

Some conservation efforts focus on saving particular species from extinction, but what happens when a whole group of birds is under serious threat? Of the world's eight curlew species, two have already disappeared and others could go the same way unless we act rapidly to mitigate the threats they face.

PREVENTING EXTINCTIONS PREVENTING EXTINCTIONS

round-nesting birds do a vital job they tell us what is happening on the ground. This is where we build houses and develop industry, farm for food, drain land and 'reclaim' it, extract resources, deforest or plant trees and place energy infrastructure. It is also where we take our leisure. All these activities affect land-based wildlife, and birds that breed directly on the earth are in the midst of the fray.

This is also the case when birds migrate to and from their breeding grounds, journeys which can cover many thousands of kilometres. Tracking coastlines and crossing continents over vastly different environments, they need safe passage and sites to feed and rest. Many species use whole landscapes, not single habitats. If they are thriving, then fine, but if they are disappearing, and we want to hold onto them, something has to change.

Curlews are large, charismatic ambassadors for earth-bound creatures. They are the poster birds for environmental health across large areas of the world – especially our grasslands, heaths and wetlands and particularly on the coast. By their very nature, they attract our attention and our affection, providing a conduit between us and the land. It is therefore deeply concerning that their trilling, fluty calls, which we find so beautiful, may reflect more often a lament than a call of joyful abundance.

The modern world is not always kind to curlews. Out of the eight species across the globe, two are most likely already extinct, and the other six are in various stages of peril. Curlews need space and peace, to be free from too much human disturbance and hunting. They must rest up and feed over the winter months on soft soils and mud rich in invertebrates. When breeding, their eggs and chicks need to be protected from excess predation and human activities, such as farming, and they need insect-rich habitats for food. All of these conditions are getting harder to come by.



ABOVE Ground-nesting birds such as Eurasian Curlew often face a range of different threats © Andreas Trepte/www.

avi-fauna.info

We are in competition with these ancient spirits of the wild for the same places, wanting their breeding and wintering areas for our own uses. In some places they are hunted for food or sport, adding further pressure. Too often, curlews are collateral damage on a fast-paced, business-driven, highly populated planet.

The species I work closely with is Eurasian Curlew. With a breeding range stretching from western Ireland to eastern Russia, it is classified globally as Near Threatened on the IUCN Red List, but that is not the whole picture. In some parts of the western end of its range, country-wide extinctions are a real possibility. In southern Ireland, for example, numbers have crashed by 98% since the 1980s and only 105 breeding pairs remain. In Wales, there has been a similar decline of around 80%, in Scotland 60% and in England about 30%. This is a serious situation as the UK holds 25% of the world population. Eurasian Curlew is Red-Listed in the UK because of these rapid losses and it is considered a top conservation priority.

Worryingly, the pressures faced by this embattled bird are replicated to varying degrees in other curlew species around the world.

BREEDING WOES

Adult Eurasian Curlews survive well. The problems are during the breeding season – they are simply not producing enough young. Curlews need to fledge one chick every other year for the population to remain stable. In many places, they are only managing half that. The three major issues have been identified as farming practices (mainly





grass cutting for silage to feed livestock), unsustainable predation of eggs and chicks, and widespread loss of habitat.

Eurasian Curlews typically lay three or four eggs directly on the ground, most often in lowland farmland, grasslands or on the rough pastures and moorland of higher ground. From the moment the first egg is laid, the nest is vulnerable. Frequent grass cutting for silage begins as early as mid-April in some areas, and trampling by livestock is also a danger if stocking densities are high. Bizarrely, nest cameras show that in some areas many eggs are eaten by sheep. If the eggs and chicks survive the machines and farm animals, predators such as foxes Numbers, though, are no guarantee of safety. The and crows take a heavy toll. These middle-sized predators are common in the human-dominated landscapes of western Europe, and in some breeding sites more than 75% of nests are lost to predation within two to three days after laying.

BirdLife's European partners, including the RSPB in the UK, NABU in Germany, Birdwatch Ireland and VBN in The Netherlands, have joined other environmental organisations in implementing measures that include erecting electric fences around nests, changing mowing regimes, advising farmers, predator control and advocating for Eurasian Curlews within agricultural policies. There is also increasing interest in tagging and monitoring curlews, giving us a better understanding of their movements and survival, both on migration and on their breeding grounds.

Agriculture has rapidly spread to feed a growing human population, which globally stands at 8 billion; farming now takes up almost 40% of the



Earth's land. Unless agricultural policies take into account the needs of ground-nesting birds, then some, like curlews, will disappear from large areas; indeed, they already have in some places.

LOST SPECTACLE

Once so numerous, the migration of Eskimo Curlew was considered one of the wildlife spectacles of North America. When they passed overhead, flying between the tundra and South America, the flocks were said to sound like "the wind whistling through the ropes of a thousand ton vessel" (from Alpheus Spring Packard's The Labrador Coast, 1891). conversion of the prairies to farmland saw the removal of their main food supply, the now extinct Mountain Locust. That, combined with intense hunting for the pot – perhaps 2 million birds a year were shot – meant it didn't take long for Eskimo Curlew to disappear from the face of the Earth.

The last confirmed record was from Barbados in September 1963. The species is still considered Critically Endangered (Possibly Extinct) because, although there have been many claims since then, these all have a very low probability of being valid.

The conversion of prairies has also greatly reduced the range of Long-billed Curlew. This spectacular species, whose bill can measure up to 20cm, once nested in grasslands across central and western USA, but it has now disappeared from Michigan, Illinois, Minnesota, Wisconsin, Texas and Arizona. Even though shooting them is illegal, they are still targeted. Surveys show that in south-west Idaho, which was once the densest area for

ABOVE LEFT

Eurasian Curlew's streaked brown plumage contrasts with its white underwings © Andy Li

BOTTOM LEFT

The RSPB regularly monitors curlew nests across the UK © Patrick Cashman (rspb-images. com)

LEFT

Eurasian Curlew's distinctive long, curved bill allows it to forage for invertebrates deep within mudflats © **Dominic Mitchell**



CELEBRATING CURLEWS WORLDWIDE

There are two reasons why World Curlew Day is celebrated on 21 April It is the feast day of St Beuno - patron saint of curlews - as well as the day that curlew champion Mary Colwell began her 500-mile walk across the breadth of the UK in 2016 to help raise the profile of Eurasian Curlew.

Since 2017, World **Curlew Day has** celebrated all species of curlews and raised awareness about the threats they face as a result of local and global factors, such as agricultural intensification and climate change. **Colwell founded Curlew Action (www.** curlewaction.org) in 2019, after a series of talks, meetings and forums among experts discussing what was most needed to rescue the rapidly declining UK curlew population.

There are a multitude of resources on the website, including podcasts, which bring different perspectives from conservationists. artists, writers and scientists about the world's curlews.

"TOO OFTEN, CURLEWS ARE **COLLATERAL DAMAGE ON A FAST-**PACED, BUSINESS-DRIVEN, HIGHLY POPULATED PLANET"



Monitoring curlews at their breeding grounds is critical to informing conservation efforts © Michael Schroeder/ Shutterstock

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breeding curlews, numbers have fallen by 95% over the last 40 years, with poaching cited as the main cause. Rapid housing developments and increased use of the public lands where the curlews breed has brought people and wildlife closer together.

Heather Hayes from the Intermountain Bird Observatory (IBO) at Boise State University, which is studying Long-billed Curlew, described the pressures it faces. Between 2013 and 2018, 16 birds were fitted with transmitters and half were shot, indicating more faced the same fate but were not detected.

Long-billed Curlew is currently assessed globally as Least Concern, but if declines continue it will follow Eskimo Curlew unless its habitat is protected and illegal persecution is stopped. The IBO and BirdLife partner the American Bird Conservancy are working to protect this beautiful species through education programmes with local communities, restoring habitat and tracking. Educating people about the birds and encouraging respect for them and their needs is essential, and there is some indication this is working. Heather told me that since 2018, no more tagged birds have been shot, which she hopes is partly due to an increased understanding of the species' plight.

Hunting has also contributed to the likely extinction of Slender-billed Curlew, which once migrated between its nesting areas in Siberia and perhaps the steppes of Kazakhstan, and its wintering grounds in the Mediterranean. Despite large areas of suitable breeding habitat, there have

- 1. The last confirmed record of Eskimo Curlew came from Barbados in 1963 © Don Bleitz
- 2. Slender-billed Curlew was last seen in Morocco in 1995 © Chris Gomersall (rspb-images.com)
- 3. The world population of Far Eastern Curlew is now thought to number just 35,000 individuals © Aurélien Audevard/ Agami
- 4. Little Curlew is one of the least studied species in its genus © Hiyashi Haka/Flickr
- 5. Bristle-thighed Curlew may undergo a period of flightlessness while moulting its primaries and secondaries © Mick Thompson/Flickr
- 6. Whimbrels in Eurasia differ from those in the Americas principally in having a white lower back and rump © Saman Lenin photography/ Shutterstock

been no verifiable sightings for 25 years; it may now be extinct, although it is still assessed as Critically Endangered. Historical reports describe large-scale hunting for food and many birds were seen hanging on market stalls in Italy and elsewhere. As Slenderbilled Curlews were less flighty than Eurasian Curlews, feeding higher up the shore, they were an easy target. This species has disappeared on our watch, and it may not be the last.

The next most 'heartbreaking' curlew is Far Eastern Curlew, the largest migratory shorebird in the world, numbering 35,000 individuals. Slightly larger than Long-billed, but with a comparable bill length, it breeds in Siberia, Kamchatka and Mongolia, and the majority winter in Australia, a 9,000km journey to make each way. This striking bird is the one most likely to follow Eskimo and Slender-billed Curlews to extinction, primarily due to habitat loss across its range.

Over the last few decades, its decline has been steep and dramatic. The IUCN considered it of Least Concern in 2004, Vulnerable in 2010, and then upgraded it to Endangered in 2015 following a decline of 80% over 30 years.

The main pinch point has been its migratory stopover sites in the Yellow Sea wetlands, an essential area for resting and feeding. This is the single most important area for migratory birds along the East Asian-Australasian Flyway. Millions of birds rely on the tidal mudflats, yet this critically important ecosystem has seen a 65% loss over 50 years due to the rapid development of the



coastlines of China and the Korean Peninsula. It is among the world's most degraded marine areas and described as an epicentre of extinction.

Wintering sites in Australia are also highlighted for development. Waterside marinas, housing and tourism opportunities, such as the proposed Toondah Harbour development in Queensland, constantly battle with conservationists trying to protect the dwindling numbers of curlews that depend on this picturesque area for feeding. A wide range of commercial enterprises constantly threatens Far Eastern Curlew's survival. There is no better example of economic development being pitched against the natural world.

Similarly, Little Curlew (also known as Little Whimbrel) breeds in the north-east Russian Arctic and winters in Australia. On its wintering grounds, it prefers grassy, dry areas with pools rather than the extensive mudflats used by coastal waders, which may have protected it from the worst of the habitat degradation, both in the Yellow Sea and on its wintering grounds. But the truth is, no one really knows. This exquisite, delicate-looking wader has not attracted as much attention as other species, but the data that do exist once again point to worrying declines.

Fewer sightings of Little Curlews are being recorded at regular winter haunts, something that BirdLife Australia's Dr Amanda Lilleyman is concerned about. She ran a small project looking at the abundance and distribution of Little Curlews in Australia. "I am worried about Little Curlew.

The IUCN says it is Least Concern, but I think that is because there is a lack of data. Historically, people would see them on different sports ovals and school grounds because they like grassy areas, but they're not around anymore. There is not a lot known about the Little Curlew and its population size, but there's a lot of habitat destruction and other threats within their entire flyway. Like most migratory shorebirds, the future looks dire."

RAY OF HOPE

Some good news, though, has brightened the future for curlews using the Yellow Sea. Since 2018, the Chinese government has banned further development of its mudflats, and two of the most important areas have become World Heritage Sites, with a further 12 to be added in the next few years. Similar progress has been made in South Korea, and North Korea is also taking positive steps.

There is now a focus on recovery and restoration rather than degradation, and an increasing awareness that local actions have global consequences. The BirdLife partnership, alongside a wide range of organisations and governments along the East Asian-Australasian Flyway, has been a vital player in this positive development. It is too early to know if this has come in time to reverse the decline for so many shorebirds, but it is truly a welcome step forward.

Some better news too for the wonderfully named Bristle-thighed Curlew, which migrates non-stop between Alaska and islands in the Pacific

ASSESSING EXTINCTION RISK

As the official Red List authority for birds, **BirdLife International** regularly reassesses the global extinction risk of all of the world's 11,000 bird species, to help identify conservation priorities. In 2023 and 2024, the Red List team aims to reassess the status of various waders. including curlews, and would welcome relevant data and information (redlistteam@birdlife. org). Where it appears that species may qualify for listing in a higher or lower Red List category, the team will develop and post proposals for consultation on BirdLife's **Globally Threatened Bird** Forums (https://forums. birdlife.org/red-listchanges-forums/).

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Ocean – a distance of over 4,000km. It is the only extant shorebird to become flightless during its winter moult, which renders it vulnerable to predation, especially by introduced pigs, cats and dogs. Extensive alteration of the land for development and agriculture has also displaced the birds from traditional wintering areas.

Recent successful management on some islands, which includes fencing around breeding sites, exclusion of people, and water level and vegetation management, has seen the birds return, which points the way to protecting them in the future. It was downlisted from Vulnerable to Near Threatened on the IUCN Red List in 2020.

Whimbrel is a stocky, shorter-billed curlew with a stripy head. It's considered Least Concern due to its wide distribution and large population, but, as ever, this picture is nuanced. It is the most widespread curlew, breeding right across Arctic regions, and different populations winter on the coasts of six continents, including Africa and South America. Whimbrels are so widespread and migrate such long distances that they face a range of issues, including climate change (increasing storms and coastal erosion), large-scale habitat alteration and destruction, high predation levels, and hunting for sport and subsistence.

A female Whimbrel called Machi, for example, was satellite tagged in 2011 as part of a multi-organisational tracking project. She was found to have travelled more than 43,000km over two years as she flew between Hudson Bay in Canada and the coast of Brazil. Her last flight included a long detour around Storm Irene, and sadly she was shot as she came down to rest on Guadeloupe.



ABOVE

Some authorities consider American populations of Whimbrel as a distinct species, Hudsonian Whimbrel © rock ptarmigan/ Shutterstock

BELOW

Although most Eurasian Curlews migrate, in some milder regions of Europe populations are resident throughout the year © Dominic Mitchell BirdLife has since been working with flyway partners to define safe reserves, a vital step as the number of Whimbrels migrating along the Atlantic Americas Flyway has fallen by 50% since the mid-1990s. As increasingly intense tropical storms coincide with the peak of migration, birds such as Whimbrel are being grounded in the Caribbean, where they must find safety, rest and food if they are to survive. A warming world is adding more pressures to long-distance travellers.

CONSERVATION ACROSS FLYWAYS

All curlew species face daunting challenges. They are windows to the conservation issues of the world, and climate change is now an added factor. So many threats bear down along the migration routes of these species that only a holistic approach can begin to tackle them. BirdLife is working with National Audubon (BirdLife in the US) and the Development Bank of Latin America in the Americas and the East Asian-Australasian Flyway Partnership and Asian Development Bank in Asia and Australasia to take an entire flyway approach to conservation in both regions.

This is what is termed a 'full lifecycle conservation approach', which recognises that there is no point in only protecting one part of the journey – for birds to thrive they have to be safe across the flyway – and it relies on multi-organisation co-operation, a key strength of the BirdLife partnership. Partners can focus on safeguarding critical habitats and sites for key species and work with other conservation interests, such as the Western Hemisphere Shorebird Reserve Network, to make this happen. Such co-operation is good news for so many beleaguered, migrating birds.

As a group, curlews the world over are in the eye of many conservation storms, and all species are declining. Their haunting, bubbling songs are telling us all is not well, and they are sounding a warning which we ignore at our peril. Curlews challenge us to think big, to work across landscapes, even continents, to join the dots and work together to save them. If curlews thrive, then so much else will too. We cannot allow them to fall silent.

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