Brief account of the proceedings of the

Devon Birds Wetland Bird Conference

19 November 2022 at Exeter Court Hotel, Kennford

SURVEYS

Devon WeBS sites showing wetland bird abundance (5-year means of peak native wildfowl + wader counts 2015/16 to 2019/20). Map prepared by Neil Calbrade BTO.

RESEARCH & CONSERVATION

Oystercatcher showing rings and number for individual identification. Photo by Geoff Carefoot at Grimsargh Wetlands, Lancs. on 18 June 2021, of a bird initially ringed at Dawlish Warren on 4 February 2018.

A large attendance at this conference, hosted by Devon Birds, indicates a lively interest in wetland birds in Devon, with about 90 WeBS counters and other birders from all corners of Devon, and even some from Cornwall and Somerset, packing the venue to hear short presentations from 12 speakers. Devon Birds Chair Nick Armstrong introduced the conference, and morning and afternoon sessions were chaired by Tim Frayling (Natural England) and Malcolm Burgess (RSPB) respectively. The following account provides a summary of each presentation.

Introduction to the Wetland Bird Survey

Gill Birtles *WeBS Counter Network Organiser from the BTO.*

The morning session was about WeBS, with BTO's Gill Birtles leading off with the history of wetland bird counting, which started in 1947 with the National Wildfowl Counts, and then describing the different types of survey. *Core counts* are carried out at both coastal and inland sites produce the main source of information from which BTO can assess the health of wetland bird populations and the importance of individual sites and look for trends. These may have obvious causes, for example displacement due to development, or may indicate a decline which needs further investigation. Examples included Pochard, whose numbers have declined in the UK at the same rate as on the continent, whereas Little Egret, after their successful colonization, have now started to show a slight decrease in numbers in England. *Low tide counts* are done each year on 20 sites in winter, though the chosen sites vary, and these check numbers on different intertidal feeding areas. Results for the Taw-Torridge estuary over 20 years show that Golden Plover numbers have increased, but the species is now less widespread than previously. Occasional *Non-estuarine Wetland Bird Surveys* (the last in 2015/16) provide checks on numbers on open coasts, including species such as Purple Sandpiper and Turnstone. The *Goose and Swan Monitoring Programme* is a suite of annual and periodic surveys that monitor the UK's internationally important populations of geese and swans during the non-breeding season. The WeBS Alert system flags up major declines, such as the decrease in Oystercatchers (53% down) and Grey Plover (30% down) on the Exe Estuary.

WeBS in Devon

Peter Reay *WeBS Local Organiser for most Devon sites.*

The main duties of a Local Organiser, outlined by Peter Reay, are to find counters for sites and to make sure that count data are submitted to the BTO. In Devon there are four Local Organisers, covering the Exe and Taw-Torridge Estuaries, the Tamar Compex (part Cornwall) and all 'other sites'. Of the 77 WeBS sites, 13 are estuaries, six are on the open coast, 17 are on Dartmoor, and the rest are lowland lakes, reservoirs, ponds, marshes, rivers and canals. In 2021, counts came from 98 species, including 34 swans, geese and ducks, 21 other 'wildfowl', 30 waders, 12 gulls and terns and Kingfisher. The most abundant wildfowl species in 2021 in terms of peak monthly WeBS county totals in was Wigeon (peaking at 6,053), with Oystercatcher (3,913) the most abundant wader. The most widespread wildfowl and wader species were Mallard (71 sites) and Snipe (25 sites). Using the Avon Dam reservoir as an example, it was shown how monthly site counts become incorporated into WeBS county totals (mainly for use in the *Devon Bird Report* species accounts, but also in County Wildlife Site designation), and how time of day can influence the species present, with Goosanders only present from dusk to dawn and Herring Gulls only in the middle of the day. Mallard county totals derived from WeBS counts are underestimates because of the wide occurrence of this species on non-WeBS sites, which to some extent can be quantified from separate area-based surveys. The same applies to Goosander, but here the birds conveniently gather at a limited number of roost sites where synchronised counts at dawn provide more robust estimates of numbers than WeBS counts. Further information is available in annual *Devon WeBS* and *Goosander Roost Survey* reports.

WeBS counting on the Taw-Torridge Estuary

Chris Dee *WeBS Local Organiser for the Taw-Torridge Estuary.*

Chris Dee gave an overview of the way in which his team cover the large and complex Taw-Torridge Estuary. His team count at high tide (with a 6 m spring tide range) so are mostly counting wetland bird roosts. Finding a suitable high tide in daylight, and early enough in the morning to avoid disturbance from dog-walkers etc., can be difficult in winter. Around 2,500 Curlew used to be a typical peak count, but this has declined to the 600-800 range, a decline mirroring that in the UK and Europe. Lapwings are down from 9,000 to a range of 3,000-5,000, but numbers of Golden Plover are holding up and vary between 3,000 and 5,000. Sanderling, Greenshank and Mediterranean Gulls are all doing well, with Sanderling present in nationally important numbers. As a result of poor maintenance of a sluice and the consequent breach of the seawall, Horsey Island, now owned by Devon Wildlife Trust, has been transformed from grassland into a more dynamic mix of mudflats, sandbanks and saltmarsh with a greater variety of marsh plants, and this has, for example, contributed to the increase in Golden Plover and Lapwing using this specific part of the estuary. Disturbance to wetland birds, a topic which raised some ire, especially against people who do not control dogs, was discussed. A study of bird disturbance on the estuary was carried out in May 2019 and is accessible online at http://publications.naturalengland.org.uk/publication 4652342337536.

WeBS counts for a large estuary site, the Exe

Martin Overy *WeBS Local Organiser for Exe Estuary.*

Martin Overy gave a description of the Exe Estuary. This, the most important WeBS site in Devon, has multiple conservation designations mainly because of its wintering wildfowl numbers and as an Avocet wintering site. The Exe team count nine separate areas, each further subdivided into 35 smaller parcels. The team have carried out a number of full-tide distribution counts, which give a good idea of the distribution of birds over this large estuary and establishes which are most important areas for different species at various states of the tide. This, in turn, shows which areas are most vulnerable to disturbance. Studies have shown that kayaks and canoes cause 40% of disturbance causing birds to fly, dogs off leads 30%, and dogs on leads 10% and sailing boats and paddle boards 20%. Most gulls are only counted on a synchronized count on one day in January each year as they fly in, to roost on open water in the evening gloaming. Data generated from WeBS have been essential for the development of the Exe Estuary Management Plan.

Dipping into the Exe WeBS Data: Counts, Trends and Distributions over five decades

David Price *former WeBS/BoEE Local Organiser for Devon and the Exe Estuary.*

David Price, who has been counting on the Exe Estuary for 50 years, gave his own analysis of the vast array of data collected and the types of breakdown which are most useful. They record peak annual numbers, means, then means in seasons, with the November–February means broken into decades from the 1970s, to the 2010s. As an example, he showed that for Black-tailed Godwits, numbers were relatively stable in the 1970s, 1980s and 1990s with 400 to 600 wintering. Then in the 2000s and 2010s there was a clear increase. This matches the pattern for UK as a whole and a probable reason is that these Icelandic race birds have been favoured by warmer conditions in Iceland where climate change is producing earlier springs and longer summers, so better breeding conditions. In contrast, Bar-tailed Godwits which typically numbered 500 in the winters of the 1970s have now declined to about 100. This is not mirrored by the national picture with numbers actually increasing on the Wash, so it seems likely that migrant birds finding that their first landfall on the east coast is not as cold as in the past, there is less reason for them to visit the traditionally milder South-West estuaries. They recorded over 1,000 Mallard in early days but as elsewhere in the UK, numbers have declined somewhat. Ringed Plover results show the danger of relying too much on peak numbers. Their high peak is in August while they are on migration, but few birds overwinter on the Exe, so the importance of the site is only temporary. In fact, decadal analysis shows that both peak and wintering numbers have declined, with a wintering mean of just 17 for the 2010 decade. The overall trend for waders shows some decline, the greatest in Dunlin with mean wintering numbers around 4,000 in the last century falling to around 2,000 in recent winters. This is in line with a national decline. Grey Plover numbers have also declined, with short-stopping the likely reason. However, for wildfowl the trend is upwards, with Canada Geese (unfortunately!) leading the way with recent annual peak numbers often exceeding 1,000. However there have also been welcome increases in numbers of Teal, Pintail and Shoveler. These ducks have undoubtedly benefitted from the work done by the RSPB to create scrapes and improve habitat on Exminster and Powderham marshes.

The value of WeBS data to the work of Natural England

Fiona Freshney *Senior Specialist in Natural England's Ornithology Team.*

WeBS data are crucially important to NE, enabling assessment of the condition of non-breeding bird features on designated sites, and underpinning development related planning casework and Environmental Impact Assessments (EIA). They are also used to evidence whether the UK are meeting national and international obligation to identify and protect areas of importance for birds, and particularly migratory populations. They also guide priorities for conservation action both for species and sites, with WeBS alerts flagging–up changes in bird numbers which require further investigation or action. Although rare, some new SSSIs are designated, and WeBS data can provide key evidence to support this process (as was the case with the new Cotswold Water Park SSSI). They have informed decisions on the extension of the National Coastal Path and have also been used to help identify areas of Functionally Linked Land (FLL), i.e., land that lies outside protected sites, but which is considered to be critical to the ecological or behavioural function of a qualifying feature of the SSSI, particularly important in the case of waders and wildfowl. All in all, an invaluable resource!

The Dartmoor Curlew Recovery Project

Jon Avon *Project Officer for the Dartmoor Curlew Recovery Project from 2021.*

Jon Avon, employed by the Duchy of Cornwall to lead the Dartmoor Curlew Recovery Project (DCRP) 2021–25, described the efforts being employed to increase Curlew breeding success on Dartmoor. Until 1988 there had been up to 35 breeding pairs on the moor, but this has declined sharply since 1990 with only one or two pairs returning to breed in recent years, and poor breeding success has resulted in only four chicks fledging in 18 years. Carrion Crows are the main predators of eggs, though fox predation and poor habitat are other factors depressing population size. Curlews require relatively short grassland, so extensive *Molinia* clumps are unsuitable. The project is working with farmers and commoners and the Dartmoor National Park Authority to improve habitat on a landscape scale near Widecombe and in the Two Bridges area to provide the right vegetative mix and enhance habitat by creating wet scrapes. Livestock grazing and swaling (burning off gorse and tough grasses) are key factors in providing good Curlew breeding and feeding habitat. Curlews incubate eggs for 28 days and after hatching young Curlews take about 50 days to become independent and able to fly, and so are particularly vulnerable to predation for a long period, so Carrion Crows have been removed in the vicinity of known Curlew nests. As well as trying to preserve the existing small wild population, the DCRP is seeking to boost the number of young Curlews by rearing chicks in captivity before releasing them on the moor. This is known as 'headstarting'. Eggs collected from Curlews nesting on RAF airfields in Eastern England, where they pose a bird strike risk to aircraft, have, under license from Natural England, been collected and taken to WWT Slimbridge to incubate, and just before hatching are transferred to Dartmoor where they are hatched and reared in 5-star accommodation behind high electric fences, until fit for release into the wild at about 55 days old. They are health checked by WWT vets and colour–ringed with a yellow tag above the right 'knee' and yellow flag over a green ring on the left leg above the knee. Each yellow flag has a two digit or letter code. Sixty headstarted Curlews have now been released, and it is hoped some will return to nest on Dartmoor when they are at least two years old. Meanwhile, during autumn and winter, they will be searched on local estuaries. Please report any sightings to curlew@wwt.org.uk. The DCRP is funded by the Prince of Wales Charitable Foundation and the Duchy of Cornwall, working in partnership and support from WWT, Dartmoor National Park Authority, Natural England and RSPB.

Wandering waders – tracking the movements of Devon Oystercatchers and Curlews

Ryan Burrell *PhD candidate, Bournemouth University and Project Officer, DCWRG.*

Ryan Burrell gave a talk on tracking Oystercatchers and Curlew in Devon. The Devon & Cornwall Wader Ringing Group (DCWRG) recommenced activities in 2018 and the group has been receiving and, with the help of Jo Morten at University of Exeter, analysing the data produced by DCWRG volunteers. GPS-tracking and colour–ringing are used to give insights into site use and behaviour. So far, of the wintering Oystercatchers caught at Dawlish Warren, 40 have been GPS tagged to date and 278 colour–ringed. Around 92,000 GPS position records have been recorded mainly within the Exe Estuary and show that these Oystercatchers occupied all areas of the estuary and some neighboring fields and travelled a median distance of 10.4 km per day. A small number wandered outside of the estuary to nearby coasts and neighbouring estuaries. Juvenile birds seemed to be pushed to the upstream end on the estuary, where feeding is less productive, but in their second year they spent more time at the downstream end. Twenty–one GPS-tags have been deployed on Curlew within the Exe and Taw–Torridge Estuaries and are providing important information on site use. Although not yet analysed, tracking data on migration routes to and from Europe will be important in advising on the location of offshore wind turbines. Sightings of colour–ringed waders should be reported to www.dcwrg.org.uk.

Peatland restoration on Dartmoor

Morag Angus *Mires Manager, South West Water.*

Morag Angus from South West Water, spoke about peatland restoration in the SW, which involves 10 sites on Exmoor, Dartmoor and in Cornwall, with a budget of £7 million for Dartmoor 2021–25. Using a holistic approach and much consultation with stakeholders such as farmers, communities and archaeological interests, the aim is to restore the hydrology of blanket bog previously damaged by extensive peat digging, overgrazing and vegetative degradation after *Molinia* become more abundant. Drainage ditches have caused the most damage, resulting in extensive drying out of peat bogs so that only 2% of Dartmoor's 16,000 ha of peaty soil deeper than 40 cm are now in good condition. Peatland on Dartmoor currently emits carbon, but nature-based solutions to reverse this are neither easy nor cheap. By using wide–track diggers and lightweight vehicles dams have been built to block ditches, raise water levels and spread water across surrounding land. Peat dams are built where possible, but on deeper gullies, timber dams are installed, the timber coming from sustainable Dartmoor woodlands. Ditches are blocked every 5 to 7 m and on some ditches the timber dams are 'leaky', designed to raise the water table, but not cause local erosion. Breeding waders are already beginning to benefit from the treated areas, with both Dunlin and Snipe occurring in higher numbers in 2018 than 2010. On Exmoor, where there have been no records of breeding Dunlin for 70 years, a pair displayed territorial behaviour in 2021. On Dartmoor, at Hangingstone Hill aerial photos showed surface water present on restored areas even at the height of the spell of very hot, dry weather in August 2022.

Adapting to changing coasts. What's in it for nature?

Sam Bridgewater *Head of Wildlife and Conservation for Clinton Devon Estates, and Estate lead for the Lower Otter Restoration Project (LORP) and the climate adaptation initiative Promoting Adaptation to Changing Coasts (PACCo).*

Sam Bridgewater gave a presentation about a project to adapt the lower Otter valley to climate change and recreate salt marsh and mudflats on about 60 hectares of low-grade agricultural land on the lower Otter catchment. The project has EU funding through the Interreg France (Channel) England programme. Together with a similar project on the Saâne valley in Normandy, France, it is providing a case study to support adaptation at other coastal communities facing similar climate challenges. Sam described the consultation and negotiation efforts taken during the project development phase and some of the challenges of delivering landscape-scale change. The project will hopefully create attractive feeding areas for waders and other wildfowl.

The role of FWAG SW's Regional Wetland Adviser: delivering wetland creation in the SW

A J Bellamy *Farming and Wildlife Advisory Group Regional Wetland Adviser covering the whole SW region.*

A J Bellamy described some successful wetland creation schemes achieved in the last two years. Working mostly in Somerset and acting with farmers willing to encourage wildlife, over 70 field ponds, filled in or unmanaged during the early part of the 20th century, have been restored, 10 of them being 'ghost ponds' identified from old OS maps and excavated to bring them back into existence. Interestingly, the exposed organic matter often contains viable plant seeds from the old ponds, and these frequently germinated to provide the new aquatic flora. These ponds soon attracted waders, either to the open water or the wetter surroundings. At one site (Pawlett Hams), beside the lower River Parrett near Bridgewater, five ponds and 50 ha of wet grassland have been restored, and in 2022 15 pairs of Lapwing and two pairs of Redshank returned to breed, with the help of electric fencing to reduce predation. This success is particularly notable given that the Exminster Marshes Lapwing population has dropped to single figures in recent years, with only two successful nesting attempts in 2022.

A view from Somerset

Eve Tigwell *BTO Regional Rep and WeBS LO for Somerset.*

In the neighbouring county of Somerset, most WeBS sites are small inland ponds or pits, but the Somerset Levels complex, including RSPB Ham Wall and several Somerset Wildlife Trust reserves, is the largest and most important in the SW. Among notable features are Grey Herons nesting in reedbeds, the Great White Egrets and Cattle Egrets that have now joined Little Egrets as breeding species and the large numbers of Shoveler, Wigeon and Teal wintering on the levels.

Overall, this was a very useful conference for WeBS counters and others to see how their efforts contribute to the greater picture of how waterbirds are faring in Devon and beyond. It was also a good opportunity to talk to counters from other areas, hear what difficulties they face and how they organize themselves. A useful way of touching base. It was also interesting to gain insight into some current research and conservation projects. However, it was also clear that, although large amounts of data are being collected and sent to the BTO and made available to bodies such as the RSPB and Natural England, this does not necessarily result in improved protection to wetland birds and habitats.

Compiled by Chris Klee (WeBS coordinator Kingsbridge Estuary) from notes taken at the conference, and edited by Peter Reay and speakers. For further information on any of the talks contact peter.p.j.reay@btinternet.com.

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Some recent images from Mike Sampson's trail cameras at Dartmoor bog pools, which confirm breeding by Teal, Snipe and Dunlin.