

Sea Change

BirdLife International Marine Programme newsletter

**Seafood certification
must do more on
bycatch**

- New technologies help shed light on the High Seas
- Impact of EU fisheries in West Africa
- Sensitivity mapping offers seabirds hope



Certified fisheries are not necessarily sufficiently addressing the issue of bycatch.

Seafood certification – must do better

According to a review published by the BirdLife International Marine Programme earlier this year, being certified by the Marine Stewardship Council (MSC) does not guarantee that a fishery is addressing the bycatch of marine mammals, seabirds, turtles, sharks and rays.

A green/amber/red rating system was used to review and assess 23 fisheries certified by the MSC. A green rating meant the fishery was actively working to minimise bycatch, underpinned by effective data collection.

An amber rating meant that some measures were in place, with bycatch reductions of some species, though action was not considered comprehensive.

Fisheries rated as red were found to have made no significant changes to bycatch over the certification period. They had insufficient management measures, poor data collection and had sustained or increasing bycatch levels.

Ultimately, we found that only three fisheries scored green, 12 were amber, and eight were red. Only one of the fisheries

reviewed clearly demonstrated a sustained reduction in bycatch. In seven fisheries, bycatch either increased or stayed constant across the certification period, which is a cause for serious concern.

The MSC scheme is not a simple pass or fail process – fisheries are often certified with requirements to implement improvements, known as ‘conditions of certification’.

In some cases, this approach works effectively. In the offshore South African hake trawl fleet, for example, seabird bycatch was substantially reduced when the fleet worked to implement bycatch mitigation measures. However, conditions placed on 10 of the fisheries reviewed were insufficient to address bycatch issues. Further, only three of the fisheries examined had implemented effective measures to reduce bycatch.

Last year, the MSC announced they would be reviewing the bycatch elements of their standard as part of a full standard review. Given the findings of the study, BirdLife is urging the MSC to tighten its standards relating to bycatch and meet the expectations of green-minded consumers.

With thanks to the David and Lucile Packard Foundation for funding this work

Want to know more?
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Technical solutions to gillnet bycatch

Since 2015, BirdLife International has been involved in testing different net modifications in the Lithuanian and Polish inshore fisheries.

The challenge we face is that, despite rigorous work, we haven't yet found a solution that catches significantly fewer birds. Disappointingly, while evidence from Peru suggested that green lights may be the answer, our tests of green lights in the Baltic sea haven't backed this up. Equally, white flashing lights or black and white panels were either ineffective or increased the number of globally threatened long-tailed ducks being caught at our study sites in the Baltic sea.

While we continue to test green lights for now, it is also timely to explore alternative approaches to underwater mitigation, especially given the poor water clarity conditions in which many fisheries operate.

In terrestrial settings, such as at airports, visual stimuli have been found to deter birds from entering undesired areas. At sea, this approach has not yet been extensively explored and could offer a potential means to reduce bird entanglements. The development of such a device is currently ongoing and pilot tests are expected to happen by the end of the year.

A special thanks to the Fondation Segre, the Baltic Conservation Foundation and the European Union, which allowed us to carry out this work alongside the Lithuanian Ornithological Society, the Polish National Marine Fisheries Research Institute and the participating Baltic inshore fishermen.

Want to know more?

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Julius Morkunas

A long-tailed duck bycaught in a gillnet in Lithuania.

Equipped with spotting skills

Observers across the Mediterranean have been trained in species identification and multi-taxa bycatch data collection.



Antonio Vulcano

Observers trained to record bycatch on a Moroccan trawler.

Thanks to the MAVA-funded Mediterranean bycatch project, BirdLife International has trained 55 future observers in multi-taxa bycatch data collection in Morocco, Tunisia and Turkey. These are focal countries for the project covering the Alboran Sea, the Strait of Sicily/Tunisian Plateau and the Aegean Sea.

The training, which included practical at-sea demonstrations, was led by international experts and local specialists. Participants were taught how to identify vulnerable species (including seabirds, turtles, sharks, rays and corals), safely handle and release bycaught animals and the use of potential bycatch mitigation measures.

In addition to learning about different fishing gears, emphasis was put on the importance of building long-lasting relationships with fishers. The fishers can then be encouraged to help with data collection through port questionnaires and by providing logbooks.

Observers from these three countries are now out at sea or in ports with 'hands on their catches'. Their work is extremely valuable in getting the first glimpses of multi-taxa bycatch occurring in some of the most vulnerable areas of the Mediterranean Sea.

Want to know more?

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Conservation Technology

Tracking seabirds for conservation

Understanding how seabirds use different areas of the ocean is vitally important when planning conservation interventions.

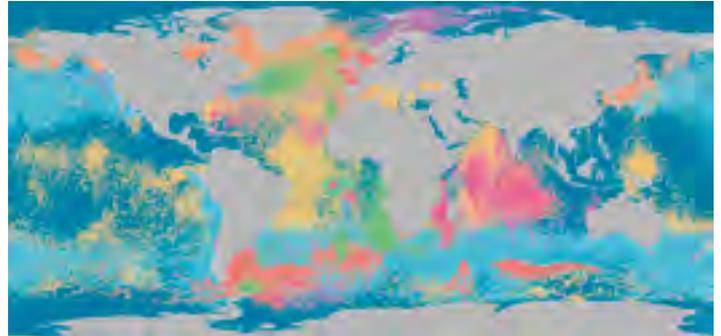
The Seabird Tracking Database (seabirdtracking.org) exists thanks to a unique collaboration between seabird tracking scientists worldwide. Co-ordinated by BirdLife International, it offers a wealth of data to inform conservation policy and management.

Analysis of tracking data can identify discrete areas that are highly important for seabirds. For example, with the permission of the tracking data owners, BirdLife has recently analysed data from multiple species to identify an important foraging area for millions of seabirds in the Northeast Atlantic. This area is used by threatened Bermuda and Zino's petrels and a Marine Protected Area (MPA) has been proposed to protect these birds.

Similarly, hotspots for 14 seabird and seal species have been identified from tracking data around the South Georgia archipelago. This data has helped inform discussions on assessing the appropriateness of spatial and temporal protection under the existing MPA.

However, area-based management can be less effective at protecting very widely dispersing species from large-scale, diffuse threats. In such cases, tracking data can be used to estimate density distributions of seabird populations across their range. These can be used to assess spatio-temporal overlaps with threats such as fisheries and provide more robust estimates than range maps alone. These analyses have played a critical role in BirdLife's work to mitigate albatross bycatch in fisheries across the world.

Although tracking studies generally focus on breeding adults for practical reasons (such as fledging birds not returning to their breeding sites for several years), we know younger birds can show



different space-use patterns at sea, and can be more susceptible to bycatch mortality. In the future, we hope that these tracking data gaps for juvenile and immature birds will be filled. Meanwhile, BirdLife is collaborating with scientists worldwide to develop more sophisticated ways to incorporate different life-history stages into density distributions, by including demography and phenology data.

By staying on-track with our seabirds we are continuing to learn about how they use the oceans. Help us protect them by sharing your data with the Seabird Tracking Database today.

Want to know more?

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Keeping an eye on the High Seas

Implementation of bycatch mitigation measures has been difficult to assess for vessels on the remote High Seas. However, technological advances indicate that this might be about to change.

Setting lines at night is one of the three main measures for reducing seabird bycatch in longline fisheries. Last year, the RSPB collaborated with Global Fishing Watch to conduct the first ever analysis of night setting on the High Seas. The analysis used publicly available satellite data and found it was possible to tell if boats were night setting. This represents a real step forward in improving transparency at sea.

The study found that fewer than 15% of fishing sets were at night and these results have been presented to the Commission for the Conservation of Southern Bluefin Tuna (CCSBT). We are now working with countries to conduct further analyses to understand their fleets' behaviour.

BirdLife International is also embarking on a new collaboration with the British Antarctic Survey, in which the same type of satellite data will be used in combination with radar detectors to study interactions of wandering albatrosses with legal and Illegal, Unreported and Unregulated (IUU) fishing vessels

This project has the potential to be a game-changer given the capacity for identifying IUU vessels from bird-borne radar. The outputs will help stakeholders and policy makers target bycatch



Derren Fox

observer programmes and monitor compliance with bycatch mitigation. The approach also has the potential to be applied to other highly mobile species.

With thanks to Darwin Plus for funding this work @darwin_defra @Darwininitiative

Want to know more?

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A shy albatross – the Albatross Task Force have been working tirelessly to reduce seabird bycatch in fisheries around the world.

Spotlight on albatross bycatch

In May 2019, the Seabird Bycatch Working Group of the Agreement on the Conservation of Albatrosses and Petrels (ACAP) met in Brazil.

Bringing together seabird bycatch experts from around the world, a key message from the meeting was the need to reinvigorate awareness of the conservation crisis affecting albatrosses and petrels. Bycatch mitigation measures are not yet being used sufficiently to stop the decline of these threatened species.

Members from BirdLife International's Albatross Task Force (ATF) teams, who have tirelessly been working to reduce bycatch in some of the world's deadliest fleets for albatrosses since 2005, presented their latest results to ACAP's Seabird Bycatch Working Group. This included the bycatch reductions resulting from the introduction of regulations requiring the use of bird scaring lines in the

Namibian hake fishery and the results from fieldwork on the use of modified purse seine nets in Chile, which have been shown to reduce seabird bycatch by up to 98%. These successes show what is possible to achieve.

But Regional Fisheries Management Organisations (RFMOs), which manage many of the world's major High Seas fisheries, are critically important in solving the conservation crisis due to the high overlap of fishing effort with many ACAP species. At the ACAP meeting, BirdLife International co-hosted a workshop to refine priority actions for engaging with these fisheries.

The enforcement of regulations to reduce seabird bycatch remains an issue on

the High Seas and at domestic levels. Moving forward, BirdLife International is committed to engaging with the fishing industry and regulatory bodies to address compliance issues and facilitate fleet-wide uptake of mitigation measures.

Supporting this work helps to save thousands of seabirds each year. **Become a Friend of the Albatross today at rspb.org.uk/friendofthealbatross**

Want to know more?
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or follow [@AlbyTaskForce](https://twitter.com/AlbyTaskForce) on Twitter.



Meeting with all the Gambian observers during a training on seabird and sea turtle bycatch.

Tackling EU fisheries in West Africa – a cross-border approach

The impact of EU fleets on seabirds in West Africa is currently unknown, but this should change.

Since 2019, over 300 European fishing vessels are authorised to fish in Mauritania, Senegal, Cape Verde, The Gambia and Guinea-Bissau through EU agreements. This includes longline vessels, known for high bycatches of seabirds.

There are 13 European species of seabirds migrating each year to West Africa, including the vulnerable Scopoli's Shearwater, which are protected under the EU Birds Directive. They now risk being caught in European vessels operating in their foraging area.

Information is missing on seabird bycatch in the EU's Distant Water Fleet, even though EU governments have an obligation to collect this information.

Improved electronic logbooks, remote electronic monitoring and scientific observers on board EU vessels will be crucial to solve this data gap.

On one hand, West African governments must explicitly tackle seabird bycatch in their national legislation, including from EU vessels fishing in their waters. However, the EU can financially and technically support better monitoring, scientific research and control of EU vessels in West African waters. Through increased cross-border collaboration, with the support of the MAVA Foundation, the BirdLife partnership is providing decision-makers in Europe and West Africa with solutions to address these issues cooperatively.

Nevertheless, it is up to the European Member States to limit the impacts their distant fleets have on seabirds, wherever they fish. In the meantime, the BirdLife partnership will continue to demonstrate that African/European collaboration is possible and needed to sustainably manage global fisheries while improving the state of the global marine environment.

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Putting seabirds on the map: determining oil spill sensitivity

A project led by SEO/BirdLife (BirdLife in Spain), SPEA (BirdLife in Portugal), LPO (BirdLife in France) in partnership with BirdLife International and Puertos del Estado (the Spanish state-owned ports company) has produced maps showing the sensitivity of seabirds to oil pollution.

This gives national governments the opportunity to take preventive action and support the decision-making process during an oil spill emergency.

Creating the maps involved modelling the distribution of each species for each region and season. A seabird sensitivity index was then developed based on factors affecting species' vulnerability to oil pollution (eg conservation status and ecological and life-history traits).

The sensitivity index was then weighed by the population abundance of each species and combined with the distribution models to generate an Oil spill Sensitivity Map for each species and season. Combining these produced an overall Oil spill Sensitivity Map.

During emergency responses, Spain, France and Portugal currently use georeferenced systems that take into account variables including Special Protection Areas (SPAs). However, they do not account for the presence of seabirds outside of these areas.

National governments can now use these new maps to direct ship traffic away from highly sensitive areas. In the event of a shipping accident, the maps can inform the best course of action to protect wildlife. Such sensitivity mapping can also support the implementation of an ecosystem-based approach to marine spatial planning.



Oil Spill Mapping can be used for emergency situations.

This project was funded by a grant from the European Union DG ECHO.

Want to know more?

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Collaborating for conservation

First seabird bycatch assessment completed for global tuna fleets.

The vast distances travelled by albatrosses expose them to the risk of being caught as bycatch in multiple fisheries. Understanding the scale of this cumulative threat is an important step in finding solutions to the bycatch problem.

In February 2019, data owners and modellers from multiple tuna fishing nations came together to produce the first estimate of total seabird bycatch in the world's pelagic longline fleets of the Southern Hemisphere. This was the output of the Food and Agriculture Organization Areas Beyond National Jurisdiction Common Oceans Tuna Project, funded by the Global Environment Facility, and co-ordinated by BirdLife South Africa.

The aims of the workshop were:

- to estimate of seabird bycatch in pelagic longline fishing in the Southern Hemisphere
- to assess the population level impact of this bycatch estimate for key species
- to strengthen national scientist capacity to analyse their own bycatch data in future.

27 participants, including scientists, fisheries managers, bycatch officers, data consultants and NGO representatives participated.



BirdLife South Africa

The Global Seabird Bycatch Assessment Workshop attendees.

Seven contrasting data analyses produced similar bycatch estimates, which gives us confidence in the results.

The results will be published in a scientific paper and participants are keen that the collaboration from this project will endure and continue to make science-based recommendations to help protect seabirds at sea.

Want to know more?

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The mysteries of penguins at sea

Penguin tracking data can help protect this threatened group.

Penguins are the second most threatened group of seabirds, facing multiple challenges in our changing world. They are particularly threatened by climate change and overfishing. Being unable to fly, when insufficient prey is in nearby waters, the energetics to capture enough prey to feed developing chicks do not add up.

The remarkable ability to gain insight into penguin distribution at sea has come through the revolution of tracking technology. Early devices were large and cumbersome. Nowadays, birds can be temporarily fitted with devices that are no bigger than a smart watch. Scientists can track birds for days on end, following them via satellite while they roam the open ocean. This knowledge can be used to inform effective conservation and management strategies for these birds and their associated biodiversity.

BirdLife has just completed a global review of the data available on the distribution of penguins at sea, uncovering the key data gaps that could aid further support for these birds. These include juvenile tracking (the 'lost' years), adult tracking beyond the breeding period, and the need to fill gaps for many of the globally threatened crested penguin species.

Among seabird species, penguins are good candidates for benefiting from protection afforded through Marine Protected Areas (MPAs), given that for critical periods of their annual cycle they occur and aggregate at spatial scales on the same order of magnitude as site-based conservation tools. Penguins also face several threats, including overfishing, bycatch and pollution, which MPA designation and Marine Spatial Planning can help mitigate.



Jonathan Handley

Tracking gap analysis kindly supported by the Prince Albert II of Monaco Foundation

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#AlbatrossStories

This educational social media documentary chronicles the lives of five albatrosses on Bird Island (South Georgia) and is an amazing chance to learn more about these birds and the threats they face. Watch Bobby the grey-head fledgling and follow the flights of his cohort, thanks to their satellite tags. See Atlas and Amelia, our wanderer stars, raise their chick Greta through an Antarctic winter – when the nest camera isn't frozen over. For regular updates follow [#AlbatrossStories](https://www.instagram.com/AlbatrossStories)

With thanks to the SGHT and Darwin Initiative for funding this work
[@darwin_defra@Darwininitiative](https://twitter.com/darwin_defra)

End notes

The BirdLife International Marine Programme is co-ordinated, on behalf of the BirdLife International Partnership, by the RSPB (BirdLife Partner in the UK).

For more information, please contact us at marine@birdlife.org



The RSPB is the country's largest nature conservation charity, inspiring everyone to give nature a home.



The RSPB is a member of BirdLife International, a partnership of conservation organisations working to give nature a home around the world.

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