The Breeding Waders in North Kent
- Reasons to be cheerful

Alan Johnson

One of the oddities of working in the field of wildlife conservation is that, quite rightly, we put most of our effort into helping the species that are struggling, with no guarantee of success. There is no shortage of candidates for help, as the State of Nature report (2013) recently described, and nature is under enormous pressure, particularly in the South East of England, where some of the UK's most important wildlife sites fight for space amongst one of the worlds most populous regions. In spite of this, we have had some big wins over the past few years as a result of targeted conservation action, with increases in bitterns, corncrakes, stone curlews, sea eagles, cirl buntings and red kites being notable. I think we may soon be able to add the breeding waders of North Kent to this list.

Because of their long history of population decline (lapwing have declined by 80% since 1960 in England and Wales) and their status as indicators of the health of wetland habitats in general, breeding waders are a high priority for conservation action in the UK. The North Kent Marshes have about three quarters of all the breeding waders in the South East of England, primarily lapwing, redshank and oystercatcher (the clay soils not being suitable for snipe, and black-tailed godwit recently becoming extinct as a breeding species in Kent), which makes this area an overwhelming priority for action. I trawled through the data on breeding lapwing recently for the Kent Breeding Bird Atlas (2015) and there are some interesting trends. The Breeding Bird Survey indicates that lapwing have declined significantly across Kent, reflecting declines across the UK which probably result from changes in farming practice, e.g. a switch to winter wheat, but have remained stable on the wet grassland habitat found on the North Kent Marshes. The Breeding Bird Atlas supports this picture, with birds disappearing from the middle of the county, but remaining on the lower, wetter margins.

The North Kent Marshes were subject to a determined land drainage programme following World War II, and many areas were subsequently converted to arable, so this wetland retreat for waders was also under pressure. Lapwing, redshank and oystercatchers all have a preference for open, seasonally wet, grazed pasture, but much of the marshes had become dry, inappropriately grazed and enclosed by scrub. However, in contrast to the declining population trend in the wider Kent countryside, the wader population on wet grasslands in Kent has recovered from the 80's onwards. This has been the result of some significant and heartening changes on the ground, which can broadly be summarised as making new wetland habitat, supported by agri-environment schemes, and tackling the issues around low chick productivity.

The Breeding Birds of Wet Meadows Survey is a good indicator of change in wader populations in the UK and records a big uplift in wader populations between the 1982 and 2002 surveys on wet grasslands in Kent, with the number of lapwing pairs increasing from 472 to 650 and redshank pairs increasing from 38 to 176 pairs. The increase between the 1982 and 2002 surveys is almost entirely due to the excellent work undertaken by the Elmley Conservation Trust on the Isle of Sheppey, particularly from the 1990's onwards. The wader populations on Elmley NNR rocketed off the back of hundreds of hectares of pioneering habitat management and this family run farm continues to be the main stronghold for waders in the South East today.

Over the same period of time, the RSPB has developed 657 ha of new wet grassland habitat in North Kent, creating space for an additional 180 pairs of lapwing and 190 pairs of redshank since 1990. There are two main ways to provide new habitat; creation and restoration. Creation involves starting from scratch with arable farmland, creating new ditches, rills, dams and other hydrological features that allows shallow pools to be maintained as feeding areas for chicks during the breeding season. A grass sward will also need to be established along with gates and fences to allow grazing animals to be managed. The award winning Great Bells Farm project, a partnership between RSPB and the Environment Agency, used digital mapping and satellite co-ordinated GPS-guided machinery to create precise design features that maximise the benefits for wildlife and make the management of water more efficient, and the early results are encouraging. Although the creation of wet grasslands on former arable sites is important, there is a note of caution because it can take a long time to be fully effective. Northward Hill was first reverted from arable in the early 1990's, but still cannot quite match the density of breeding waders that are found on established sites, such as Elmley Marshes. One of the issues may be that after years of ploughing and cropping on arable sites, the surface topography and soil structure is not as beneficial as that found on un-improved sites. We have been investigating techniques that might speed up the process, such as breaking up soil structure by sub-soiling, but we may need to be patient, and accept that natural habitats cannot be created fully-formed.

This is why the second technique, restoration, is more desirable, (and cheaper!). This involves finding original, un-ploughed wet grassland sites and "switching them on" for wildlife. The most recent example is Higham Marsh, where the RSPB is working in partnership with a local farmer to turn around 150 ha of old grazing marsh by removing invasive scrub, installing water control structures and adjusting the grazing regime. Since the work began in 2013, the results have been stunning, with lapwing increasing from 2 to 49 pairs by 2015, and redshank from zero to 74 pairs.

Another big factor that has contributed to this success is increasing chick productivity. Scientists have worked out that lapwings need to successfully fledge between 0.6 and 0.8 chicks per pair in order to maintain a stable population, so we need to ensure that our lapwing pairs raise more than this if we want the population to increase. Because of the distribution changes described above, breeding waders are increasingly found in restricted, managed areas. This, along with other factors, makes these ground-nesting birds vulnerable to predation of eggs and chicks. Evidence from across the UK suggests that predation by nocturnal mammals is a big factor in low wader productivity and we have evidence from nest cameras that foxes are a significant predator on our reserves in North Kent. Over the last few years the RSPB have installed electric fencing around key areas for waders in the hope of excluding ground predators. These measures, backed up by fox control,

have resulted in high levels of chick productivity on RSPB reserves every year since 2013. In 2015 RSPB reserves achieved overall lapwing productivity of 1.3 fledged chicks/pair in North Kent (including 1.8 at Higham Marsh), which is well above target. Wader productivity on Elmley NNR has been high in most years since at least 2008, and the hope is that this will contribute to further population increases over the next few years.

We now have historically high densities of breeding waders on managed areas in North Kent and attention is shifting to the gaps in-between. Much of the work described above is underpinned by agri-environment schemes, which pay landowners and managers to manage for wildlife, including specific payments for breeding wader management. The RSPB is working with Natural England to increase the level of advice to farmers in agri-environment schemes in North Kent and the hope is that this will provide a further boost to wader populations.

There are still some big challenges ahead, and the predicted impact of climate change on water availability in the South East will require some imaginative solutions from wetland managers, but with plans for more habitat restoration at Seasalter Levels and a major wetland creation project at Lydden Valley, there are good reasons to be optimistic about the future. Because they do not have a glamorous reputation, and because of a lack of good access, the North Kent Marshes are not always the easiest place to visit, and many of the best places for these delightful ground-nesting birds are out of sight to many, but rest assured, there is a lot going on out there and it is working!

Alan Johnson – March 2016

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References:

Breeding Waders of Wet Meadows Survey ~ 1982 *British Trust for Ornithology*
Breeding Waders of Wet Meadows Survey ~ 2002 *British Trust for Ornithology*
The Breeding Bird Survey ~ *BTO/JNCC/RSPB*
The State of Nature Report ~ 2013 *Royal Society for the Protection of Birds*
Kent Breeding Bird Atlas 2008-2013 ~ 2015 *Kent Ornithological Society*