germany.

Estimated population size of Common Crane in Western Europe.

SOURCE Deinet et al. (2013) *Wildlife comeback in Europe: The recovery of selected mammal and bird species*. London, UK: ZSL.



Maintaining functional links between sites in an ecological network promotes conservation of whole landscapes: the Acaponeta river basin, Mexico

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The Acaponeta river basin in Northwest Mexico links two IBAs: Marismas Nacionales, a coastal wetland hosting 300,000 waterbirds annually; and Pueblo Nuevo, a forested site with a range of threatened birds. The area provides a range of ecosystem services to some 125,000 people and is in very good ecological condition. Pronatura (BirdLife in Mexico) is working to designate the catchment as a “water reserve”, a novel way of ensuring that at least 70% of the water flow reaches the sea. This will have the dual benefits of maintaining and restoring forest cover in the upper parts of the catchment (where Pueblo Nuevo lies) and preserving the ecological integrity of Marismas Nacionales downstream. By conducting conservation work that supports important functional links between different areas of the river basin, more than 1 million hectares of this landscape of high biological importance will be maintained in good conservation condition.

Pueblo Nuevo IBA. PHOTO Pronatura



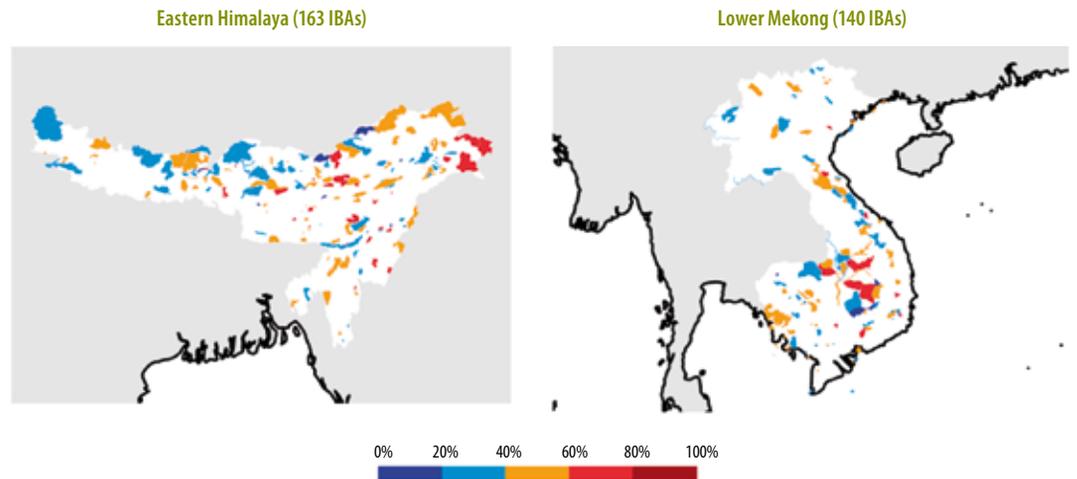
A resilient network for a changing environment

Climate change presents a growing challenge to biodiversity conservation, development and poverty alleviation. Maintaining a resilient network of IBAs is vital for helping both biodiversity and people adapt to climate change. BirdLife International is assessing the climate vulnerability of IBAs, monitoring impacts, and developing adaptation plans for the species and people that depend on them.

IBAs form a coherent network of sites for conservation, even under climate change

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Numerous studies show that many bird species are projected to shift their distributions (often in combination with overall range contraction) as a consequence of relocation of the climatic conditions to which they are adapted. This is likely to result in considerable 'turnover' in the composition of bird communities occurring in IBAs, protected areas and other sites. However, research shows that the IBA network as a whole will retain suitable climatic conditions for the great majority of species of conservation concern. For example, in sub-Saharan Africa, only 7 out of 815 species of conservation concern (<1%) are projected to have no suitable climate within the network of 863 IBAs by the end of the century. Similarly, in the Eastern Himalaya and Lower Mekong regions of Asia, while 45% of species are 'extremely likely' to experience a reduction in suitable climate within the IBA network, for no species is suitable climate 'extremely likely' to be completely lost from the network.



Projected percentage turnover in species composition within IBAs in two regions in Asia by the end of the 21st Century. Colours indicate the projected turnover in species composition. SOURCE Bagchi *et al.* (2012) *Global Change Biol.* 19: 1236–1248. PHOTO Michael Foley/Flickr

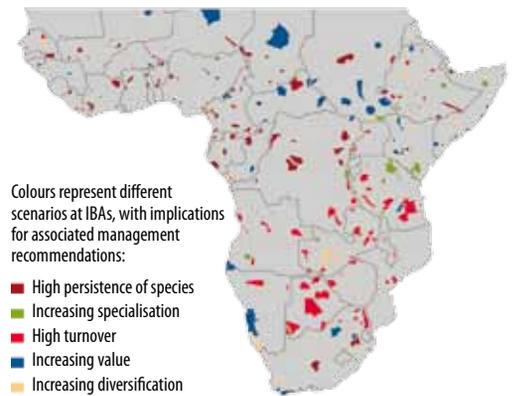


Responding to the challenge of climate change: monitoring and adaptation planning

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Although there is little doubt that climate change impacts on wildlife will be substantial, there is considerable uncertainty over the precise projections for individual species and sites. It is therefore imperative to establish or strengthen monitoring of biodiversity in protected areas and unprotected IBAs, in order to detect changes in species distribution and abundance. BirdLife's IBA monitoring protocol provides a simple and cost-effective means of doing this (see page 7).

Data from research on birds can also inform how best to manage protected areas in the face of climate change. One recent study identified management scenarios for sub-Saharan African IBAs based on the proportion of species of conservation concern within each IBA projected to emigrate, colonise or persist in the face of climate change. The balance between these numbers for each site will determine the focus of management actions. Effective management may necessitate the expansion of some sites into adjacent areas of natural or semi-natural habitat. Although the relative conservation value of individual sites may change, these results demonstrate that safeguarding the existing network of IBAs (through formal protection, where appropriate, and effective management), in conjunction with adaptation measures and landscape-scale policy interventions, will play a key role in helping to minimise the negative impacts of climate change on biodiversity.



Management scenarios for African IBAs, based on the turnover of species projected under climate change. SOURCE Hole et al. (2011) *Conserv. Biol.* 25: 305–315

Helping local communities at IBAs adapt to climate change: ecosystem-based adaptation

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IBAs provide local people with diverse livelihood options and offer natural defences against climatic hazards, such as floods, droughts and sea-level rise. Supporting the application of local knowledge, together with community engagement and action at IBAs, can increase the resilience of natural and societal systems, and so help deliver locally appropriate solutions that allow communities, countries and economies to adapt the challenges of climate change. BirdLife is working through its Local Conservation Group network to help communities do this through such ecosystem-based approaches.

Priority adaptation measures identified by communities under the Darwin Initiative project *Ecosystem Conservation for Climate Change Adaptation* in East Africa include planting seedlings on degraded slopes to reduce run-off and erosion, the introduction of more climate-resilient crops, and climate-smart land-use planning in and around IBAs.

BirdLife is involved in projects around the world to conserve and restore degraded forests and promote sustainable forest use.

PHOTO Deutsche Welle



Many IBAs are under threat and some are in particular danger

Human actions are putting immense pressure on many IBAs and some are at risk of losing their natural habitat and characteristic biodiversity forever. BirdLife has identified a suite of 'IBAs in Danger' which urgently require action to safeguard them from intense threats.

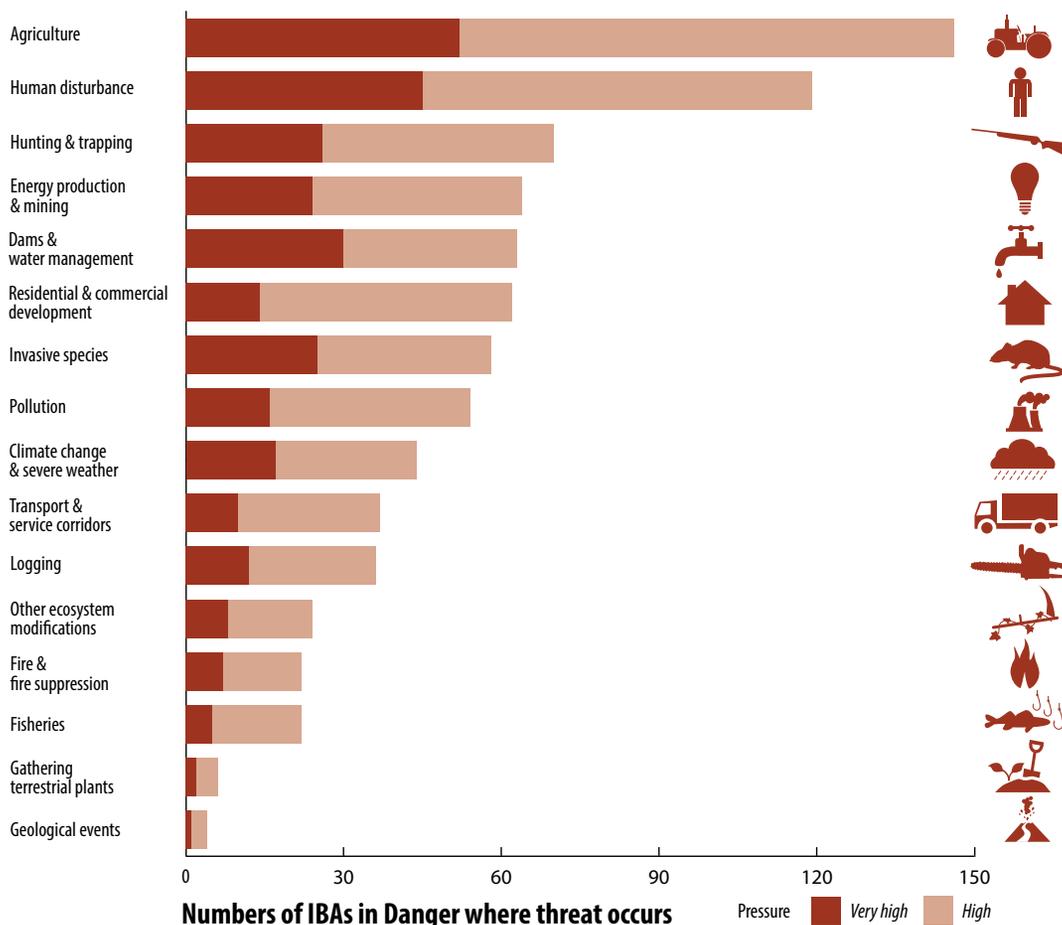
IBAs in Danger face a wide range of threats

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More and more IBAs are under threat from expanding human activities—many of which are poorly planned and do not take environmental values into account. By monitoring the pressures facing IBAs, BirdLife Partners have identified a subset of sites at particularly high risk of losing their biodiversity value, owing to intense threats and inadequate protection or management.

The resulting list of 356 'IBAs in Danger' provides an essential focus for action by governments, development agencies, intergovernmental agreements, businesses and wider civil society, in order to mitigate these threats and prevent further damage or loss.

IBAs in Danger are under high to very high pressure from a broad spectrum of threats. The most frequently recorded threat types are unsustainable agriculture and aquaculture and human disturbance, but most IBAs in Danger are suffering serious pressure from multiple threats.

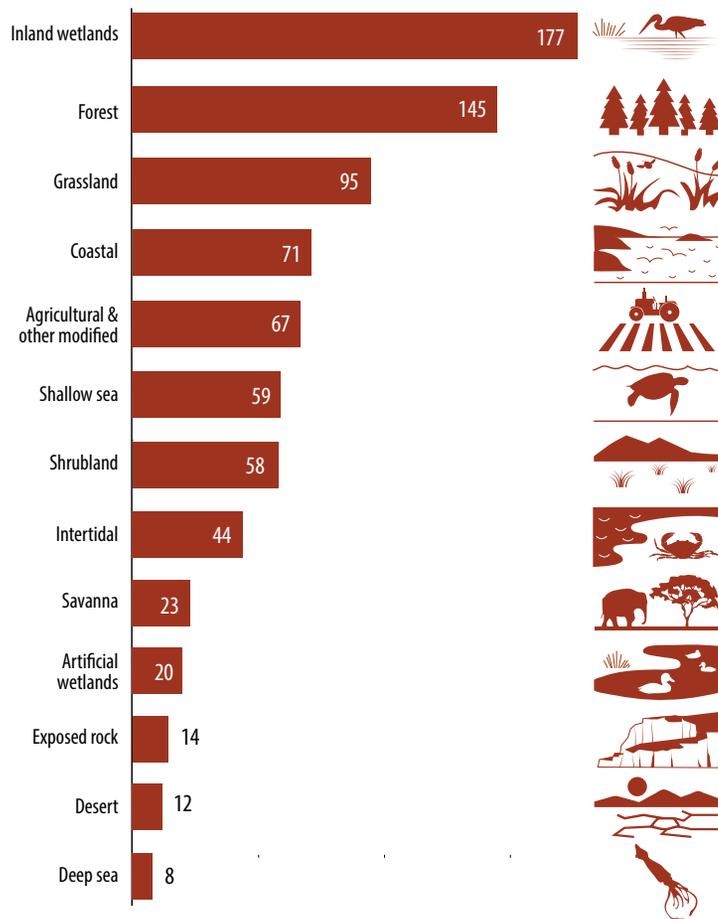


IBAs with wetlands are particularly threatened

tinyurl.com/casestudy598

The most frequently recorded habitat types present in IBAs in Danger are inland wetlands, followed by forests and grasslands. Moreover, half of the IBAs in Danger (181 sites) hold significant congregations of migratory waterbirds. Just over half of the IBAs in Danger overlap with protected areas, including no fewer than 64 Ramsar Sites, 12 Biosphere Reserves and eight World Heritage Sites.

Number of IBAs in Danger where habitat type occurs



Taking action for sites at risk

tinyurl.com/casestudy599

To respond to the threats facing IBAs in Danger, the BirdLife Partnership has developed effective site safeguard measures, most notably in Europe and Africa.

In Europe, BirdLife Partners challenge threats to IBAs through hundreds of legal cases every year. Within the EU in 2014 alone, BirdLife pursued 63 cases involving IBAs, all of which have now been submitted as complaints to the European Commission as breaches of EU environmental protection laws. An example is the case of Kaliakra IBA in Bulgaria, where unregulated large-scale development of wind turbines, along with other pressures, threatens wintering populations of the globally threatened Red-breasted Goose *Branta ruficollis*.

In Africa, eight IBAs have recently been the focus of intensive, internationally supported BirdLife campaigns. These include some notable successes, such as the Tana River Delta in Kenya, which was designated as a Ramsar Site after several years of hard work with local and national stakeholders.

Local Conservation Groups—community-based groups working on the conservation of IBAs—are active at 121 IBAs in Danger (34%).

Tana River Delta, Kenya. PHOTO H. Byron



IBAs in Danger— priority sites for immediate action

The 2014 IBAs in Danger list includes 356 sites in 122 countries worldwide. All face intense threats and need urgent attention. Examples from across each region highlight the diversity of pressures and the urgency with which actions are required.



① Isle of Conejera and islets of Bledes and Espartar, Spain

tinyurl.com/casestudy588

Isle of Conejera is one of the last remaining undeveloped islands in the Balearic archipelago and home to a colony of Critically Endangered Balearic Shearwater *Puffinus mauretanicus*. SEO/BirdLife (BirdLife in Spain) is lobbying local authorities to drop controversial and potentially devastating plans to turn the island's lighthouse into a hotel.

② São Tomé lowland forests, São Tomé

tinyurl.com/casestudy589

This site holds three species that are Critically Endangered and seven more that are Endangered or Vulnerable. The IBA is threatened by industrial-scale plantations, hydroelectric dam building and illegal hunting. Strengthening local capacities, working with the private sector to improve the sustainability of business practices, and research are all urgently needed actions.

③ Tadmur desert and mountains, Syria

tinyurl.com/casestudy590

This IBA holds the last remaining population of the Critically Endangered Northern Bald Ibis *Geronticus eremita* in the Middle East. The site is facing diverse threats, including agriculture expansion and intensification, road building, oil and gas exploitation and hunting. The Syrian Society for Conservation of Wildlife (BirdLife in Syria) has been working to increase local capacities and awareness.



4 Belum-Temenggor, Malaysia

tinyurl.com/casestudy591

The site has an exceptional diversity of mammals and birds, including 10 species of hornbills. One third of the IBA is protected as a State Park. The highest threats to the site are commercial logging, land conversion and industrial development. MNS (BirdLife in Malaysia) is advocating for the protection and sustainable management of the whole forest complex and the establishment of a sustainable financing mechanism.

5 Murray-Sunset, Hattah and Annuello, Australia

tinyurl.com/casestudy592

This IBA is particularly important for a range of threatened bird species restricted to the unique mallee habitat. Recent large-scale wildfires have destroyed vast areas of habitat and increased the extinction risk for these birds, exacerbated by political pressure on government agencies to carry out planned burning. Protection of unburnt mallee habitat from fire is now the top priority.

6 Tasman Sea, Australia and New Zealand

tinyurl.com/casestudy593

The Tasman Sea, in international waters between Australia and New Zealand, is a key feeding area for many globally threatened seabirds. Unfortunately, the ingestion of plastic debris is estimated to be higher at this site than any other worldwide. The threat from fisheries bycatch is also high. Actions needed include bycatch mitigation measures and solutions to the plastic ingestion problem.

7 Upper Bay of Panamá, Panamá

tinyurl.com/casestudy594

This IBA hosts up to 2 million migratory shorebirds each year. Despite formal protection, it faces high pressures from a wide range of threats. An attempt to degazette the protected area was successfully defeated in 2013 by the Panama Audubon Society (BirdLife in Panama) and others. Now the challenge is to develop a sustainable land-use plan for the site and improve the management of the protected area.

Delivering sustainable development through IBA conservation

Given the critical role of IBAs in delivering sustainable development, BirdLife is working globally to mainstream IBA conservation into a range of sectors.

Mainstreaming IBAs into development, financial and productive sectors

tinyurl.com/casestudy600

Biodiversity conservation is vital to sustainable development. Many development sectors currently impact biodiversity, but all are ultimately reliant on the ecosystem services it provides. The BirdLife Partnership therefore works with governments, businesses and financial institutions to help them avoid or minimise negative impacts on priority sites—such as IBAs—and to harness effectively the many benefits they deliver.

IBA mainstreaming occurs when the value of IBAs are recognised within productive, financial or development sectors—such as agriculture, finance, or health—and their conservation is integrated into the goals, policies, strategies and practices of these sectors. Mainstreaming can lead to a range of positive outcomes, from influencing national budget decisions to changing the behaviour of corporates.

Mainstreaming IBA conservation into livestock farming

tinyurl.com/casestudy601

Four BirdLife Partners in South America—Aves Argentinas, Aves Uruguay, SAVE Brazil and Guyra Paraguay—are working together as part of the Southern Cone Grasslands Alliance (Alianza de Pastizal del Conosur) to support and incentivise the adoption of best practices by local ranchers who are farming in IBAs. A cornerstone of the Alliance’s approach has been the development of a “bird-friendly” natural grasslands beef certification scheme. The higher market value of the beef is a positive economic incentive for this sustainable production practice.



Mainstreaming IBA conservation into development finance

tinyurl.com/casestudy602

A number of development banks, such as the World Bank, the International Finance Corporation, the European Investment Bank and the European Bank for Reconstruction and Development, have incorporated IBAs into their environmental safeguard policies, performance standards and guidance. This means that the location of IBAs and the species for which they are identified are considered when deciding whether development projects should proceed, and with what design requirements, to minimise environmental risks.



Mainstreaming IBA conservation into mining

tinyurl.com/casestudy205

CEMEX and Rio Tinto—two of the world’s largest mining and extraction companies—are incorporating IBA considerations into their operations to manage risks and harness opportunities. Through partnership with BirdLife, CEMEX and Rio Tinto use data on the location of IBAs to avoid impacts on these sites wherever possible and, where not, to minimise, to restore and to offset. Additional benefits to companies include sustained provision of ecosystem services, reputational gains, and social license to operate.



Using IBAs to guide sustainable energy production

tinyurl.com/casestudy509

Millions of birds of prey and other soaring birds migrate through the Middle East and northeast Africa along the ‘Rift Valley/Red Sea flyway’ each year between their breeding and non-breeding grounds. Owing to their slow flight and immense concentrations, these species are particularly vulnerable to human activities and development. Dedicated efforts are now helping to incorporate the conservation of these migratory soaring birds into a range of sectors. With support from the Global Environment Facility and United Nations Development Programme, data on IBAs are being used to inform decisions by developers, planning authorities and other stakeholders on the safe siting of new developments, such as wind farms, thus minimising adverse impacts on migratory birds. BirdLife’s Soaring Bird Sensitivity Mapping Tool makes this information easily and freely accessible to all stakeholders. See tinyurl.com/MSBmap.



Providing essential data to inform decisions for sustainable development

tinyurl.com/casestudy254

When planning new operations, companies and development agencies have a clear need for accurate biodiversity information. Poorly informed decisions can often prove both financially and environmentally costly. The innovative Integrate Biodiversity Assessment Tool (IBAT) is designed to facilitate access to accurate and up-to-date biodiversity information—including the location of IBAs and protected areas—to support critical business decisions. The tool is the result of a ground-breaking partnership between BirdLife International, Conservation International, the International Union for Conservation of Nature and the UNEP World Conservation Monitoring Centre. See www.birdlife.org/datazone/info/ibat



IBAs provide essential services for people

IBAs provide a wide range of ecosystem services—the benefits that people receive from nature. Understanding the values of these services enables governments, businesses, landowners and communities to make better informed decisions about managing the environment.

A new tool to assess ecosystem services in protected areas, IBAs and other sites

tinyurl.com/casestudy542

Nature underpins our lives in diverse ways and at a range of scales, from local communities through to the global population. BirdLife is helping to pioneer site-based techniques to assess and monitor the benefits we receive from nature—known as ecosystem services—so that they can be correctly valued and maintained.

BirdLife International and collaborators from the RSPB (BirdLife in the UK), University of Cambridge, Anglia Ruskin University, UNEP-World Conservation Monitoring Centre and the Tropical Biology Association have recently developed the Toolkit for Ecosystem Service Site-based Assessment (TESSA). It provides local conservationists with accessible, low-cost methods for identifying and valuing the benefits that people receive from nature at individual sites.

The toolkit provides useful information for decision-makers to help them understand the net consequences of potential land-use changes, in terms of impacts on biodiversity and the benefits for human well-being that may be lost. To date, TESSA has been implemented by BirdLife Partners at more than 30 protected areas and other IBAs in 15 countries around the world, with the results already informing decision-making at local and national levels.



For further information on TESSA see: tinyurl.com/tessatoolkit

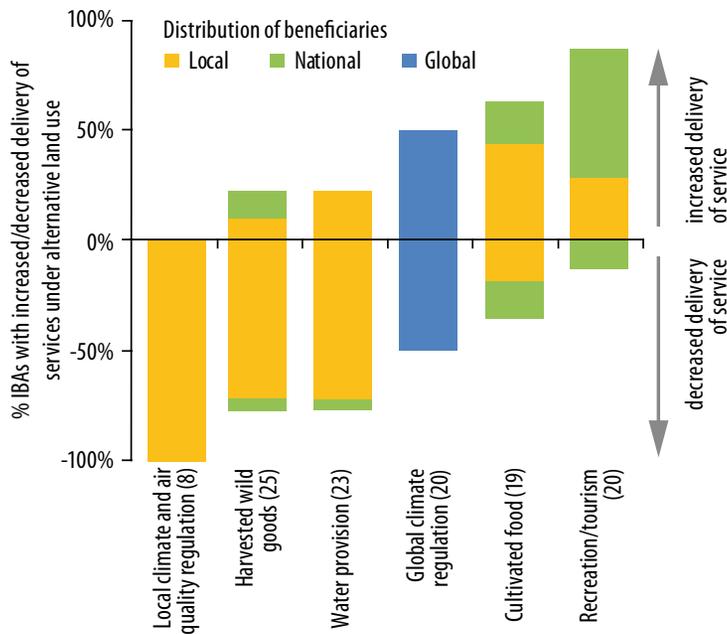
Providing decision-makers with information about the impacts of land-use change on ecosystem services

tinyurl.com/casestudy238

Protected areas, IBAs and other sites of biodiversity significance are facing increasing pressures. This is often because environmental considerations are excluded from decision-making, resulting in perverse outcomes that threaten long-term sustainable development. BirdLife Partners play a key role in generating information to promote better-informed decision-making. For example, in 2012, Bird Conservation Nepal (BirdLife in Nepal) identified key pressures affecting biodiversity and ecosystem services at Nepal's 27 IBAs, 14 of which are protected areas, and assessed the implications for beneficiaries of these services of projected changes in a 'business as usual' scenario. The results showed that, if unchecked, these threats were expected to lead to land-cover change, biodiversity loss and declines in ecosystem services across the IBA network that would mainly impact local communities. The report was endorsed by the Nepalese Ministry of Forests and the findings informed Nepal's National Biodiversity Strategy and Action Plan.



Researchers at Llanganates National Park in Ecuador. This IBA consists of 11 distinct wetland systems and more than 100 lakes. PHOTO LEFT Aves y Conservación. RIGHT Juan Medina Dueñas/Flickr



Improving management of protected areas for biodiversity and ecosystem services

tinyurl.com/casestudy603

Using TESSA, Aves y Conservación (BirdLife in Ecuador) have assessed the impact of land-uses—especially cattle grazing—on the delivery of ecosystem services at Llanganates National Park in Ecuador (an IBA and Ramsar wetland of international importance).

Four ecosystem services were considered: global climate regulation, water provision (for human consumption, irrigation, and hydro-electricity), grass for livestock grazing, and nature-based tourism. The assessment found that if grazing of the park continued under ‘business as usual’, carbon storage would be reduced by 14% (a loss of US \$45 million in total carbon storage), and nature-based tourism was projected to decrease by 68%, with the total value estimated to reduce by US\$ 20,000 per year. The overall impact of grazing was therefore negative in terms of the value of services provided.

The National Park authorities are now working with Aves y Conservación to explore removing cattle, with the agreement of cattle ranchers, and supporting alternative livelihoods opportunities. Other protected area authorities and the national government have taken notice of the results and are promoting the approach at other sites.

SOURCE BCN and DNPWC (2012) *Conserving biodiversity and delivering ecosystem services at Important Bird Areas in Nepal*. Kathmandu and Cambridge, UK: Bird Conservation Nepal, Department of National Parks and Wildlife Conservation, and BirdLife International.

IBAs support local livelihoods and contribute to societal well-being

Local communities are often dependent on IBAs for their livelihoods and well-being. Community engagement and involvement in IBA conservation is vital. This is increasingly being achieved through the actions of Local Conservation Groups.

Local communities are often dependent on IBAs for their livelihoods and well-being

tinyurl.com/casestudy433

Phulchoki Mountain IBA is the highest peak on the rim of the Kathmandu Valley in Nepal and provides an excellent example of the benefits IBAs can provide to local communities. Much of the forest is managed by nineteen Community Forest User Groups, which between them comprise almost 3,000 household members. The community harvests over 47 different types of product from the forest, including fuelwood (the main source of domestic fuel in the area), fodder (the main source of food for livestock) and leaf litter (used as livestock bedding and compost). Phulchoki is also a popular destination for recreational visits and pilgrimages by Nepali nationals, with over 140,000 visitors in 2010.

The benefits that the community gets from the IBA are significant when compared to adjacent, degraded forest land. Harvested wild goods from the community forest area are worth US\$244/ha/yr, but unmanaged, illegally harvested wild goods from degraded forest yield only US\$31/ha/yr. In 2010, the value of recreation at Phulchoki to communities and the wider economy was US\$998,000/yr. Surveys suggest that in a degraded state this would be reduced by 75%.

Appropriate interventions at IBAs can ensure that ecosystem service benefits are sustained and that development benefits are enhanced for local people

tinyurl.com/casestudy604

With appropriate natural resource governance arrangements and technical support, the goods and services that IBAs provide can form the basis of local social and economic development. The Natewa Tunuloa IBA in Fiji is owned by indigenous peoples who are organised in land-owning units or clans known as *mataqalis*. Communities living in the vicinity of the IBA rely heavily on forest resources for firewood, hunting, timber, medicinal plants and wild foods. In October 2005, the Sisi Initiative, supported by BirdLife, was established as a community-based volunteer group charged with leading efforts to conserve the IBA in response to threats from illegal logging, forest fires, overgrazing, agricultural encroachment and invasive species. The initiative provides communities with alternative livelihood training, including projects on bee keeping, poultry rearing, handicraft and jewellery making, baking and sustainable agriculture. This development is helping to conserve 6,000 hectares of forest. The *mataqalis* have refused logging concessions within the demarcated area, and are undertaking activities that will restore and enhance the remaining tracts of native forest.



Given the right legal frameworks, local communities can help conserve biodiversity at IBAs

tinyurl.com/casestudy605

With secure rights and responsibilities over natural resources, local people can be effective stewards, managing biodiversity both for local economic benefits and to meet national or international conservation objectives. The Mahavavy-Kinkony Complex IBA (and Ramsar site) in Madagascar was recently declared a protected area. The site is important to local people for fishing, hunting and agriculture and is home to a large number of threatened wildlife species. However, lack of clear rights and access meant that the wetland was threatened by over-exploitation and habitat loss. National law in Madagascar has enabled local community associations to acquire rights to control the management of natural resources, ensuring continued benefits for the local people who depend on them. Helping communities to claim these rights and strengthening the community associations is one of the key conservation strategies of Asity Madagascar (BirdLife in Madagascar).

LEFT A Sisi Initiative Local Conservation Group discusses tourism within Natewa Tunuloa IBA. PHOTO BirdLife Pacific MIDDLE Supported by BirdLife and NatureFiji-MareqetiViti Local Conservation Groups in Fiji are developing sustainable livelihoods such as bee keeping. PHOTO BirdLife Pacific RIGHT Local organisations are strong advocates for IBAs and many have taken a robust stance against ill-conceived development projects. PHOTO Goldman Environmental Prize

Cultural and socio-economic ties to IBAs often make local people powerful conservation advocates

BirdLife Partners are working with Local Conservation Groups at over 2,700 IBAs worldwide, providing them with the information, capacity and linkages to national and international decision-makers to help them conserve their IBAs and sustainably utilise ecosystem services.

With such support, local people have taken action to safeguard numerous IBAs around the world. For instance, the future of the Rospuda Valley in north-eastern Poland was thrown into doubt by plans for a controversial express road. As a result of an energetic, and ultimately successful, public campaign involving NGOs such as OTOP (BirdLife in Poland), and the local community, this damaging development was finally halted in 2009 (tinyurl.com/casestudy25).

In Uganda, a proposal to convert one-third of Mabira Forest Reserve to sugarcane for biofuel production was defeated by a campaign involving Nature Uganda (BirdLife in Uganda) that galvanised public support (tinyurl.com/casestudy231).

In Tanzania, local communities are fighting plans for a soda ash factory at Lake Natron IBA by demonstrating that the operation is not economically viable and that investment should instead focus on protection of the environment and promotion of local livelihood alternatives (tinyurl.com/casestudy507).



Useful resources

BirdLife is an authoritative source of high-quality data, amassed by a global conservation partnership of over 120 leading national organisations. Much of this information can be accessed for free via a range of tailored online resources. For instance, detailed factsheets for all IBAs are available at www.birdlife.org/datazone/site, while over 350 case studies on every aspect of bird and wider biodiversity conservation can be found in State of the world's birds at www.birdlife.org/datazone/sowb

Section	URL	QR code
Country profiles 	www.birdlife.org/datazone/country Biodiversity statistics, graphs and maps for every country and territory of the world, including information on national avifaunas and their IUCN Red List status, IBAs and their protection status, and relevant environmental treaties.	
IBAT 	www.birdlife.org/datazone/info/ibat The Integrated Biodiversity Assessment Tool provides accurate and up-to-date biodiversity data. 'IBAT for Research and Conservation Planning' is aimed at governments and practitioners, while 'IBAT for Business' (a subscription-based service) is tailored to the private sector.	
Marine IBA e-atlas 	www.birdlife.org/datazone/marine A dynamic and interactive map and database providing information on all the world's seabirds, breeding colonies, important marine sites and their protection status.	
IBAs in Danger 	tinyurl.com/IBAsindanger The IBAs in Danger Story Map combines an interactive mapping interface with media-rich content to tell the story of IBAs in Danger—those sites around the world that face the greatest threats and therefore require the most urgent conservation action.	
Soaring Bird Mapping Tool 	tinyurl.com/MSBmap The Soaring Bird Sensitivity Mapping Tool provides information to aid the safe siting of new infrastructure developments, such as wind farms, in the Middle East and northeast Africa.	
CSN Tool 	tinyurl.com/CSNmaptool The Critical Site network Tool, developed with Wetlands International and UNEP-World Conservation Monitoring Centre, maps information on migratory waterbirds in the region covered by the African-Eurasian Migratory Waterbird Agreement.	
TESSA 	tinyurl.com/TESSAtoolkit The Toolkit for Ecosystem Service Site-based Assessment (TESSA) provides accessible guidance on low-cost methods for how to evaluate the benefits people receive from nature at particular sites.	



NatureWatch is a new iPhone application that provides users with both information on IBAs and a way to share their experiences of these sites to benefit conservation. NatureWatch—which will soon be available in the App Store—currently covers 533 Important Bird and Biodiversity Areas in Australia, Cyprus, Fiji, Lebanon, Malaysia and South Africa. For more information visit <http://www.birdlife.org/worldwide/projects/naturewatch>

NatureWatch has been generously supported by the IBAT Alliance (BirdLife International, Conservation International, IUCN and UNEP-WCMC), the Aage V. Jensen Foundation and UK Darwin Initiative, and has been developed in partnership with BirdLife Partners in Australia, Cyprus, Fiji, Lebanon, Malaysia and South Africa.

BirdLife International is the world's largest nature conservation Partnership. Together we are 120 BirdLife Partners worldwide—one per country or territory—and growing with over 13 million members and supporters, 7,000 local conservation groups and 7,400 staff.

BirdLife's vision is a world rich in biodiversity, where people and nature live in harmony. We are driven by our belief that local people, working for nature in their own places but connected nationally and internationally through our global Partnership, are the key to sustaining all life on this planet. This unique local-to-global approach delivers high impact and long-term conservation for the benefit of nature and people.

BirdLife is widely recognised as the world leader in bird conservation. Rigorous science informed by practical feedback from projects on the ground in important sites and habitats enables us to implement successful conservation programmes for birds and all of nature.

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