

Welcome & Overview

Thank you for joining us for our Online European Curlew Headstarting Workshop. Over the next two days, you will discover the critical role of Headstarting in conserving European Curlew (Numenius arquata).

Headstarting is a technique used to boost populations of endangered species. It's typically done with birds, but is also used for amphibians, reptiles and fish. Headstarting involves taking wild eggs, hatching them in captivity and then releasing chicks when they are ready to fledge.

Curlew Action's visits to projects across Europe has highlighted the importance of this technique in reversing population declines, as well as the diverse approaches employed. This workshop will unite project leads and experts from across Europe to exchange insights, share experiences, and explore best practices.

There will be a variety of talks and panel discussions on key topics such as:

- Licensing requirements
- Egg sourcing and incubation
- Chick rearing and veterinary care
- Release strategies and post-release monitoring
- Case studies from leading European projects



Terminology & Acronyms

A guide to some terminology and acronyms:

BTO - British Trust for Ornithology

NE - Natural England

ZSL - Zoological Society of London

GWCT - Game and Wildlife Conservation Trust

CRP - Curlew Recovery Partnership England

EIP – European Innovation Partnership (e.g. Breeding Waders EIP)

Hard Release (also see 'soft release') - a release tactic that involves no acclimation period Headstarting - a crisis conservation technique for endangered species in which eggs are removed from areas in which they are unlikely to survive, reared in captivity and the young birds fledged back to the wild

HS – Headstarting

Re-introduction - the action of putting a species of animal or plant back into a former habitat

SAV – Severn and Avon Vale

Soft release (also see 'hard release') - a release tactic that involves a gradual and controlled introduction back to the wild

Translocation - the deliberate movement and release of plants, animals or fungi into the wild for conservation purposes

WWT - Wildfowl & Wetlands Trust

ZSL - Zoological Society of London



Schedule Day One 6th February 09:30 - 16:30

If there are any major changes to the schedule, delegates will be contacted by e-mail at the earliest opportunity.

To avoid disappointment, please do not rely on the times below if you are only planning on joining some sessions, as start times may change based on events on the day.

Please note times below are UK time (GMT).

09:30 - Welcome, housekeeping, & introduction to Day 1

09:50 - Session 1: An Overview of Headstarting

11:00 Comfort break

11:20 - Session 2: Country Project Talks Part 1

13:25 - Lunch break

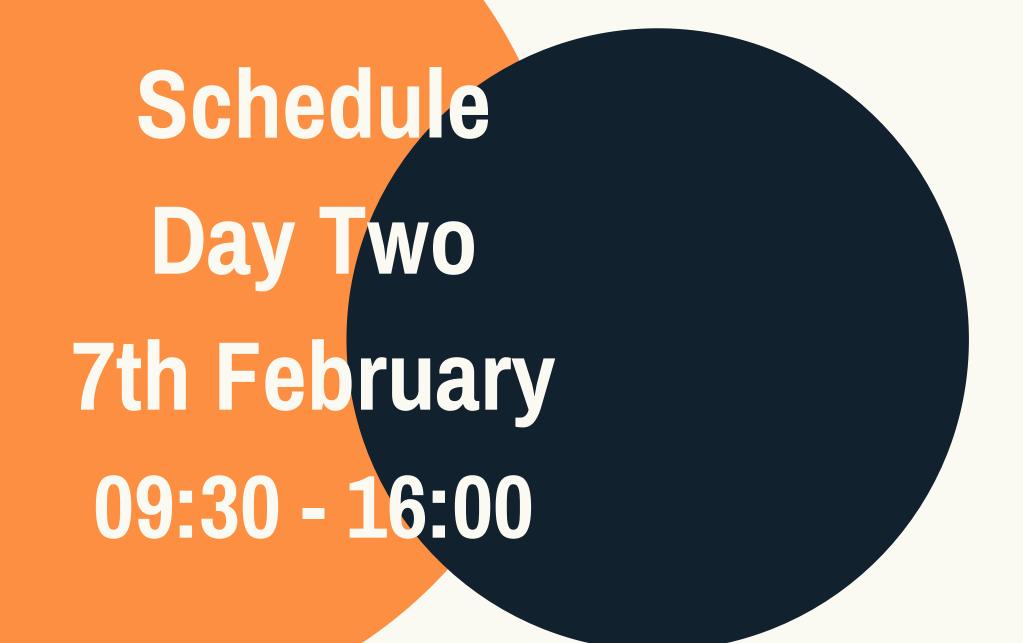
14:10 - Session 3: Country Project Talks Part 2

15:50 - Day 1 Q&A

16:20 - Closing remarks

16:30 - End of Day 1





If any major changes are to occur, delegates will be contacted by e-mail at the earliest opportunity.

To avoid disappointment, please do not rely on the times below if you are only planning on joining some sessions, as times may shift depending on events of the day, e.g. technical difficulties or illness.

Please note times below are UK time (GMT).

09:30 - Welcome, housekeeping, introduction to Day 2, Day 1 recap, and 'The Big Issues Faced by Curlews'

09.55 - Session 4: Eggs to Chicks

11:25 - Comfort break

11:45 - Session 5: Veterinary Work and Release

13:15 - Lunch break

14:00 - Session 6: Post-Release Monitoring

14:45 - Day 2 Q&A

15:50 - Closing remarks

16:00 - End of workshop



The Speakers

In order of appearance

Mary Colwell - Director, Curlew Action

Keiron Derek Brown - Naturalist & Founder, Biological Recording Company

Ryan Burrell - Director, Curlew Recovery Partnership

Dr Geoff Hilton - Head of Conservation Evidence, WWT

Dr Helmet Kruckenberg - Biologist & Head of Institute for Wetlands & Waterbird Research

Richard Saunders - Senior Ornithologist, NE

Graham Irving - Senior Licensing Officer, NE

Nigel Jarrett - Conservation Breeding Manager, WWT

Dr Samantha Franks - Senior Research Ecologist, BTO

Donal Beagan - Nest Protection & Headstarting Manager, Breeding Waders EIP, Ireland

Eric Heath - Senior Project Manager (Species Recovery), WWT

Dr Katharine Bowgen - Senior Research Ecologist, BTO

Chrissie Kelley - Head of Species Management, Pensthorpe Conservation Trust

Charlie Mellor - Head Gamekeeper, Duke of Norfolk Estate, Arundel

Dr Chris Heward - Head of Wetlands Research, GWCT

Amanda Perkins - Lead, Curlew Country, Shropshire

Griet Nijs - Behavioural Biologist, Natuurpunt, Belgium

Dr Heike Weber - Zoo Veterinarian & Curator, Tierpark Nordhorn, Germany

Przemysław Obłoza - Research Coordinator for LIFE Project, Polish Society for Bird Protection, Poland

Dr Andrew Hoodless - Director of Research, GWCT

Professor Ian Newton - Ornithologist

Tanya Grigg - Principal Conservation Breeding Officer, WWT

Dr Sophie Common - Wildlife Veterinarian, ZSL

Dr Alex Nicol-Harper - Principal Research Officer in Wetland BioScience, WWT



Day One Talks

Welcome

Mary Colwell, Director of Curlew Action



Housekeeping

Keiron Derek Brown, Naturalist & Founder of Biological Recording Company

Day One Introduction

Ryan Burrell, Director of the Curlew Recovery Partnership and Chair





Headstarting: The Big Picture

~ Dr Geoff Hilton, Head of Conservation Evidence, WWT

Dr Geoff Hilton is the Head of Conservation Evidence for WWT, the wetland restoration charity. He has worked on the science of threatened species recovery for 25 years, with a background in researching the ecophysiology of seabird digestion and thermodynamics of incubation. He worked at the RSPB for ten years managing a range of projects focusing on threatened species. In WWT he established the Species Research



© WW7

Unit, now the Conservation Evidence Department, and has been involved in work to understand and devise solutions to reverse the Eurasian Curlew decline for the past six years.

In this presentation Geoff will put Curlew headstarting into context as a conservation intervention. What is the problem we are trying to solve with headstarting? Why is it a promising technique, and what are its limits and constraints? What does all this tell us about when and where headstarting might be a sensible option for Curlew conservation?



Headstarting as a Conservation Measure: Opportunity or Aberration?

~ Dr Helmut Kruckenberg, Biologist & Head of Institute for Wetlands & Waterbird Research



Headstarting is a relatively new method used in species conservation. It has been used as a conservation tool with success in reptiles and amphibians, but is it also useful for birds?

Helmut will be discussing the potential pros and cons of headstarting, and what should be considered before it is deemed a viable option. Consideration will be given to whether headstarting is the best conservation strategy in any given

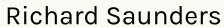
situation and why it may not always be the best tool to employ. This presentation will give an overview on the potential problems associated with headstarting, as well as presenting more questions than it necessarily answers, to encourage open communication in the headstarting community to help tackle some of the issues.



UK Licensing and Restrictions

~ Richard Saunders, Senior Ornithologist, Natural England & Graham Irving, Senior Licensing Officer, Natural England







Graham Irving

Richard Saunders leads on a number of bird re-introduction projects and oversees the Curlew Recovery Project on behalf of Natural England. This project involves Curlew eggs being removed from airfields in the East of England and being headstarted.

After deciding to turn away from issuing licenses to destroy eggs on airfields several years ago, Graham Irving has been involved in liaising with airbases with Curlew eggs to arrange their collection and transportation to Pensthorpe Natural Park for headstarting.

Since 2021, this project has continued, eggs being taken to locations including Pensthorpe and WWT Slimbridge before release. Many birds are fitted with GPS tags and radio transmitters so that their activities post-release can be monitored, and some airfield sites have moved to making their grassland more friendly for the birds to encourage nesting, as well as monitoring the sites to help nests to be found.

All headstarting projects require a licence. It is extremely important that all licensed projects follow the English code for reintroductions and translocations. Adhering to the code's principles maximises the chances that headstarting is sustainable and results in viable Curlew populations becoming established. In this presentation, Richard and Graham will explain how licence applications for headstarting projects are assessed and describe the different types of headstarting project. They will then focus on one bird licensing issue - air safety. A change in approach has been used to the Curlew's advantage. Through headstarting and translocation, hundreds of Curlew eggs and chicks have been rescued from sites where the birds were at risk. Is this situation unique to England, or might such opportunities exist elsewhere in Europe?

You can view 'A Curlew Calls', a film about the Curlew Recovery Project, <u>here</u>.

To read DEFRA's 'Reintroductions and other conservation translocations: code and guidance for England' document, click <u>here</u>.

CURLEW ACTION

WWT Perspective, Feasibility and Justification

~ Nigel Jarrett, Conservation Breeding Manager, WWT

Nigel Jarrett has been directly involved in the headstarting of several species including the Black-tailed Godwit in Cambridgeshire and Norfolk, and the Spoon-billed Sandpiper in Russia. He has also been involved in the reintroduction of the Madagascar Pochard in Madagascar and Eurasian Cranes in southwest England, as well as translocations of Layan Teals and McQueen's bustards. He has 40 years'



experience in bird conservation, having worked with more than 150 waterbird species in 17 countries. Nigel has been involved in the headstarting of Eurasian Curlews in England since 2019, with the aim of achieving up to a five-fold increase in annual recruitment to declining populations.

In his talk, Nigel will explain why he believes headstarting to be a justifiable and feasible conservation intervention that could help halt or reverse the decline of Curlew in southern England, as long as the causes underlying the species' decline are absent or controlled. Nigel will touch on the costs of headstarting, which he describes as an expensive undertaking, as are many species conservation interventions.



A Review of Curlew Headstarting Projects in Europe

~ Dr Samantha Franks, Senior Research Ecologist, BTO

Dr Samantha Franks' interests focus on exploring how our changing environment is impacting threatened bird populations. She oversees BTO's breeding wader research, with a particular focus on Curlew and working in partnership to develop evidence-based conservation management strategies for waders. Samantha leads on



CURLEW ACTION

post-release monitoring of headstarted Curlews and sits on the steering groups of the <u>Curlew Recovery Partnership</u>, Curlew Action Group, and Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) Eurasian Curlew International Working Group.

Headstarting is now a commonly used tool in wader conservation, and over the last five years has become increasingly popular in efforts to conserve the Eurasian Curlew. In Europe, the Curlew has declined by 30-49% over the last 35 years. Samantha will talk about a review into Curlew headstarting projects in Europe, due to be published in spring this year, in which questionnaire and data request responses were reviewed to find the reasons for, methods used, and outcomes of, eleven Curlew headstarting projects from five European countries. The need for this review was identified at an AEWA Curlew international working group meeting in 2022, and the aim of the review is to provide an overview of current understanding of headstarting and to identify knowledge gaps to inform future headstarting projects. Learning more about survival and recruitment of headstarted birds is extremely important, and can only be achieved with post-release monitoring.

Headstarting Curlews in Ireland

Donal Beagan, Nest Protection & Headstarting Manager, Breeding Waders
 EIP



© Breeding Waders EIP

The Republic of Ireland has fewer than 100 breeding pairs of Curlew remaining, a shocking decline of about 98% since the 1980s. Saving the species from extinction is now one of Ireland's greatest conservation challenges. Breeding productivity in Ireland, as with elsewhere in Europe, has been identified as the critical factor. Now, headstarting is being employed as a tool to keep the population in existence while conservationists act to try to save the birds in the longer-term, with early outcomes looking promising. However, a shortage of eggs for

CURLEW ACTION

headstarting is proving to be an issue, as the project has the capacity to handle more eggs and chicks than it has available to it.

Donal Beagan has worked with <u>Breeding Waders EIP</u> on headstarting Curlews since 2022, the year in which <u>The Curlew Conservation Programme</u> undertook a small-scale pilot headstarting operation in a pre-planned and strategic manner to ascertain if headstarting was a viable option in Ireland and to assess the resources required. This was carried out in the form of two pilot projects in counties Kerry and Monaghan. Since the pilot project in 2022, 73 headstarted Curlews have been released, and the programme has so far been deemed successful in terms of allowing those on the ground to gain expertise in the area, but its level of success will ultimately be based on the number of Curlews which return to breed, and where they go.

Donal's presentation will bring us up to speed with where headstarting is at in Ireland, an operation that involves a team of 7-8 egg collectors and 20-30 field staff involved in the important role of nest detection, protection, and rearing. Future plans include a softer design for release aviaries and, if at all possible, upscaling, which will require more eggs.

Headstarting Curlews in Dartmoor & Severn Vale

~ Eric Heath, Senior Project Manager (Species Recovery), WWT

Eric Heath has worked in the environmental sector for almost 20 years, and leads on WWT's conservation work, which involves identifying and developing new conservation projects for the organisation. He is currently focused on running various Curlew conservation projects around England and is also involved in WWT's future plans for its Black-tailed Godwit and Corncrake projects. Eric sits in the UK Programmes team but works closely with



© WWT

Conservation Evidence, the Breeding Conservation Unit, and the Reserves teams. His role also looks forward, identifying and developing new species conservation projects.

With multiple partners, including the government conservation agency Natural England, WWT has been involved in an initiative to test the use for headstarting of Curlew eggs that are licensed for destruction because they are a risk to aviation safety. Initially, WWT ran a trial in the Severn Vale during 2019, aiming to test the potential of headstarting to improve the fortunes of a small (~35 pairs) and declining Curlew population in an area of lowland floodplain grassland. From 2021, WWT has been a partner in a project to restore Curlew populations in a farmed upland area in Dartmoor National Park, where the habitat is in restoration but the Curlew population has reached critically low levels. In his presentation, Eric will report on the experience of the project and results to date.



The Norfolk Headstarting Project

~ Dr Katharine Bowgen, Senior Research Ecologist, BTO & Chrissie Kelley, Head of Species Management, Pensthorpe Conservation Trust



Katharine Bowgen © BTO



Chrissie Kelley © Curlew Recovery Project

Katharine Bowgen's time as a Senior Research Ecologist is split between BTO Cymru and the Wetland and Marine Teams. She principally works with wader populations in the UK, observing their behaviours and habitat choices through the year and with her background in behavioural ecology she's able to understand more about their behaviours and habitat preferences. A keen bird ringer, Katharine also works with several wader ringing groups to learn more about bird populations from a hands-on perspective.

Chrissie Kelley has worked in aviculture for 30 years, specialising in waterfowl and waders. She has been involved with species reintroduction projects for Eurasian Cranes, Corncrake and most recently, leading Curlew headstarting in Norfolk, UK.

In this joint talk, Katharine and Chrissie will introduce the Norfolk headstarting project, which takes eggs from airfields where they would otherwise be destroyed, and has done since 2021. In Norfolk, the Breckland region is the main stronghold for Curlews, with around 150 breeding pairs present. Different sites are faring differently, with some seeing an increase in numbers and others a decline, with fluctuating annual breeding productivity occurring. So far, 208 Curlews have been released thanks to this project, which involves a team of around ten people either working with the birds or carrying out monitoring.

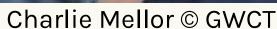
This project hopes to continue in 2025, with a final goal to see a self-sustaining breeding population of Curlews in the East of England which benefit from conservation efforts.



The Southern England Curlew Project

~ Charlie Mellor, Head Gamekeeper, Duke of Norfolk Estate, Arundel & Dr Christopher Heward, Head of Wetlands Research, GWCT







Chris Heward

Charlie Mellor is Head Gamekeeper on the Duke of Norfolk estate at Arundel, an estate renowned for its farmland bird recovery project, in particular Grey Partridge. In 2022, the Duke of Norfolk initiated a Curlew headstarting project on his land. This ran for one year on Peppering Farm on the Norfolk Estate*. From 2023 onwards, the project expanded and now runs at three sites: Peppering Farm, Cranborne, and Elmley, in the south of England. None of the three sites have naturally breeding Curlew populations any more, but the Cranborne site is close to populations in the New Forest, and had a breeding population until the 1990s. Chris Heward is responsible for the monitoring of this project - the Southern England Curlew Project.

This headstarting project is licensed as a research project by Natural England, its aims being to better understand headstarting and its efficacy, as well as to actively establish Curlew populations. 30-40 people are involved in the project, including landowners, initiators, nest-finders, chick-rearers, nature reserve volunteers, researchers, students, and a steering committee. The current project span is until 2027 and so far, over the three sites, 192 Curlews have been released. While it is too early to definitively state whether the project has been a success from a conservation point of view, it is delivering useful information about the movements of headstarted Curlews after release, as well as information about their survival. Future plans include putting a greater focus on individual-based monitoring of Curlew behaviours at donor sites, and removal of eggs, to establish the proportion of birds which reattempt breeding, and their subsequent success.

Charlie and Chris will give an overview of the South of England Curlew Project and provide insights into the behaviours of released Curlews.

You can read about the headstarting project on Elmley Nature Reserve here.

*Confusingly, the Norfolk Estate is not actually in Norfolk, but in West Sussex! This is a separate project to the BTO's Norfolk headstarting project.



Curlew Country: Headstarting in Shropshire

~ Amanda Perkins, Lead, Curlew Country

Amanda leads Curlew Country and represents Curlew Country on the national Curlew Recovery Partnership Steering Group and Gylfinir Cymru.

In her talk Amanda will discuss the Curlew Country journey to headstarting, a bit about the procedure, and what we know so far. The headstarting project in Shropshire, which she leads, can be described as the 'true' headstarting project of England, because the chicks are released in the same place as they are initially brought in from.





Headstarting Curlews in Belgium

~ Griet Nijs, Behavioural Biologist, Natuurpunt

Curlew populations in Flanders (the northern region of Belgium) are under great pressure. In less than 20 years the population has gone from 500-600 breeding pairs to an estimated 170-230 pairs as of 2013-2018 (with an up to date estimate due out soon). Productivity is too low for the local population to sustain itself naturally.

This project started in 2020 when a Curlew nest was found in a field in which cows would be introduced the following day, certainly trampling the eggs. This



was the first time that such a thing had been done with meadow birds in Belgium. Between 2020-2024 87 Curlew nests were monitored, of which 38% hatched, 29% being predated in the egg phase. Of the nests which produced chicks, fewer than 30% of chicks survived their first week, with only seven chicks reaching fledging age overall in the five years of the monitoring project and a nest productivity of just 0.06 chicks per breeding pair, less than 10% of the 0.68 needed to maintain a stable population. Predation has been found to be a major issue.

Abandoned or doomed clutches were headstarted from 2020 onwards where they would otherwise be lost due to agricultural work, predation, or poor weather conditions. So far, headstarting has allowed for a total of 23 young Curlews to be released, seven of which were GPS tagged. Three, all released in 2020, have already returned to the breeding area. The project is run by just two people - Griet and a colleague.

As a behavioural biologist for the Belgian nature conservation organisation Natuurpunt, Griet has studied the habitat requirements and breeding success of the Curlew in the region of Flanders since 2020, and will update on the project, which hopes to use headstarting to slow the population decline in the area and boost the population.

Read about Curlews in Belgium <u>here</u>.



European Curlew Headstarting Project of Tierpark Nordhorn, Germany

~ Dr Heike Weber, Zoo Veterinarian & Curator, Tierpark Nordhorn

In 2011, 3,600 breeding pairs of Curlew were counted in Germany, with biologists estimating that the population has fallen by 20-25%, making the Curlew critically endangered in the country.

Since the 1990s, a local meadow bird protection programme has improved habitat and protected nests. If nests cannot be protected, Curlew eggs are taken to be reared at the German zoo Tierpark Nordhorn, where they have been rearing Curlews in this way since 1999.

Dr Heike Weber has been a zoo veterinarian and curator for Tierpark



© Franz Frieling, Tierpark Nordhorn

Nordhorn for over 20 years. In her talk, she will discuss the zoo's Curlew headstarting programme, going into detail about how chicks are reared including indoor and outdoor housing, costs, problems that have been encountered, solutions found, and success rates. Heike will also discuss the work that goes towards post-release monitoring, release, and some discoveries made about how headstarted chicks fare in the wild.



Headstarting Curlews in Poland

~ Przemysław Obłoza, Research Coordinator for LIFE Project, Polish Society for Bird Protection

Around the year 2000, Poland had 650-700 breeding pairs of Eurasian Curlew. By 2018 only 60 pairs remained and Curlews were extinct in many areas. In 2021 the species was uplisted from Vulnerable to Endangered. The headstarting of Curlew started in Poland in 2014 as a response to the rapid decline in the population, and is carried out by cooperating non-governmental and governmental organisations. Over the past ten years since its inception, several hundred birds have been released through headstarting in Poland, with the positive



© Dominik Krupiński

impact of the programme becoming increasingly visible.

Przemysław is the Research Coordinator for the LIFE project 'Curlew in Danger - Protection of the Eurasian Curlew in Poland' and a doctoral student at the University of Siedlce.

In his talk, Przemysław will introduce the issues faced by Curlews in Poland before going on to talk about the scale, costs, and logistics of the headstarting project he is involved in. He will explain how chicks are housed and cared for and how release is carried out, before going on to explain post-release monitoring and what it has revealed about the birds' behaviours once they are in the wild.



Day Two Talks

Welcome

Mary Colwell, Director of Curlew Action

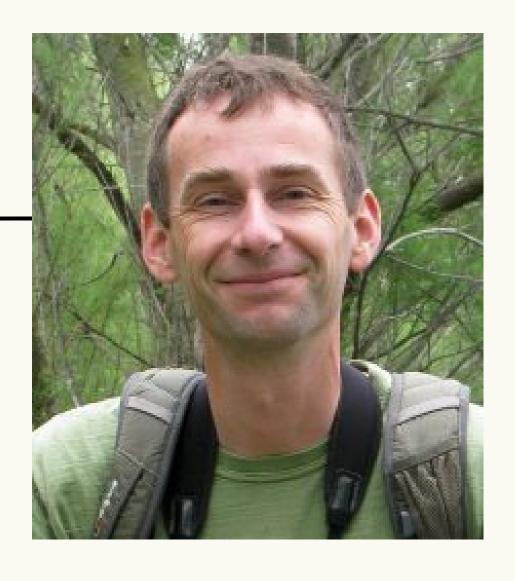


Housekeeping

Keiron Derek Brown, Naturalist & Founder of Biological Recording Company

Day Two Introduction

Dr Andrew Hoodless, Director of Research at GWCT and Chair





The Big Issues Faced By Curlews

~ lan Newton, Ornithologist

Professor Ian Newton is a retired ornithologist who has worked all his life on the ecology of birds, and bird conservation. He has written more than 300 papers in the scientific literature and ten books on different aspects of bird ecology and migration. Ian has acted in an advisory role on Curlew and (more extensively) on raptor captive rearing and reintroduction projects in the US and Britain.



lan will be talking about the factors which have caused Curlew population declines, and especially the role of predation on eggs and chicks. The value of headstarting in boosting numbers in declining populations, and in restoring populations to other suitable areas currently lacking Curlews will be discussed. In the words of Ian, and as is generally agreed in the headstarting community, the chief value of headstarting is as a stop-gap measure for use until environmental conditions can be changed so that birds can produce sufficient young on their own.



Day Two Discussions

Day 2 will focus on discussion sessions, allowing attendees to get involved in discussions and for different headstarting projects to talk about their different headstarting experiences. Discussion chairs will speak about their topic of expertise before opening up the floor to discuss specific topics and take questions, in some cases using Mentimeter to allow for audience engagement. Menti does Mentimeter to allow for audience engagement. Menti does Mentimeter app, just a device connected to the internet (preferably a separate device to the one screening the workshop). How to join in with Menti will be explained. Those unable to join using Menti will have other ways to engage, such as via the Zoom chat function.

Eggs, Incubation & Hatching

~Tanya Grigg, Principal Conservation Breeding Officer, WWT

Tanya Grigg is the lead aviculturist on the Dartmoor Curlew Recovery project and has worked on Curlew projects since 2019 at WWT Slimbridge and on Dartmoor. Before this, Tanya was been involved with projects on Black-tailed Godwits and Eurasian Cranes in England and Madagascar Pochard in Madagascar.





In her discussion session, Tanya will describe the care process from egg collection to hatching and the equipment that WWT uses. She will delve into detail about the incubators used and the best practices employed for improving the chances of chick survival, before opening up the floor to discussion about different incubation methods, considerations, and measurement of success, allowing the headstarting community to learn about one another's techniques.



Rearing Curlew Chicks

~ Chrissie Kelley, Head of Species Management, Pensthorpe Conservation Trust

In this discussion session, Chrissie Kelley (introduced on day one) will focus on sharing experiences, challenges and lessons learned from rearing Curlew chicks. She will consider the following factors and questions:

 Stages and ages of chicks - indoor and outdoor facility requirements - what is the best pen design?



Chrissie Kelley © Curlew Recovery Project

- Enrichment what works well?
- Nutrition and gut health What food is best for Curlew, are there supplementation requirements?
- Stress from people, heat and other Curlew! How best to reduce stressors?
- Moving and handling for ringing/flagging, health checks and transport



Health & Disease Aspects of Curlew Headstarting Projects

~ Dr Sophie Common, Wildlife Veterinarian, ZSL

Dr Sophie Common is a wildlife veterinarian working within the Disease Risk Analysis and Health Surveillance team at ZSL. She provides veterinary support for a number of projects across different taxa, and as part of her role works to manage health and disease aspects of the Curlew headstarting project at Pensthorpe Conservation Trust.



In her discussion session Sophie will give an overview of Disease Risk Management and Health Surveillance within a Curlew headstarting project, including an introduction into protocols and processes and an overview of the results of disease surveillance work to date. As well as speaking about her experience, Sophie will encourage others to share their experiences.



Releasing Birds

~ Dr Alex Nicol-Harper, Principal Research Officer in Wetland BioScience, WWT

Dr Alex Nicol-Harper is a Principal Research Officer in the Wetland Bioscience team at WWT. She uses her background in ecology and conservation, with a focus on population modelling and breeding biology, to advise on recovery projects for a range of bird species, including Curlew and other waders.



In her session, Alex will be focusing on various factors that need to be considered when releasing Curlews, including:

- The merits of hard versus soft release
- The importance of release location including considerations into whether a release site is a current or historic breeding area, wintering site, or completely new area for the species
- Chick age at release
- Cohort size (total cohort per year, birds in each release group)
- Whether there are free-ranging birds present at the release site
- Habitat and predator management in the release area
- Immediate post-release survival/dispersal



Post-Release Monitoring

~ Dr Katharine Bowgen, Senior Research Ecologist, BTO

Headstarted Curlews are often released with metal rings and coloured, coded flags to allow them to be monitored post-release. Headstarted birds have been seen integrating with wild birds and migrating as would be expected in wild-born birds, a promising sign.

In this discussion session, Dr Katharine
Bowgen (introduced on day one) will be
focusing on sharing experiences,
challenges, and lessons learned from post-release monitoring that will
consider the following questions:

- Are birds colour-ringed or tracked?
- What is the survival rate post-release?
- What is over-winter survival?
- What is the adult survival rate?
- Where do birds winter?
- What is natal dispersal / where do birds breed?
- Do headstarted birds breed as successfully as wild counterparts?



© Wash Wader Research Group



End of Workshop

After the discussion sessions of Day 2, a Q&A with all speakers will be chaired by Dr Andrew Hoodless.

Mary Colwell will then give the final words of the workshop.



Thank you for attending.

Useful Links

Click on the links below to find out more

Curlew Action website

What is Headstarting? - Curlew Action

Curlew Recovery Project

<u>Press Release - Endangered Curlews get a headstart</u>

Will Headstarting work for Curlews? - WaderTales

Press Release - Saving eggs from airfields

Eurasian Curlew Recovery - WWT

Action for Curlew appeal

<u>Curlew LIFE - Saving the call of the Curlew</u>

Curlew Conservation - Dartmoor

<u>Curlew Country</u>

