

Iconic wader in trouble

Curlew in coastal lagoon in winter. – Shay Connolly



Curlew

Numenius arquata

The Curlew is one of Ireland's most recognisable and charismatic birds. Feeding on an estuary amongst other waders, its large size in combination with its long, deeply-curved bill separates it easily from all but the smaller Whimbrel, a spring and autumn passage migrant. The Curlew is in trouble and needs our help.

Curlew breeding population in freefall

Peadar O'Connell reports



The melancholy cry of the Curlew is instantly recognisable. Whether it be on the exposed uplands of Donegal, along the flooded callows of the mighty Shannon or on the wild Atlantic coast, the haunting "cour-lee" call is nature at its rawest and has the ability to make you pause and wonder.

I have been lucky enough to work on BirdWatch Ireland's Shannon Callows Breeding Wader Project, which is working to protect and enhance populations of breeding waders on the Callows. This area is one of the last Curlew strongholds in Ireland and contains some of the best breeding habitat for the species.

I remember the first Curlew nest I found as I walked the Callows one afternoon. A large, brown bird exploded into the sky from a short distance away, screaming out a warning; my heart jumped. Its nest contained four large eggs, which would be monitored until the young fledged. The story took a tragic turn, however, as all the eggs were predated before they hatched, probably by a fox.

Conservation status

Curlew is on the red list of Birds of Conservation Concern in Ireland (Lynas et al., 2007). Its total Irish breeding population fell dramatically from 12,000 to just 1,700 birds between 1988 and 2002. This shocking 86% decline is likely to have been influenced by habitat loss due to land-use changes and by increased predation pressure.

In 2008, the status of Curlew was reclassified from 'Least Concern' to 'Near Threatened' on the IUCN

Breeding map

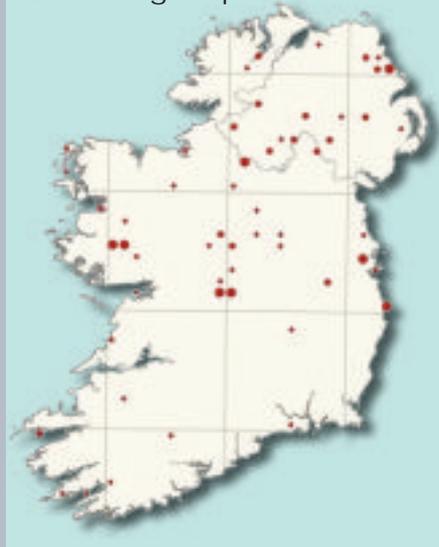


Figure 1. Current breeding distribution of the Curlew, taken from the first breeding season (summer 2008) results of the Bird Atlas survey 2007-2011. These results are provisional, as more sites will undoubtedly be located as the survey progresses. They do, however, provide some idea of the most important breeding regions.

red list of species of conservation concern. This was due to a moderately steep decline over its global range (see www.iucnredlist.org).

Curlews still occur widely throughout the country during the breeding season. However, they are thinly distributed on the ground (Fig. 1). They have managed to adapt to many of our low-intensity agricultural habitats; nevertheless, they are under severe pressure. This may not be evident to the casual observer, though, because of one very important phenomenon, migration. As well as our own "native" birds, large influxes of migrants from northern Europe, and some from Britain, appear each year after the summer breeding season. This increase in numbers can be deceptive and many people are taken aback when told that these magnificent birds are in decline.

The winter migrants do not, however, breed in Ireland: they return to Britain and northern Europe the following spring. It is thought that most of the birds that breed in Ireland also winter in Ireland.

In contrast to the dramatic decline in the Irish breeding population, the winter population appears to be relatively stable. This is probably due to the fact that most of our winter birds come from areas where declines have been less severe or absent, e.g. Denmark and European Russia, where the breeding populations seem to be stable or even increasing, though overall trends are not well understood.

BirdWatch Ireland, with the help of sponsors and volunteers, carries out an annual winter survey of wetlands, the Irish Wetlands Bird Survey (I-WeBS). This survey has found that the highest numbers of Curlews occur during February. The survey probably underestimates the total numbers, as Curlews can occur widely in the broader countryside.



Threats to Curlew

The biggest threat to Curlew is habitat loss. This is mainly due to changes in land usage including afforestation of upland sites and reclamation for agriculture, as well as agricultural intensification.

- **Afforestation** fragments the Curlew's breeding habitat, destroying large tracts of bog and disrupting ecosystem functions, degrading any remaining habitat. Forestry also attracts predators, and the trees provide look-out perches for birds of prey.

- **Drainage** is associated with forestry and with agricultural reclamation and intensification. Curlews and their chicks require damp soil to probe for invertebrates.

- **Inappropriate grazing regimes** are also a problem. Curlews prefer to nest within tussocks in otherwise relatively short grassland or bog. Cattle generally make the best grazers for Curlew habitat, as their grazing maintains the diversity of vegetation and creates a variety of sward heights. This benefits many species of plant and animal and is also beneficial for other breeding waders such as Redshank, Lapwing and Snipe. Stocking density is, however, an important factor: if it is too high there is not only a greater risk of nests and chicks being trampled but also of vegetation being damaged, leading to unsuitable habitat. Stocking densities, if too low, can result in vegetation that is too tall and rank for nesting and feeding in.

- **Predation.** Curlews are ground-nesting birds and are therefore prone to attack from mammalian predators. Fox, Pine Marten, Otter and Stoat could all take a Curlew egg or chick, and all bar the Stoat could even catch an adult, if lucky. Hooded Crows

are probably the main avian predator. Increased predation is often a result of fluctuations in the natural populations of native predators due to human-induced pressures such as habitat loss. This pressure is further increased when alien species such as American Mink invade an area.

- **Shooting.** Curlew are still legal quarry for hunters in Ireland and although the number shot is

unknown it is probably not large. BirdWatch Ireland's policy on hunting recommends the removal of species of conservation concern from the huntable list. This would include Curlew.

- **Climate change.** It is predicted that climate change will result in a northeasterly shift in the population range of a number of species, including Curlew.

Where to see them

Winter: The best sites for seeing Curlew in winter are the Shannon and Fergus estuaries, Co Clare; Cork Harbour, Co Cork; Wexford Harbour and Slobs, Co Wexford; Dundalk Bay, Co Louth; and Lough Swilly, Co Donegal.

Summer: Unfortunately, as they are scarce in the nesting season, reliable locations are few. The midlands, particularly west of Banagher Bridge, provide opportunities to see Curlews performing their display flights during April/May. The Donegal uplands (e.g. Glenveagh National Park) also support breeding Curlews.

A Curlew eats a crab.

– Shay Connolly



What is being done?

Curlew is one of a suite of breeding waders using more or less the same type of breeding habitat, so any work to protect the Curlew will also benefit Lapwing, Redshank and Snipe, all of which are species of conservation concern in Ireland.

The Shannon Callows breeding wader project aims to increase the numbers of breeding waders in the midlands. This project has been running since 2005 and has proven very useful in understanding the reasons for the declines in wader numbers on the Callows. As part of the management component of the project a grant scheme was introduced to pay farmers to manage the Callows, a traditionally non-intensive farming area, in such a manner as to encourage the conditions for Curlew as well as the other waders. This has involved protecting nests and managing livestock to create appropriate grazing regimes; some areas have been re-colonised following this work. In addition, work has been carried out to reclaim or recreate wader habitat, including tree and scrub removal.

In Northern Ireland, the Countryside Management Scheme run by the Department of Agriculture and Rural Development has a Breeding Wader Option, enabling farmers to undertake five-year management regimes to benefit waders.

What next?

BirdWatch Ireland would recommend that a breeding wader option be included (in appropriate areas) in the Rural Environmental Protection Scheme (REPS) (Ireland's agri-environment scheme) and the Farm Plan Scheme (the National Parks and Wildlife Service scheme for designated sites or important areas not in REPS). The Shannon Callows wader project is providing data which will help in this process. All areas where Curlew are breeding should be identified and appropriate management continued on these sites.

Work is currently ongoing within BirdWatch Ireland to help the Government meet our obligations under the EU Birds Directive, with which Ireland was recently found guilty of non-compliance. A plan for protecting species outside of currently designated areas is being developed.

Although the outlook for Curlew, like so many of our birds and wildlife, is uncertain, concerted conservation efforts and a good understanding of how to tackle land management issues in the wider countryside will go a long way towards improving its fortunes. However, without a healthy population and suitable habitats, future threats such as climate change will be much more destructive.

Ronnie Martin

How you can help

The current Atlas survey is providing some fantastic results which could be greatly improved with more volunteer input. Roving records and timed tetrad visits are used to develop a map for each species, identifying the presence/absence and abundance of all our birds.

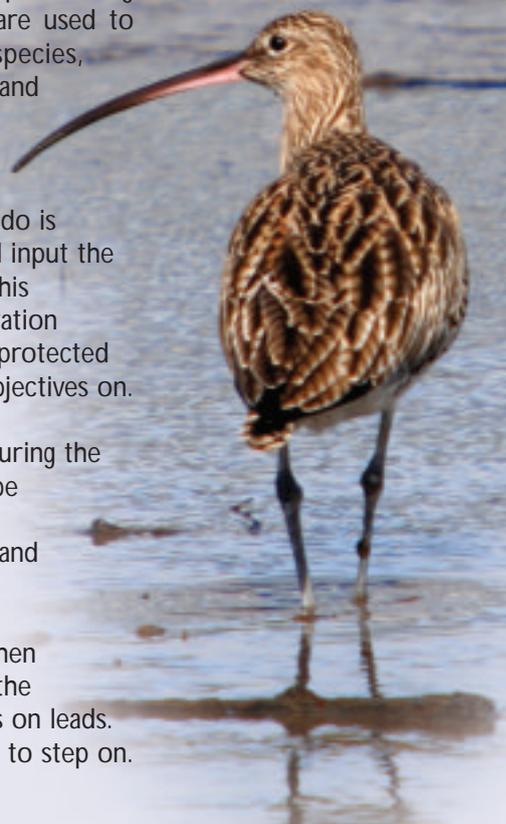
You don't need to be a great birder; all you need to be able to do is identify species you recognise and input the location onto the Atlas website. This information is vital in any conservation programme as no species can be protected efficiently without data to base objectives on.

If you see a Curlew, particularly during the summer months when they may be breeding, go to <http://www.bto.org/birdatlas/> and help in the conservation work.

Please remember to be careful when walking in Curlew habitat during the breeding season and to keep dogs on leads. Nests are difficult to see but easy to step on.

Curlew on mudflat.

– Pádraig Kavanagh



The melancholy call of the Curlew would become just a sad reminder of its former glory should it disappear as an Irish breeding bird. A walk in the hills, bogs or Shannon Callows would be all the poorer for its loss. We must ensure that the Curlew's efforts to adapt to our rapidly changing landscape are not in vain.

Peadar O'Connell is BirdWatch Ireland's Species Policy Officer. He will be developing a framework for the protection of priority species throughout the country to help ensure that Ireland complies with the EU

Birds Directive.

The Species Policy Officer post is funded through the Environment Fund of the Department of Environment, Heritage and Local Government.



Comheshool, Oidhreacht agus Rialtas Áitiúil
Environment, Heritage and Local Government



Ronnie Martin