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Gamewise

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SPRING 2023



The twilight flights of woodcock

Why volunteers are needed to take part in the 2023 Breeding Woodcock Survey

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On the cover
 Woodcock. © Helge Sørensen
 (birdphotos.dk)

© Laurie Campbell



WELCOME

TERESA DENT CBE, CHIEF EXECUTIVE

As I write this, thousands of farmers, gamekeepers, birdwatchers and others have just completed the Big Farmland Bird Count, our annual initiative to showcase how much birdlife is on our farms. This year marks the 10th anniversary of the count and I am grateful to all of those who have taken time out of their busy lives to stop and monitor their birds in the past decade.

The count symbolises much of what the GWCT stands for – the importance of monitoring, engagement with the wider community and the positive impact that good private stewardship can have on our countryside. The same can be said of the Breeding Woodcock Survey, which we run in conjunction with the British Trust for Ornithology. Amidst differing opinions on the timing of the woodcock season and some groups calling for them to be removed from the quarry list, this survey gives us the best chance to persuade the Government to make informed decisions using the best evidence available. As the third survey of its kind, this will shed a light on whether the declines seen in 2013 have continued. You can find out how to get involved on page 23.

Your support allows us to undertake a breadth of work that is reflected throughout this issue. The Environment Agency provides its take on the importance of our fisheries research on page 15, we showcase the efforts of Welsh farmer Peter Loxdale (page 50) and Henrietta Appleton gives you an introduction to the use of biochar on page 54.

Thank you for all your support throughout 2022. We have tried to demonstrate just how much you've made possible on pages 34-35 where we highlight some of our achievements, but this doesn't do it justice. It is your generosity that will carry us through 2023 and for years to come. On behalf of everyone at the GWCT, thank you.

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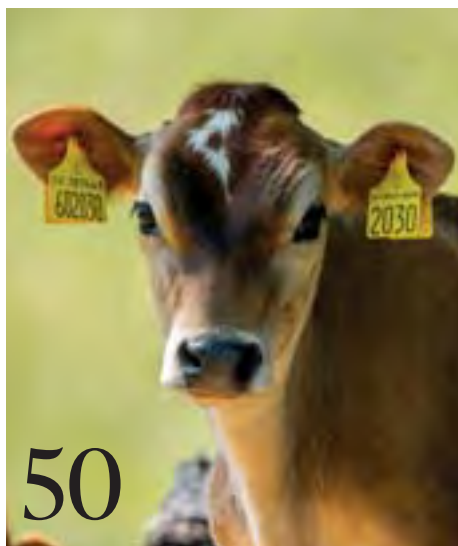
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 **BERETTA**

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RESEARCH THAT MAKES A DIFFERENCE

PARTRIDGE COUNT SCHEME

As part of its role in UK grey partridge conservation, the GWCT runs the Partridge Count Scheme (see page 28) as a means of offering management advice and feedback to farmers, landowners, and shoot managers on the basis of their spring and autumn counts. These counts are essential to monitor recovery and judge the success of habitat improvement. gwct.org.uk/pcs



IN *focus*



FIND OUT
MORE



WHY DO WE NEED TO COUNT WOODCOCK?

GWCT and the British Trust for Ornithology will be conducting a repeat national Breeding Woodcock Survey in 2023 (see page 20). This will provide an up to date population estimate and enable regional assessments of change in breeding woodcock numbers since the last survey in 2013. Please do take part as we need as many volunteers as possible and we are particularly keen to enlist surveyors who might be able to count in more remote parts of Scotland, northern England and Northern Ireland where survey coverage is traditionally low. FIND OUT MORE AT bto.org/woodcock.

It is possible to identify
some individual
woodcock using
acoustic monitoring





GWCT in POLICY

1 **Wildfire risk mitigation** – the need to change policy from suppression to prevention in recognition of the importance of managing fuel loads in vulnerable ecosystems.

2 **Policy into practice** – increasing use of app-based data collection for evidence-based management – GWCT's 'Best Practice with Proof' approach.

3 **Controlling foxes** – the code-compliant humane cable restraint must be retained as part of the conservation 'toolbox' as foxes are placing often intolerable levels of predation pressure on key red-listed species such as the curlew and lapwing.

In Brief



AGM

THE NEXT GWCT AGM WILL BE held on 6 July 2023. Members are welcome to attend as observers. To register your interest please email lhoare@gwct.org.uk.



RESEARCH THAT MAKES A DIFFERENCE

STEVE MOREBY

Collecting insects is a normal day for senior entomologist Steve, who highlights the importance of long-term studies

Steve Moreby's career with the GWCT has spanned more than 40 years. During this time he has studied the diet of grey partridges and red grouse, and looked at agricultural management and its effects on insects. Along the way he has trained up a legion of young ecologists in insect identification, sharing his skills with several generations.

"IN 1983 I started work looking at insect samples from the Sussex Study, a job I am still doing today. This is the longest-running monitoring project in the world measuring the impact of changes in farming on the fauna and flora of arable land. It started in 1968, looking into the causes of the decline in numbers of the grey partridge.

"THE GROUND-BREAKING Cereal and Gamebirds Project had a great team including Nick Sotherton and the late Dick Potts. It developed selectively sprayed field margins known as conservation headlands, and mid-field tussocky grass strips known as beetle banks, which are still popular agri-environment options today. Farm-scale experimentation demonstrated the efficacy

of such management in restoring invertebrate abundance and improving partridge chick survival, while agronomic studies evaluated practical farming issues.

"I RUN THE long-term insect monitoring studies which include the Sussex Study (1970-ongoing), Allerton Project (1992-ongoing) and three other studies on large estates. We sample the insects during June to early July, the period when insects are most important to the young of gamebirds and many other farmland birds. We sample crops and non-crop habitat, collecting more than 1,000 samples. Together, with my small team, we then identify and count the insects, which provides valuable insight into how changes in farming practices (including pesticide use) affect invertebrate abundance.

"THE GWCT'S LONG-TERM monitoring studies have never been more important. Most monitoring projects are only funded for three to seven years. Our long-term projects (now 30 to 50-plus years) help put in perspective the effects of both the ongoing changes in farming practices (within crops and in environmental options) and changes in weather on insects."



Classified in the UK as amber-listed, short-eared owls mainly hunt during the daytime, flying low over moorland, grassland and saltmarshes. © Laurie Campbell

Celebrating 10 years

Championing our British birds

2023 WAS THE GWCT'S BIG FARMLAND Bird Count's 10th birthday and this year's count in February was as popular as ever. Its founder Jim Egan, champions land managers' efforts on the ground and says: "Understanding that what you do makes a difference and gives the GWCT a superb opportunity to shout about all the good work done in the British countryside."

Our director of advisory, Roger Draycott, who now runs the count, agrees: "In the 10 years since the GWCT's Big Farmland Bird Count began, the commitment shown by an ever-growing number of farmers and land managers to supporting and monitoring birds and other wildlife is inspiring and should be celebrated. The nationwide voluntary effort enables the GWCT to build a picture of the status of the UK's farmland bird species. Thank you to everyone who got involved this year."

Full results will be published in the next *Gamewise*.

Re-establishing Ratty

Wildlife benefitting from improved habitats in the Avon Valley

HABITAT LOSS AND PREDATION HAVE DIMINISHED THE POPULATION OF BRITAIN'S water vole by more than 90% and they are believed to be extinct in 97% of their former range. However, this summer, 60 water voles were released into the water meadows of the River Avon on the Bisterne Estate, to try to re-establish a viable population. Ahead of the release the estate's gamekeeper, Rupert Brewer, and our wetlands ecologist, Lizzie Grayshon, worked hard to create the perfect home for the new residents. Now, trail cameras are showing that the improved habitats are also attracting winter visitors who have not been seen there in numbers for many years.

Lizzie Grayshon said: "We are seeing far more waterfowl using the river meadows. Our trail cameras are showing good numbers of less common species such as gadwall and wigeon. It is really encouraging to see them as it shows that our habitat work is paying off for a wide range of species.

"The water vole reintroduction and the benefits for other threatened wildlife, shows that not all species' reintroductions require re-wilding of the landscape or designation as nature reserves," continued Lizzie. "Wildlife can thrive on farmland when there is active management of habitat and predation, driven by a landowner or manager committed to conservation."



Water voles were released into the Avon Valley this summer to try and re-establish a viable population.



Nicholas receives top accolade

GWCT sits on NE Scientific Advisory committee

WE ARE PLEASED TO REPORT THAT NE's chief scientist (Tim Hill) and chair of NESAC (Andy Clements) have invited GWCT's Nicholas Aebischer to sit on the Natural England Scientific Advisory Committee (NESAC). This is a well-deserved accolade for Nicholas, our former deputy director of research, and recognises the objective scientific and statistical expertise that Nicholas has brought to the GWCT's scientific projects and, in his new role, will now apply to the scientific evidence brought before NESAC.

Thank you

In memoriam

WE ARE EXTREMELY GRATEFUL to receive donations in memory of Les Huntley and Geoffrey Hayward. We would like to thank their families and friends for thinking of us during such a difficult time.



The seminar tackled the moorland management issues for ground-nesting birds, such as red grouse. © Anne Coatesy

Tackling moorland matters

Importance of research highlighted at Grouse Seminar

OUR POPULAR NORTHERN ENGLAND GROUSE SEMINAR WAS HELD IN FEBRUARY. The event, held in Harrogate, focused on moorland management for the conservation of ground-nesting birds and presented the latest research of the Green Recovery Challenge-funded Merlin Magic Project and the Hen Harrier Conflict Resolution work. Presentations were also given on the Langholm Moor Demonstration Project, together with the latest research on various peatland management initiatives. Director of uplands research, Dave Baines, said: "We really appreciate the support received today both from our audience and our excellent speakers. It was great to see so many familiar faces, as well as some new ones. The seminar is a great opportunity for anyone involved in moorland management or interested in ground-nesting birds and other uplands fauna and flora, to hear the latest research into some of the most topical issues, as well as gaining practical management tips."

In Brief



FARMING AWARD

JOE STANLEY (CENTRE) WAS PRESENTED with an Associateship of the Royal Agricultural Societies at the House of Lords in October. Joe, head of training at the Allerton Project, said: "I'm proud to keep championing British food, farming and the environment to policymakers and the public."

High coverage of water crowfoot is associated with more and better-growing young salmon.

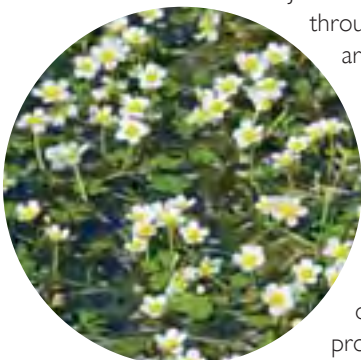
Weeding out the difference

The importance of water crowfoot and young salmon

NEW RESEARCH HAS FOUND THAT WATER CROWFOOT – AN AQUATIC PLANT found commonly in lowland rivers – has multiple benefits for young Atlantic salmon, and that active management of the plant could be important for the conservation of this iconic and declining fish. Water crowfoot (*Ranunculus sp.*) is an aquatic member of the buttercup family and is found in clean, gravelly lowland watercourses. A classic component of chalk rivers, this plant is vulnerable to low flows, pollution and physical loss from leisure activities, weed cutting and swan grazing.

The PhD research project conducted by Jessica Marsh at the GWCT, in conjunction with Queen Mary University of London (QMUL), has shown that high coverage of water crowfoot is associated with more and better-growing young salmon. Her findings are significant because populations of salmon are declining steeply, and a part of the solution might be to restore high coverage of water crowfoot in lowland salmon rivers.

Jessica explains: "Populations of wild Atlantic salmon are in decline throughout most of their range, and the rivers of southern England are no exception. Brown trout are also facing pressures from predation, habitat degradation, pollution and warming water temperatures. It is important to ensure that young fish have the best possible habitats in which to thrive. Our research identified that instream aquatic vegetation has benefits for young salmon (and to a lesser extent, trout), and demonstrates that restoration aims for lowland rivers might be achieved through the promotion and even enhancement of naturally occurring *Ranunculus* beds to improve the production of both salmon and trout."



Gun legacy donation

Raising vital funds for the GWCT's research

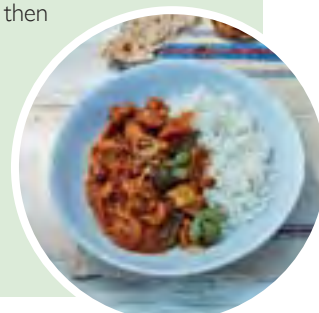
NEARLY £15,000 WAS RAISED FOR the GWCT in November, thanks to the generosity of donors using the Holts Charity and Legacy Lots Programme. We are continuing to work with Holts Auctioneers to offer a solution to what to do with your guns and shooting accessories when the time has come to retire from shooting, or you are just considering making a little more room in your gun cabinet. You can now do this while also helping to raise funds for the GWCT. Holts will handle the entire transaction, from collection to sale, and the hammer price of your items will be donated on your behalf to the GWCT. There are no fees for you as the vendor for this service and Holts will also help you navigate the licensing from the transfer and will make the entire process as easy as possible.

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In Brief

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The Environment Agency's (EA) aim is to protect and enhance the environment and so contribute to sustainable development, which is an ever more important mission given climate change and the crisis in biodiversity.

In 1991, as a new recruit to the National Rivers Authority, a predecessor body to the Environment Agency, I was charged with setting up a freshwater fish survey programme across Hampshire and the Isle of Wight, and it was to the GWCT that I turned as they were known for providing industry-leading fisheries scientific expertise. On visiting the Salmon & Trout Research Centre at East Stoke, I was impressed by the research facilities, together with the applied nature of fisheries scientific investigation in action when I met the fisheries team. This was the beginning of a long lasting and positive partnership.

The importance of rigorous science and taking a long view to understand the nature and causes of environmental change, together with an ability to translate scientific knowledge into influencing policy and programmes of work, has never been more important.

With England's salmon and sea trout populations continuing to be in a critical state, the GWCT's fish counter on the River Frome provides one of the most comprehensive records of salmon movement in England. As one of just 10 index salmon rivers across the country, this vital data is used to assess the status of stocks and inform investment decisions for environmental improvement, such as through the River Basin Management Plans and Water Industry National Environment Programme. The data is also used to report to the North Atlantic Salmon Conservation Organisation and the International Council for the Exploration of the Sea, and by the local EA team to inform fisheries management decisions and steer habitat improvements in the Frome catchment.

Though we understand many of the issues affecting salmon and sea trout in freshwater, what happens in estuaries and at sea has been much harder to fathom and it was for this reason that together with eight other organisations, we partnered with the GWCT in 2017 in the €8.7million Salmonid Management Round the Channel (SAMARCH) Interreg-funded project. From this project we have new information on the migration and survival of salmon and sea trout smolts through estuaries, the movement



HOW OTHERS SEE US

LAWRENCE TALKS

Lawrence Talks, national senior salmonid management advisor for the Environment Agency, gives his opinion

and behaviour of adult sea trout offshore, improved models for assessing salmon populations and policy recommendations for the protection of salmon and sea trout in estuaries and at sea. In addition, SAMARCH through its international collaboration has supported two PhDs and 16 scientific publications, with more to follow, which

highlights the GWCT's role in furthering fisheries science and being an essential training ground for fisheries scientists of the future.

Thirty years on from my first visit to the Salmon & Trout Research Centre, the GWCT continues to be a centre for industry leading fisheries scientific expertise and long may that continue. ■

As one of just 10 index salmon rivers across the country, this vital data is used to assess the status of stocks and inform investment decisions for environmental improvement

Formed in 1996, the Environment Agency provides a range of key roles from protecting property from flooding and regulating industry to striving to achieve healthier air, land and water for both people and wildlife. It has been described that the Environment Agency does everything from 'fish to fission and everything in between.'

gov.uk/environment-agency



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RESEARCH & DEMONSTRATION

THE ALLERTON PROJECT

The latest news, research and advice

(L-R) Alastair Leake, Jim Paice, Mark Spencer (Farming Minister), Jonathan Baker (Defra) and Teresa Dent.



Minister visits farm

Bringing our research to policymakers

THE ALLERTON PROJECT WELCOMED Mark Spencer MP, the newly appointed Farming Minister, to learn more about our approach to combining productive farming with a thriving natural environment. Mark Spencer was joined by Jonathan Baker, a deputy director at Defra, and heard about the recent work on soil health and carbon, as well as the development of a Hedgerow Carbon Code. We emphasised the importance of supporting sustainable domestic food production and demonstrated on-farm examples of how this can be achieved, while still meeting environmental goals. The team also discussed the ongoing field-scale silvopasture trial, the proven three-legged approach to wildlife conservation, and ways to reward farmers for the natural capital on their land. The value of bringing policymakers to the Project to showcase the experience and challenge their thinking cannot be underestimated.

Representatives from more than 160 major global food companies visited to find out more about regenerative farming.



Regenerative farming

Global food companies visit the Project

IN OCTOBER, WE WELCOMED A VISIT FROM THE SUSTAINABLE AGRICULTURE Initiative Platform (SAI Platform), a network of more than 160 major global food companies, as part of its 20th Anniversary event. The group chose to visit the Allerton Project to see regenerative farming in action and learn about the role of habitat measures and the long-term tillage trials run in partnership with Syngenta. They also found out about the agroforestry experiment, leaky dams, the biobed and the introduction of leys to an all-arable system. The tours demonstrated the opportunities and challenges of a more regenerative system, showcasing general farm practices and specific interventions and changes made on the farm.

Brian Nash from Ingredion said: "The one key take-away for me from the visit is that the Allerton Project team indicated that they never say "no" (as in, no tillage). They recognise that they want to be better, but circumstances may require the use of various farming methods to continue to drive farm viability. This will really shape my interactions with growers going forward."

The visit was a fantastic opportunity for the SAI Platform members to learn from the team and discuss ways to accelerate the adoption of sustainable agriculture practices and the transformation to sustainable food systems.

Did you know?

BIOLOGICAL DIVERSITY CAN BE INCREASED

by maintaining wide healthy rotations and encouraging beneficial flora and fauna through reduced artificial inputs.



Helping farms reduce their carbon footprint will provide many challenges, but also many opportunities says Joe Stanley

Climate change will increasingly dominate on-farm operations in the coming decades, this drive taking two main forms:

- The requirement to decarbonise food production as part of industry and national net zero strategies.
- The need to implement climate mitigation measures.

In the coming years, this rapidly evolving landscape will provide farmers and growers with many challenges – but also many opportunities, and at the Allerton Project we are involved in a number of initiatives which are helping to develop this space.

Ultimately, farms will be required to reduce their carbon footprint (agriculture currently contributes 10% of our national emissions) to play their part in keeping global temperature rises as low as possible. However, climate change is already with us – as anyone who has experienced the previous

We've seen a 10% increase in organic matter and huge improvement in soil workability after a decade of direct-drilling

five growing seasons can attest – so our ability to adapt our farming systems to maintain sustainable and profitable food production will become increasingly important.

We're currently involved in a pair of EU Horizon 2020 projects which seek to encourage more 'regenerative' farming practices across the EU and UK, AgriCaptureCO₂ and 'Climate Neutral' or ClieNFarms. The more sustainable farming methods that we are advocating have the twin benefits of not only improving our stocks of natural capital resources, especially soil health, but also of reducing costly inputs such as fuel and fertiliser and their associated carbon footprints; a virtuous circle of reduced environmental impact and improved farm profitability.

Talk of carbon credits is, of course, never far from any such discussion – especially as they relate to improving soil organic matter and carbon levels. And although soil carbon trades should still be treated with caution, our involvement with ClieNFarms sees us partnered with Nestlé Purina in their cereal supply chain in the east of England. The key element of this is the insetting of carbon gains in the supply chain rather than offsetting of carbon to third parties. In insetting, the farmer benefits by reducing their own 'Scope 1' direct emissions. Customers further down the supply chain also benefit from those same gains as 'Scope 3' indirect reductions, rather than the farmer selling his carbon to third parties and losing the gains from their own operations.

PROTECT SOIL BY UTILISING CROP

residues and cover crops to provide biological armour to the soil surface and reduce water loss.



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19%

improvement in per-hectare profitability moving from a plough-based to a direct-drilled establishment system on our heavy clay soils



Our long-running Conservation Agriculture trial with Syngenta also demonstrates the practical benefits of a move towards more 'regenerative' practices. Across a five field, four crop arable rotation, we can demonstrate a 19% improvement in per-hectare profitability moving from a plough-based to a direct-drilled establishment system on our heavy clay soils. Part of this is paid for via near-50% reductions in fuel use (with its associated carbon footprint) but also in the near-50% increase in work rate – allowing growers to make best use of increasingly narrow optimal weather windows.

Other trials across the estate are demonstrating the long-term soil organic matter benefits of moving to a reduced tillage system: we've seen a 10% increase in organic matter and huge improvement in soil workability after a decade of direct-drilling in places. With soil organic matter being a key element for good soil health and water

holding capacity, such improvements are key to improving soil resilience in the face of increasingly extreme weather patterns. However, soil is an almost infinitely complex natural system, and such gains can be rapidly lost with the wrong management practices exacerbated by climate extremes, such as increased flash-flooding.

Our wide body of work at the Allerton Project is helping not only to advance the frontiers of understanding in this field, but also to help disseminate that knowledge to those who need it most – the farmers on the front line. ■

Joe Stanley is our head of training and partnerships and is keen to help farmers improve soil resilience in the face of increasingly extreme weather patterns.



In the field



COVER CROP CORNER

I'M WRITING THIS HAVING TAKEN ON the responsibility for providing technical support to the GWCT's Allerton Project, from Richard Barnes. My first job was to understand the status of the farm by working closely with farm manager, Oliver Carrick. We walked the estate to assess the options under Countryside Stewardship and planned spring establishment, considering historic weed burdens and plot locations given the need to work together with the scientific projects and the shoot.

Last spring, we overseeded the flower-rich margins and plots (AB8) options to ensure persistency of flowers and applied a germinicide onto the nectar flower mixes (AB1) to mitigate grass weeds. We also created a detailed establishment and herbicide programme for the wild bird mixtures (AB9).

Unfortunately, the weather was challenging and spring-established crops struggled in the drought. Thankfully due to early planning, we had incorporated annual, biennial and perennial crops to provide consistent cover and Olly and his team were proactive, waiting for the right conditions to drill, overseed, spray and fertilise. Sharing learnings from a real farm, in all conditions, with trials at a field-scale, is one of the main reasons we're proud to work with the Allerton Project. ■

Meehal Grint



Reduced tillage has improved soil health and reduced costs.

KINGS CROPS provide agronomy advice and supply seed for the Allerton Project farm's game cover, stewardship and green cover crops. kingscrops.co.uk





Counting the wandering twilight flights of woodcock

Chris Heward explains why volunteers are needed to take part in the 2023 Breeding Woodcock Survey and how this count will inform future woodcock conservation and policy

With spring fast approaching, we are asking volunteers to take part in the 2023 Breeding Woodcock Survey and help make this the biggest and most accurate assessment of Britain's breeding woodcock population to date.

If you have never seen a roding woodcock before, it offers a view of this much-loved bird that might surprise you. Between March and July, male woodcock perform wandering twilight flights over the woodland canopy, squeaking and grunting as they go, searching for females who await in glades and rides below. These roding routes were once believed to be territorial patrols but are now known to be a lek-like display in which rival males compete for the right to mate. For the human observer, used to little more than a fleeting glance of a flushed bird, it is an opportunity to see woodcock in a very different light.

The GWCT, in conjunction with the British Trust for Ornithology (BTO), co-ordinates the only national survey of Britain's resident breeding woodcock population. First conducted in 2003, and repeated in 2013, the survey uses a specially developed methodology that relies upon this conspicuous display behaviour. Surveyors record 'sightings' of displaying woodcock during a 75-minute period starting at 15 minutes before sunset, and these are used to estimate local woodcock density.

By conducting roding counts across the UK, we can produce density estimates for sites representing different regions and wood sizes. From this national sample, which comprised more than 800 sites in 2013, we can extrapolate to regional and national estimates of population size. With successive surveys, we can also assess population change over time; between 2003 and 2013, the British population estimate dropped by 29%.

However, we cannot conduct a survey of this scale without the help of GWCT and BTO members, and we are encouraging potential volunteers to take part in the 2023 repeat of this important survey.

HOW DO I GET INVOLVED?

What does the survey entail?

Surveyors are required to make two or three dusk counts during May-June. To see a list of potential survey sites, or to learn more about the methodology, please visit bto.org/woodcock. We are particularly keen to enlist surveyors who might be able to count in more remote parts of Scotland, northern England and Northern Ireland where survey coverage is traditionally low. No experience is necessary, but we would encourage you to make a recce visit in April to find a suitable count point and become familiar with their distinctive calls.

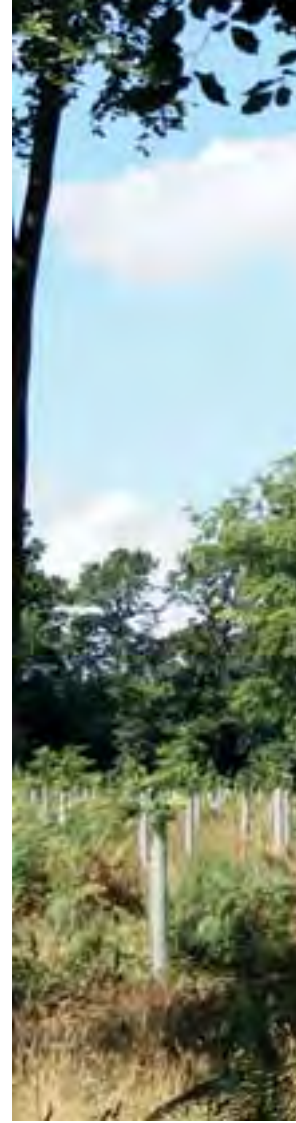
Roding: GPS loggers allowed our researchers to study roding ranges in Sherwood Forest, revealing that they were 110-130 hectares, considerably larger than was thought.



FIND OUT MORE

Our FREE 35-page guide transforms 50 years of GWCT woodcock research into practical guidance on how to provide the varied habitat woodcock require. gwct.org.uk/conservingwoodcock





We know that woodcock declined between the last two national surveys, but the last assessment is now 10 years old. More up-to-date evidence can better inform woodcock conservation and policy



In 2013, woodcock counts were conducted at 834 randomly selected woods

(Above) It is not vital to visit the exact same clearing. A recce visit in April would be ideal to choose a location.

I've taken part before; do I still need to register?

If you have previously surveyed a site, but not since 2019, you will need to visit the BTO website to re-register. Returning observers should note that it is not vital to revisit exactly the same clearing, especially if regrowth of scrub or young trees has reduced its suitability – instead count from the most suitable location within the designated one-kilometre square (or up to 400 metres from the boundary, if access is difficult). A recce visit in April may be useful to check the state of past count points and find an alternative if necessary.

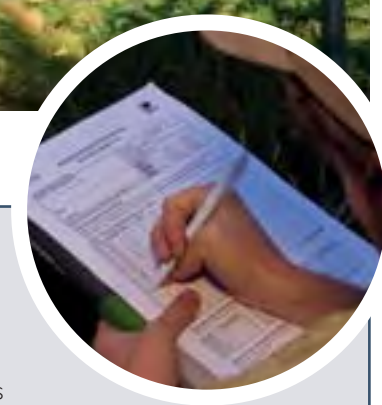
Chris Heward is head of wetland research. He is keen to encourage volunteers to count so that we can build an accurate picture of our woodcock population.



GWCT woodcock research has increased our understanding of woodcock ecology and populations.



(Above) Areas where trees have been felled and replanted offer an excellent location from which to count roding woodcock.



HOW DOES THE SURVEY WORK?

Why conduct the survey again?

We know that woodcock declined between the last two national surveys, but the last assessment is now 10 years old. More up-to-date evidence can better inform woodcock conservation and policy. Continued monitoring will capture the woodcock population's response to ongoing environmental and land-use change, such as the marked increase in tree-planting which may benefit resident woodcock.

Why are you surveying sites where there are no woodcock?

We know that there are sites in our list of proposed survey locations that are unlikely to host breeding woodcock. This list is structured by woodland size and region, but otherwise selected at random. This is so that, when we scale up to national population estimates, we do not over-represent more favourable sites where woodcock are thriving. Instead, good and poor, occupied and unoccupied sites should be represented in roughly the proportions that they occur across the UK.

Why are there no sites near me?

We generate different numbers of potential survey sites for different regions. As a general rule, there

are fewer sites available in areas with fewer people.

Past experience with similar surveys shows that providing too broad a selection of sites for less populated areas means only those conveniently close to human habitation are covered. This year, however, we intend to release a second batch of survey squares once core sites have been allocated, so please check the site map again during March/April. We are very grateful to volunteer surveyors who commit to surveying more remote sites as these provide the necessary variation to ensure a representative sample. For potential surveyors where there is no nearby random square it may be possible to establish a self-selected site. ■

MORE INFORMATION

To find out more about the woodcock survey, a list of potential survey sites, or to learn more about the methodology, please go to bto.org/woodcock. To discuss establishing a self-selected survey site please email: woodcock@gwct.org.uk.



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Fair game?

Rufus Sage explains the increased interest in gamebird releasing from ecologists and highlights new research



Pheasants and red-legged partridges are species successfully introduced to the UK as wild breeding birds from Asia in around the 12th century and from southern Europe in the 18th century. Wild populations managed for the table and for shooting began to decline in the early 20th century, so releasing for shooting has steadily increased over the last few decades. Today it is undertaken in woodland and farmland to support, usually, driven game shooting throughout most of the UK.

In late summer large numbers of pheasants and/or red-legged partridges are released onto lowland game shoots. A typical professionally managed lowland driven shoot might release 1,000 pheasants in each of several woodland release pens and/or 1,000 red-legged partridges into each cover crop patch. The density of these essentially free-ranging birds in and around the sites in the weeks and months following release does not go unnoticed and there is a mixture of evidence and perception about what the effect of these birds, and the land management practices undertaken to support them, might be having on the ecology of the habitats they occupy.

Several reviews that looked at the scientific evidence relating to the ecological effects of releasing were published recently (by the GWCT, RSPB and Natural England). The reviews indicate a broad range of ecological consequences that range from a group of local negative effects (usually at release sites) caused by the released birds themselves, some potentially wider-scale indirect negative effects such as increased predators, and to a variety of habitat management benefits in woodlands and on farmland. Up until now the GWCT has led this research programme and it underpins a range of GWCT best practice releasing

NEW PROGRAMME OF RESEARCH INTO RELEASING AND ECOLOGICAL EFFECTS

NEW & EXISTING WORK BY OTHER ORGANISATIONS

- Releasing and possible effects on reptiles.
- Dispersal of releases.
- Raptor killing and releasing.
- Stakeholder perceptions of effects near designated sites.
- Spatial associations between releasing and wildlife.
- Releasing and wildlife diseases.

NEW GWCT RESEARCH

- Game crops and breeding birds.
- Releasing and invertebrates.
- Releasing and foxes.
- Dispersal of releases.

guidelines (gwct.org.uk/releasingreport).

Increasing interest in releasing, and criticism by some commentators, has led to new licensing arrangements which have been implemented in England by Defra and which focus on designated conservation sites. Shoots near to or on those sites must fully comply with the GWCT guidelines. This will be reviewed and possibly changed in 2025. In Wales, licensing is also being discussed but there will probably be a different approach.

(Above) There is a mixture of evidence and perception about releasing gamebirds and the effects they have on the landscape.



Rufus Sage is our head of lowland gamebird research and has been evaluating the effects of gamebird releasing on the wider countryside.

RELEASING AND FOXES

Our new study has been facilitated by a donation from BASC. It will allow us to look at relationships between releasing, gamebird activity, fox control effort, fox activity (from scat counts), fox diet and other key wildlife groups. We collect data every three weeks at 18 sites across central southern England, some of which release, over a full calendar year.



In the context of game management the relationship between foxes and gamebirds is unlikely to be straightforward

Several organisations (see box) have also initiated research. This has partly been facilitated by new money from Defra, the Animal and Plant Health Agency, Natural England and Natural Resources Wales and the focus has been on issues highlighted by the reviews as requiring further research. The GWCT has some new work in several different areas. The first is to quantify the benefit of game crops to breeding hedgerow birds in a grassland landscape. The work is very relevant in the west country and Wales and we have a paper nearly ready for submission to a journal. The second is to review properly the evidence in relation to possible effects of released gamebirds on invertebrates. There were a couple of

major studies undertaken as PhDs in the noughties (which showed little or no effect away from release sites) but these were never published and are widely ignored.

Our main new research programme started in early 2022 and is ongoing (see box above). The primary aim of the study is to address the suggestion that land with released gamebirds supports more foxes. The conservation issue this potentially creates is that ground-nesting birds are more heavily preyed upon by these extra foxes during the breeding season. This is clearly plausible but in the context of patchy predator control mainly undertaken alongside game management, the relationship between foxes and gamebirds is unlikely to be straightforward. For example we do know that while gamebird releasing has increased substantially in recent decades, data available from the GWCT and BTO suggest that the UK fox population as a whole has not responded to that. However, local or regional effects have not been explored. The first phase of fieldwork for our study will finish in late spring. ■

We are looking at the benefit of game crops to breeding hedgerow birds in grassland landscapes.



MORE INFORMATION

We believe adherence to best practice guidelines and the GWCT's Principles of sustainable game management demonstrates that well run shoots create and maintain habitats that benefit gamebirds and other wildlife alike and that game management when conducted properly contributes a net gain to biodiversity. For more information see *Gamebird releasing and management in the UK* gwct.org.uk/releasingreport.

90 years and counting



Neville Kingdon looks at our historic Partridge Count Scheme and how the future of the iconic grey partridge rests in the hands of individuals on the ground

Once one of the most familiar birds of the countryside, grey partridges have declined in the last 30 years. The grey partridge is one of the best indicators of farmland ecosystem health; where they thrive, biodiversity is high and ecosystem services remain intact. In areas where few or no partridges exist, the farm environment is typically much degraded.

We believe that the future of the grey partridge rests in the hands of individuals on the ground through the management measures that they can implement. Our Partridge Count Scheme, which is celebrating its 90th Anniversary, is a free and voluntary scheme run by the GWCT since 1933 to collect information on the annual abundance and breeding success of grey partridges.

One of the longest-running surveys of its kind, the PCS relies on the participation of volunteer farmers, gamekeepers and land managers, to gather data on pair counts in spring and counts of young and old birds in the autumn. It represents a unique example of citizen science in action.

The Count Scheme launched in the early 1930s. Major HG Eley (who established the ICI Game Research Station – the forerunner of the GWCT) funded research (through ICI because of its interest in cartridge production) into partridge ecology at the fledgling, yet ground-breaking, Bureau of Animal Population at Oxford University run by Charles Elton, the ‘Father’ of animal ecology. In 1932 Doug Middleton, who played a large part in building up the early ‘Bureau’ with Elton, turned his attention to game research. He organised a system of censuses and fieldwork, visiting major partridge estates by motorcycle, setting up the PCS as a basis to study the grey partridge. In 1937 Middleton left Oxford, to become director of the ICI Game Research Station, bringing his nascent PCS with him.

Shaped by Elton and the Bureau, Middleton’s work combined natural history and fieldwork with measuring and modelling population processes. His papers were some of the first to examine gamebird ecology and laid the foundations for grey partridge research. Long before post-WW2 agricultural intensification, Middleton’s early papers discussed factors holding back grey partridge numbers that we still battle today. These include the

The grey partridge is one of the best indicators of farmland ecosystem health and thrive where biodiversity is high.

In Brief



JOIN THE PCS

JOINING IS FREE AND WE JUST ASK THAT YOU undertake a partridge count twice a year: The spring count measures breeding abundance. The autumn count measures breeding success. Counts are done in early morning and/or late evening, and we provide detailed instructions on how to count. There are no restrictions on how few partridges you must have to start with, nor must you have an interest in them as a quarry species. Sign up at gwct.org.uk/pcs or contact Neville Kingdon by email pcs@gwct.org.uk for more information.

Defra stated in 2022 that ELMs will fund predation management, alongside habitat options, for projects that aim to restore red-listed ground-nesting farmland birds

need for greater provision of nesting and brood-rearing habitats, chick food availability, the importance of overwinter cover, predation pressure at key life stages, the effects of weather and modernisation of farming methods.

In its original form, from 1933 to 1998, the PCS collated data from around one hundred shooting estates. This comprised counts of spring pairs and autumn broods, providing an overview of grey partridge numbers across the UK's shooting estates. This included calculations of young-to-old/chick survival rates, to look at summer chick production and overwinter survival.

Biodiversity Action Plan species

In 1998 the PCS became central to the GWCT's response as the lead partner for the grey partridge under the UK Government's Biodiversity Action Plan (BAP).

The PCS was expanded to engage with members of the broader farming community who were sympathetic to conserving partridges, but perhaps not as a game species.

This expansion led to an increase in the number of PCS counts undertaken per year from 84 in the spring of 1998 to 855 in 2012. PCS participants recorded an increase in grey partridge breeding density from the early 2000s to 2012. Many contributors utilised the new Environmental Stewardship Schemes (especially the Higher-Level Scheme, available from 2005) that supported new beetle banks, hedgerows, conservation headlands and wild bird cover.

As part of the GWCT's effort as the BAP lead partner for grey partridge, our advisors provided practical support and management advice to farmers and landowners to help them achieve their share of the national BAP target, utilising

Our research has shown that what is good for the grey partridge is good for other farmland birds, insects, mammals, and plants.



© Jannie Timmer



Farming with nature

To learn how management used for grey partridge conservation also helps conserve farmland wildlife, download *Farming With Nature* – a booklet that describes how grey partridge conservation helps to address the farmland biodiversity crisis across Europe. It summarises the most relevant scientific evidence regarding grey partridge management and the biodiversity benefits associated with it. Find out more at: gwct.org.uk/farmingwithnature.

local groups throughout the country and with the help of the GWCT demonstration project at Royston. The PCS was used as a tool by its participants to monitor progress and make timely adjustments where needed. For a few years it was possible to address those factors that Middleton identified in the 1930s. Then the cold, wet June of 2012 resulted in low productivity across the country. Afterwards, partridge numbers stabilised but have since failed to increase.

The success some PCS participants have had since, in recovering grey partridge numbers, indicates that it is still possible to increase grey partridge numbers, but it is not easy. We hope that the new Environmental Land Management scheme (ELMs) will be sufficiently supported, providing the necessary funding for farmers and landowners. This should promote and expand the habitat management that we know addresses the need for nesting cover, chick-food and overwinter food and cover identified by Middleton 90 years ago. Defra stated in 2022 that ELMs will fund predation management, alongside habitat options, for projects that aim to restore red-listed ground-nesting farmland birds. We hope to hear more detail on this in 2023, but research, much led by the GWCT, has shown that what is good for the grey partridge is good for other farmland birds, insects, mammals and plants.

Join the Partridge Count Scheme

We are looking for more farmers, land managers and gamekeepers who are interested in helping conserve their

DID YOU KNOW?

Bird abundance was 24% higher and species richness greater (on average five more species detected per site) on PCS sites. This research demonstrated that the adoption of management strategies as recommended in the PCS are likely to benefit other farmland bird species.

grey partridges to join the PCS, count their partridges and submit their findings to us. There are no restrictions on how few partridges you must have to start with, nor must you have an interest in them as a quarry species. People on the ground hold the key to the conservation of the grey partridge and so much more. PCS contributors have stepped up to this challenge. The grey partridge needs others to join them in this endeavour. ■

Neville Kingdon is our GIS scientist who runs the Partridge Count Scheme. He is keen to encourage more people to take part, as the counts reveal key information about grey partridge breeding success, abundance and survival during the year.





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The rise of pink salmon

Sarah Bayley Slater looks at new research that indicates the potential for self-sustaining populations of pink salmon in Great Britain

Pink salmon (*Oncorhynchus gorbuscha*) are the smallest, yet most abundant, species of Pacific salmonids. Their native distribution ranges from rivers in North America, from the Beaufort Sea to California; and in Asia, from the Laptev Sea to the Sea of Japan. The pink salmon is an invasive non-native species in the North Atlantic region, but their distribution has increased in recent years, following deliberate stocking of pink salmon into rivers in the White Sea region by the USSR/Russia between 1956 and 1999. This has led to growing concerns from fisheries managers and scientists, as the implications for native fish including Atlantic salmon (*Salmo salar*) are unknown.

Pink salmon, that roamed from the initial releases in the White Sea rivers, were first captured in Great Britain in the 1960s. For the next 56 years, the numbers of pink salmon recorded were low and irregular. But in 2017 the number of pink salmon reported increased unexpectedly, with 139 reported in Scotland, and numerous other records across Great Britain and Ireland, including as far south as the River Frome in Dorset (where the GWCT Salmon & Trout Research Centre is located).

Pink salmon have been observed spawning in Scottish rivers since 2017. It was initially anticipated, that if spawning was successful and the eggs hatched, that the fry would emerge in late autumn and descend to sea immediately. Furthermore, it was expected that poor feeding at sea during the winter months, would result in poor survival and there would be a low

probability of self-sustaining populations of pink salmon developing in Scottish rivers.

However, in spring 2022, researchers caught pink salmon smolts in two Scottish rivers, the Rivers Thurso and Oykel, between the 13 and 17 March, using six metre long conical nets fixed to the riverbed. This is believed to be the first observation of pink salmon smolts in Europe outside the Scandinavian and Kola peninsulas, and it provides evidence of successful spawning in 2021, completion of the freshwater phase of the life cycle, and indicates the possibility for the establishment of pink salmon populations in Great Britain.

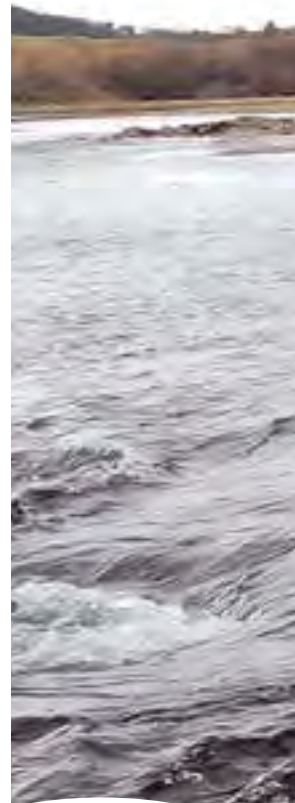
This new research led by Dr Michal Skóra on rivers in Caithness and recently published in the *Journal of Fish Biology*, indicates that pink salmon are successfully utilising spawning grounds in Scotland and their smolts are running to sea in spring, having overwintered in fresh water. This might be the beginning of establishing self-sustaining populations in Scottish rivers with the potential of pink salmon spreading to other suitable rivers in Great Britain. ■

This study was carried out under the PinkSIES project which has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 101026030.

Sarah Bayley Slater is our fisheries communications officer and highlights a new project that has discovered the possibility of a pink salmon population establishing in the UK.



(Inset) Pink salmon smolts caught in the River Oykel on 15 March 2022; net set by researchers in the river.



This is believed to be the first observation of pink salmon smolts in Europe outside the Scandinavian and Kola peninsulas, and it provides evidence of successful spawning in 2021



HOW TO REPORT PINK SALMON

Due to their two-year life cycle pink salmon have most frequently been observed in UK rivers in odd years eg. 2017, 2019, 2021. It is therefore anticipated that numbers of pink salmon will be caught and observed in the 2023 season. If GWCT members catch or observe pink salmon please do the following:

In Scotland: Fisheries managers and anglers should use the Pink Salmon Reporting Tool developed by Fisheries Management Scotland: gwct.org.uk/fmspinksalmon.

In England: Fisheries managers, anglers and netsmen should report any sightings or catches of pink salmon to the Environment Agency: gwct.org.uk/govpinksalmon.

In Wales: Sightings or captures should be reported to Natural Resources Wales: gwct.org.uk/nrwpinksalmon.

In Ireland: Anglers are asked to report any pink salmon to Inland Fisheries Ireland: gwct.org.uk/irelandpinksalmon or the Loughs Agency in **Northern Ireland:** gwct.org.uk/loughspinksalmon.

CELEBRATING

30
YEARS
of the Allerton Project



MORE THAN
30 ORGANISATIONS
from the Sustainable
Agriculture Initiative Platform
visited the Project to learn
about soil, biodiversity, water,
carbon and all aspects of
regenerative farming



AUCHNERRAN



16

SONGBIRD FEEDERS
will cover a variety of habitats at
our Auchnerran demonstration
farm to address the winter
hungry gap

UPLANDS

63

RED GROUSE NESTS
were found this summer and
we measured 545 eggs, which
averages 8.7 eggs per nest.
New technology enables us to
monitor nest temperature to
help identify predation events

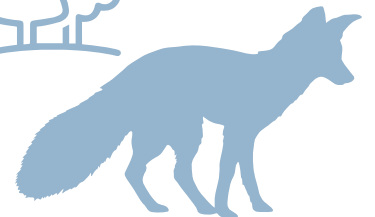


PREDATION



450

FOX STOMACHS
were analysed revealing the
food resources that support
foxes in the New Forest. They
are culled to protect breeding
curlew and other waders of
conservation concern



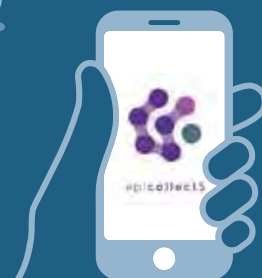
POLICY



MORE THAN

20

UPLAND ESTATES
took up Epicollect5
Best Practice Recording



RESEARCH



25

SCIENTIFIC PAPERS
published in 2022

ADVISORY



OUR NEW FARMING
CO-OPERATIVE,
the Environmental Farmers
Group (EFG), involves
86 members covering
38,437 hectares



WETLANDS

12

WATER VOLES

were relocated from Salisbury
and released with a further

48

water voles in the Hampshire
Avon Valley. Water voles are
one of the 'priority species'
chosen by the members of the
Avon Valley Farmer Cluster



ECOLOGY



MORE THAN

1,000

INSECT SAMPLES
were counted, including

362

hoverflies. Research showed
that umbellifers like wild
carrot, are important for
encouraging hoverflies



FUNDRAISING



\$120,000

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Reception and New York
Auction in aid of the GWCT

COMMS



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GWCT THE YEAR OF 2022

2

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2

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- 100% – tax deductible maintenance for Ltd Co's (please seek you tax advisors' advice) includes consumables and in-built litigation and liability protection.
- Replacement AEDs – state of the art and like for like at the end of the manufacturer's warranty – Free (why pay to replace)
- Monthly inspections and certification – outsource this to us as part of your equipment maintenance.
- 'How to' information, covering product familiarisation and instructions and what to do when deploying an AED. Easy to follow, in text and video format.

This offer is not limited to shoots, it is available to all who wish to make this life saving provision for the countryside in any field, both recreational or commercial.

Any questions, please give us a call, we'll be happy to advise.

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admin@defib-plus.co.uk +44 (0) 333 335 5667

Countywise

Your county events and fundraising update

© Two by Two Photography

2023 Clay shoots

| County | Where | When | No. per Team | Cost per Team | For more information, please contact |
|------------------|--------------------------------|-----------|--------------|---------------|---|
| Cambridgeshire | Six Mile Bottom | 13 May | 4 | £500 | Tim Furbank; tim@oakbankgc.co.uk |
| Cheshire | West Midland Shooting Ground | 28 April | 4 | TBC | Richard Goodwin; rcegoodwin@hotmail.com |
| Essex | Coptfold Hall | 9 June | 4 | £750 | Ed Rout; edward.rout@struttandparker.com |
| Leics & Rutland | Prestwold Hall, Loughborough | 16 May | 4 | TBC | Lottie Meeson; cmeeson@gwct.org.uk 07976 207113 |
| London | Holland & Holland, Northwood | 8 June | 4 | £1,200 | Iona Campbell; icampbell@gwct.org.uk |
| Norfolk | Mid Norfolk Shooting School | 6 October | 4 | £500 | Matt Hardy; matt.hardy@farmacy.plc.uk |
| North Yorkshire | Wykeham Estate, nr Scarborough | 25 May | 4 | £1,300 | Sophie Dingwall; sdingwall@gwct.org.uk |
| Northamptonshire | Warren Hill, Glooston | 20 May | 4 | £400 | Richard Wright; wrightinvestmentsltd@gmail.com |
| Nottinghamshire | North Lodge Farm, Widmerpool | 15 June | 4 | TBC | Lottie Meeson; cmeeson@gwct.org.uk 07976 207113 |
| Shropshire | TBC | April/May | 4 | TBC | Charlotte Marrison; c.marrison@camlandandproperty.co.uk |
| SE Wales | Cefn Tilla, Usk | tbc Sept' | 4 | TBC | Roger Thomas; roger.thomas@coark.com 07768 232334 |



(L-R) Live music by The Brogues; guests ate their three-course game dinner in the stunning setting of the Great Court of the British Museum.

LONDON

42nd ball at the Museum

THE GWCT HOSTED A SPECTACULAR evening at The British Museum in November for our **42nd ball** and what a night it was. We are delighted that more than £115,000 was raised in much needed funds for the GWCT. A Champagne reception was held in the magnificent Egyptian Sculpture Galleries, followed by a welcome from His Grace the Duke of Roxburghe and an introduction

from Teresa Dent. Guests enjoyed a three-course game dinner in the Great Court of the British Museum, which was followed by live music, dancing and cocktails. It was a fantastic evening, and would not have been possible without our generous supporters and sponsors including Lincolnshire Game, Gattertop Drinks Co., Wild Fox Distillery, Jukes Cordialities and Clarence Court.



Ball chairman, the Duke of Roxburghe.

City sporting success

IN OCTOBER, WE HOSTED A FANTASTIC **sporting dinner** and auction at the prestigious City of London Club. The evening brought together a selection of key corporate guests for an opportunity to network and celebrate the Trust. We were thrilled to raise a staggering £71,847, via table sales, donations, a live auction and raffle. Guests were welcomed with a Champagne reception and an introduction from Jim Paice, GWCT chairman, who discussed the future of



shooting. Trustee, Stephen Catlin, spoke about why the GWCT desperately needs support at this time. This was followed by a decadent four-course game dinner supplied by Nigel Hill, Hill Ash Estate. The night would not have been possible without Alistair Troughton, who was the driving force behind the event, sourcing the auction and raffle lots on offer to guests.

(Inset) Jim Paice, GWCT chairman, entertained guests at the City of London Club.



GCUSA

GCUSA auction raises \$120,000



GAME CONSERVANCY USA held its 36th members' reception and **New York Auction** in December, at the University Club in

Manhattan. GCUSA was honoured to host Teresa Dent, GWCT CEO, as the evening's guest speaker, who provided an update on the GWCT's current conservation initiatives, and the ongoing challenges of sensible land and wildlife management across the UK. GCUSA President Ron Beck then spoke about how those challenges presaged similar issues confronting sportsmen and women in the United States. The evening concluded

with a live auction conducted by Hugh Hildesley of Sotheby's, who raised more than \$120,000. Successful US bidders will be travelling to Gloucestershire, Hampshire and Yorkshire in 2023.

GCUSA's **spring sporting clays** outing will be held at the Pawling Mountain Club in Pawling New York on Saturday 3 June. Contact GCUSA at info@gcusa.org for more information on this and other events. Spring is also the occasion of GCUSA's annual membership appeal, that will be mailed to members under separate cover. US members can renew their support at any time by using the reply card on the enclosed letter, or via our website gcusa.org.

Auction lot donations



Mike Bax (far left) enjoying his fascinating electrofishing experience, as a result of an auction lot, with the GWCT fisheries team.

WE ARE ENORMOUSLY GRATEFUL TO everyone who supports and helps us run our events. Without your generous support these events would not be possible. One way people support the GWCT is by **donating auction prizes**, to help us raise vital funds. These lots often provide unique, once in a lifetime experiences, as Mike Bax, former Kent chairman explains: "There is little more inspiring than seeing the GWCT at work, and I have been lucky to gain many special insights by buying GWCT auction lots – shooting at the Allerton Project and Rotherfield with great commentary during the day from gamekeepers and farm staff, visits to the GWCT HQ at Fordingbridge, and last August Bank Holiday – a day out for my wife and I to spend several hours wading in the River Cerne in Dorset – one of the spawning tributaries of the River Frome. We were helping with the electrofishing of hundreds of salmon and trout parr for measurement and tagging, thus enabling fish to be followed through their life cycle, particularly on their departure and return to the river. Without the GWCT's science I really believe practical wildlife conservation would be light years behind where it is today. What commitment it provides."

ARE YOU ABLE TO HELP?

If you are able to donate an auction lot please contact your Regional Organiser for more information.

BEDFORDSHIRE

Fantastic Four raffle

DON'T MISS THE LAST REMAINING tickets for Bedfordshire and Hertfordshire **Fantastic Four Raffle** on sale gwct.org.uk/fantasticfour23. The winner will enjoy a spectacular shoot day for eight guns with four drives across Luton Hoo, Lilley Manor, St Paul's Walden and King's Walden.

Come and join the **quiz** at Oakley Village Hall on 10 March. Tickets are £20 per person and include a fish and chip supper. Other dates for your diary are the **Young Farmer Rally** on 20 May – come and pop in for some refreshments, and the **shoot walk** on the 15 June, courtesy of Richard Kendall (see page 43).

CAMBRIDGESHIRE

Packed 2023 diary

LOTS OF EVENTS ARE PLANNED THIS year including the **quiz night** at the Cambridge Rugby Club on 15 March, the **simulated game day** at Six Mile Bottom on 13 May (see page 37) and Julian Metherell of Kingston Wood, is kindly hosting the **shoot walk** on 26 June (see page 43).

CHESHIRE

Game, set & match

A SUCCESSFUL **DINNER** TOOK PLACE at the Manchester Tennis & Racquet Club, where guest speaker Ian Coghill entertained guests with his knowledge about the management of moorlands. The auction by the inimitable Mike Kenyon raised more than £5,000 – supported not least by a member bringing in five brace of fresh grouse. Thank you to sponsors Crichton Bespoke. Look out for the **clay shoot** with a new date of 28 April – see page 37.

Guests enjoying the Cheshire dinner.



CORNWALL



(L-R) Winner Kelvin Walsh receiving his trophy from Charles Williams.

Caerhays clays

THE RETURN OF THE CAERHAYS CLAY **shoot** saw competitors shooting across five challenging layouts and was won by Kelvin Walsh with a score of 49/50. A gundog scurry and 50 bird flush were also on offer. The day was kindly hosted by Charles Williams and sponsored by Duchy Gunsmiths and Kingswood Shoot.

The Hotel Bristol in Newquay was the fantastic venue for the **dinner**, where guests were treated to a delicious meal followed by a fantastic speech from Sir Richard Needham, Earl of Kilmorey. A raffle and auction helped raise £12,000.

CUMBRIA

Testing questions

A POPULAR FUN PUB **QUIZ** WAS HELD in The Royal Yew, Dean, by kind permission of Howard Speck and family. Many thanks to our sponsors Mitchells Auctioneers of Cockermouth and to James Moore for his auctioneering skills helping to raise nearly £3,500.

Guests enjoyed a superb evening at the Levens Kitchen **Quiz**, thanks to Richard Bagot. Thank you to sponsors Gilkes, Rathbones, OSG and Hewetson & Johnson, the evening raised more than £6,500.

KENT

Ultimate wild sport

LOOK OUT FOR THE MACNAB RAFFLE, a prize draw to win the ultimate wild sport for two guns to include trout fishing, fallow buck stalking and partridge shooting over pointers. For more details see gwct.org.uk/kentmacnab.

DEVON

High four

ASHCOMBE TOWER SAW THE LAUNCH of the Devon High Four **raffle**, by kind invitation of Ralph Rayner, and sponsored by Fisher German. Guests enjoyed drinks and canapés, along with the opportunity to buy one of only 250 tickets. The winner will enjoy a day's shooting for eight guns between Ashcombe, Ugbrooke, Berry Pomeroy and Lyneham. See gwct.org.uk/devonhighfour.



(L-R) Stewart Priddle, Devon chairman and Ralph Raynor of Ashcombe Estate.

HERTFORDSHIRE

Don't miss the Fantastic Four

THE JOINT HERTFORDSHIRE AND BEDFORDSHIRE FANTASTIC FOUR **RAFFLE** IS SELLING well with a limited number of tickets remaining. To ensure you are in with a chance of winning a day's shooting for eight guns across four outstanding drives across the two counties – St Paul's Walden, King's Walden, Lilley Manor and Luton Hoo, see gwct.org.uk/fantasticfour23.

HAMPSHIRE

High four launch

LONGPARISH HOUSE WAS THE VENUE for a **drinks party** hosted by Jonathan and Emma Palmer, with guest speaker Teresa Dent. Not only was carbon offsetting, and more than ever the importance of the GWCT's research a hot topic, but the chance to see first-hand a selection of Jonathan's vintage car collection on show including a Rolls Royce Silver Shadow. The 'Get Hooked on Field Sports' **raffle** was launched to encourage the younger generation to understand the importance of conservation. gwct.org.uk/hampshireraffle22.



Guest speaker, Teresa Dent, speaking at the Hampshire drinks party.

LANCASHIRE

Woodcock under the spotlight



MORE THAN £8,500 WAS RAISED AT the sporting **dinner** in September, organised by Nick Mason. Guests at the stunning Inn at Whitewell enjoyed a delicious game dinner followed by a fascinating talk on woodcock by artist Owen Williams. The evening concluded with an auction conducted by John Townsend. Thank you to hosts Charlie and Lou Bowman and to sponsors Brabners and Davis & Bowring.

(L-R) Nick Mason and Owen Williams, GWCT Wales chairman, woodcock enthusiast and artist.

LINCOLNSHIRE**Claxby clay day**

THANKS TO THE GENEROSITY OF HOSTS Jonathan and Claire Fenwick, and sponsors GFP Agriculture, Streets and Will Barker & Co, the Lincolnshire committee held an enjoyable **clay day** in September at Claxby. Teams enjoyed some challenging clays, with the Lindholm Boys emerging victorious.

Competitors at the Claxby clay day.

NORFOLK**Norfolk Big Four opportunity**

DON'T MISS THE OPPORTUNITY TO ENTER THE NORFOLK **BIG FOUR** FOR THE chance to win a unique shoot day for eight guns on four outstanding shoots on Friday 17 November. The day comprises four drives on Easton, kindly donated by Georg Gundersen, Honingham Thorpe, kindly donated by Ian Alston, Shotesham Park followed by lunch, kindly donated by Edward Bailey, concluding at Seething, kindly donated by the Key Family. Tickets cost £250 and the draw is limited to 200 tickets. Please go to gwct.org.uk/norfolkfour.

N YORKSHIRE**Dingbats, brands and mammals**

THE SELL-OUT PUB **QUIZ** AT THE WHITE Bear, Masham, in November raised more than £6,000, and saw Nick Barnard put together some ingenious questions including dingbats, brands and mammal noises. Thanks to the White Bear, sponsors Theakston Brewery and Knight Frank, Nick Barnard, Nick Downshire and Richard Ferrand for taking the vermin auction and everyone who supported and donated prizes. Forthcoming events include shoot walks and the biannual **dinner** on 16 November. Please contact Sophie Dingwall sdingwall@gwct.org.uk.

Since 2017 the Wykeham Estate's **clay shoot** has raised more than £150,000, with the total divided between the GWCT and

a local charity. On 25 May this popular clay shoot will be hosted by Viscount Downe, and 40 teams will be challenged by five varied drives across the estate with the proceeds going to the GWCT and Support Dogs. The day includes bacon rolls to start, drinks reception and lunch, followed by a raffle and auction. Please contact James Stephenson james.stephenson@dawnay.co.uk.

Following last year's **dinner** at Swinton Park, a very jolly day for eight young guns took place in December. The boys enjoyed four testing drives with a bag of 72 pheasants and four partridges. Thank you to the lot donors Adrian Thornton-Berry and Tom Orde-Powlett, who also provided lunch.

Olly Barrett and his team at the walked-up day which he bought at the Wykeham clay shoot auction.



gwct.org.uk/events

NORTHUMBERLAND

Keen conservationist Charlie Bennett.

Boosting biodiversity

CHARLIE BENNETT, JOINT OWNER of the Middleton North Estate, is hosting a **farmland walk** on Thursday 8 June. Currently undertaking a large biodiversity project, they are adding new habitat including 14 new ponds and planting 15,000 trees, 11 kilometres of hedge, plus extensive herbal-rich leys, wild bird seed and wildflowers. The wildlife has responded and together with GWCT advisor, Jennie Stafford, Charlie will lead the walk and share the knowledge he's learnt along the way. Please contact Sophie Dingwall sdingwall@gwct.org.uk.

NOTTINGHAMSHIRE**Ravenstone drinks**

A VERY ENJOYABLE **DRINKS** AND canapés reception was held at the stunning home of Jemima Wade at Ravenstone Hall. Thanks to sponsors Evenbrook and The Ultimate Travel Company, auction lot donors and a big thank you to Ian Walter our auctioneer.

SCOTLAND**Scottish auction**

THE GWCT SCOTTISH **AUCTION** will take place on Thursday 4 May at Prestonfield House Hotel, Edinburgh. Along with our long-standing sponsors Saffery Champness and Pentland Land Rover, we are delighted to welcome new sponsor Invenegy. Chairman, Tim Wishart, said: "We are working hard to produce a catalogue of fantastic lots and an outstanding evening for guests to enjoy." Please contact scottishauction@gwct.org.uk.

SHROPSHIRE



Join in the two species fun day this summer.

Mad March success

THIS YEAR HAS SEEN THE COMMITTEE bounce into much needed fundraising action, achieving more than £65,000. This was spread over two events, the fabulous and colourful Mad March Hare **Ball**, which included a generous auction, and the sell-out shoot **raffle** won by Graham Whateley who will enjoy his much-anticipated day this autumn.

Plans for 2023 are now gaining pace with a variety of events: including a **clay shoot**, followed by a **shoot walk** at Harnage, a **two species swim** with BBQ at Upper Shadymoor Farm (gundog water test, running concurrently with wild swimming in a separate, adjoining lake with hot-tub), and a **conservation walk** (12 July) at Pool Farm, Smethcott. See page 43 for more details.

WARWICKSHIRE

Thank you Rod

WE WOULD LIKE TO THANK **ROD Bird** who retired as chairman after more than a decade in post. During this time, he oversaw the hugely successful Foxcote clay shoot which has gone from strength to strength. Thank you Rod for all your hard work and support, and we wish the new chairman Ted Beale every success.

Rod Bird (left) has worked tirelessly for the GWCT.



SOMERSET

On your marks

A BLISTERING HOT DAY WAS MET WITH hot smoking barrels at the simulated **game day**. Hosted by Somerset Driven Clay Shooting, 22 guns shot 5,000 clays over four challenging drives. The day finished with a fantastic meal, laughter and a few bruised shoulders.

On your mark, get set, **FERRET**. A fantastic afternoon of **ferret racing** took place at Fivehead village hall in September. Each ferret was auctioned before every race, and the 'owner' of the winning ferret received £50. This hilarious event raised £2,000.



The hugely popular ferret racing at Fivehead.

WALES

Hitting the high notes

CEFN TILLA COURT **CLAY SHOOT** WAS held in September and saw 20 teams take part in six sporting stands and a four-man flush, before enjoying an auction and buffet supper. Kindly sponsored by Sinclair Jaguar Land Rover, Premier Forest Group, Cardiff law firm Le Gros and Holts Auctioneers, the day raised £11,500.

The Gunroom at the Vaynol Estate in Bangor welcomed GWCT Wales for an evening of **talks** on shooting and conservation matters. Matt Goodall, our head of education, explained about General Licences and policy, George Jure spoke about steel shot, and there were also updates on GWCT research.

As advisors of Aim to Sustain, GWCT Wales supported an **event at the Senedd** in

Cardiff Bay in November, where members were given the opportunity to discuss and promote the benefits of game meat with political influencers.

Members at the Senedd found out more about game meat and enjoyed some delicious treats.



© BASC



NEW SWEEPSTAKE PACKS

THE GWCT IS DELIGHTED TO ANNOUNCE its new sweepstake pack with stunning images of gamebirds by artist Owen Williams. We are very grateful to sponsors Holts auctioneers, whose support has allowed us to create the fabulous new sweepstake pack including the stunning shoot card. All the items are free if you give your support to the GWCT by running a sweepstake on shoot days. We also offer the incentive of a bottle of sloe gin for every £100 raised.

For more information please email: sweepstakes@gwct.org.uk or ring 07803 180957.

gwct.org.uk/sweepstakes

Diary

March to June

We advise checking with the organisers before attending any of the events listed. For a full listing see gwct.org.uk/events

March

- 10** **BEDFORDSHIRE** quiz
Oakley Village Hall, Julia Barnes
julia@barnesfarming.com.
- 15** **CAMBRIDGESHIRE** quiz
night, tbc, Sam Coles
sam.coles@bidwells.co.uk.
- 16** **WEST OF SCOTLAND** dinner
& auction, Oran Mor, Glasgow,
Rory Donaldson 07718 780700
rdonaldson@gwct.org.uk.
- 18** **ESSEX** Spring Ball, Braxted Park,
viv.vivers@lycetts.co.uk.

April

- 19** **LONDON** City Flickers Panel Talk,
Iona Campbell icampbell@gwct.org.uk.
- 20** **GRAMPIAN** dinner & auction,
Lochter Activity Centre, Andrew
Wright awgrousenhings@gmail.com.
- 28** **CHESHIRE** clay shoot, West
Midland Shooting Ground, Hodnet,
Richard Goodwin
rcegoodwin@hotmail.com.

May

- 4** **SCOTLAND** Scottish
auction, Prestonfield House,
Edinburgh, Lois Bayne-Jardine
07594 929783
scottishauction@gwct.org.uk.
- 10** **SHROPSHIRE** shoot walk,
Harnage Farm, Cressage, Simon
Scott simon@harnageestates.co.uk.
- 13** **CAMBRIDGESHIRE** clay day,
Six Mile Bottom, Tim Furbank
tim@oakbankgc.co.uk.
- 16** **LEICESTERSHIRE &
RUTLAND**
clay shoot, Prestwold Hall,
Loughborough, Lottie Meeson
cmeeson@gwct.org.uk.
- 20** **NORTHAMPTONSHIRE**
clay shoot, Warren Hill,
Glooston, Richard Wright
wrightinvestmentsltd@gmail.com.
- 25** **N YORKSHIRE** clay shoot,
Wykeham, nr Scarborough,
James Stephenson
james.stephenson@dawnay.co.uk.

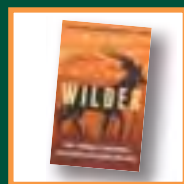


June

- 8** **LONDON** clay shoot, Holland &
Holland, Northwood, Iona Campbell
icampbell@gwct.org.uk.
- 8** **NORTHUMBERLAND** farmland
walk, Middleton North Estate, Sophie
Dingwall sdingwall@gwct.org.uk.
- 9** **ESSEX** clay day, Coptfold Hall,
Edward Rout edward.rout@struttandparker.com.
- 15** **BEDFORDSHIRE** shoot walk,
Millow Bury Farm, Julia Barnes
julia@barnesfarming.com.
- 15** **NOTTINGHAMSHIRE** clay shoot,
North Lodge Farm, Widmerpool,
Lottie Meeson cmeeson@gwct.org.uk.
- 26** **CAMBRIDGESHIRE** shoot walk,
Kingston Wood Estate, Sam Topham
sam@caldecotemanor.co.uk.
- 28** **SHROPSHIRE** dog trials evening,
Upper Shadymoor Farm, Stapleton,
Dorrington, Shrewsbury, Joy Fox
joy@shadymoor.co.uk.
- 29** **NORTHUMBERLAND** shoot
walk, Skelton, Skelton in Cleveland,
Saltburn-by-the-Sea, Sophie Dingwall
sdingwall@gwct.org.uk.

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View the full range at www.gwctshop.org.uk



The Vaynol Estate hosted the first ever Welsh Game Fair.

Success for Welsh Game Fair

A showcase for the Welsh countryside

THE VAYNOL ESTATE IN BANGOR, welcomed GWCT's first Welsh Game Fair last year, where more than 10,000 people visited the inaugural three day event. Showcasing fishing, clay shooting, gundogs, game cookery, falconry, horses and hounds, as well as rural crafts, food and drink, visitors were treated to a wide range of attractions, displays, live debates, shopping at hundreds of trade stands and family entertainment, all with a countryside theme.

The event was an important platform for GWCT Wales enabling us to demonstrate our research work and bringing it to life to all those interested in conservation, biodiversity and farming. Welsh chairman, Owen Williams, said: "We are delighted that our close collaboration with Stable Events has produced a great game fair for Wales. At a time of significant instability and change in the countryside it is vital that the rural community comes together to celebrate and showcase the many interdependent strands of life in the countryside. We are also very grateful to our hosts the wonderful Vaynol Estate."

Due to its success, the Welsh Game Fair will return to The Vaynol Estate this year on 9-10 September. Early bird tickets are now on sale at welshgamefair.org.



The Nick Williams theatre was an ideal place to discuss GWCT research.

MORE INFORMATION

Contact: Sue Evans 07399 296550 or sevans@gwct.org.uk. GWCT Wales, The Maltings, Cardiff, CF24 5EA.



Discovering origins

New woodcock project

THE FIRST WOODCOCK RESEARCH project in Wales began this season, centered around the migrant woodcock population on Pen Llŷn (Lleyl Peninsula). Involving three estates Nanhoron, Cefnamwlch and Glasfryn all contributing funding along with other landowners, the project involves ringing, GPS tags, hand-held thermal surveys and thermal drone surveys. We will also be taking feather samples from ringed and shot birds, which will show the origin of the population. To find out more contact Lee Oliver loliver@gwct.org.uk.

Future agri-environment

KINDLY HOSTED BY TERRY MILLS OF Cruglas Farm, as part of the Bro Cors Caron SMS project, a panel discussion was held last year surrounding the proposals for the Sustainable Farming Scheme – Wales' future agri-environment scheme. The panel included James Owen (Land Reform Division of Welsh Government), Gareth Parry (Farmers' Union of Wales), Chris Thomas (4 Rivers 4 LIFE project) and Owen Williams (GWCT Wales). Topics included tree and hedgerow planting, food production and the heritage of Welsh farming communities. Guests then enjoyed a guided tour around Cruglas Farm looking at the different habitats and conservation practices.

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The action and frame of this gun has been made from aviation grade alloy, light, and an extremely strong material.

The shotgun has been developed as a fast handling comfortable fit for ladies, but is also gaining popularity with more senior aged sporting Gentleman.

When using standard 20 bore loads, recoil is comfortable. This gun has been made with 76mm chambers and proofed for steel shot. When using magnum game loads recoil is increased, but still less than a 12 bore counterpart.

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The challenges facing ptarmigan and three other grouse species are being discussed in May.

Scottish grouse

Practical conservation for Scottish grouse species

A SYMPOSIUM ON THE CONSERVATION of Scotland's four grouse species – red grouse, black grouse, capercaillie and ptarmigan – will take place on 5 May at Balhousie Castle in Perth. Organised by the GWCT together with the World Pheasant Association, it will feature expert speakers discussing the challenges facing the species, and steps to support their success or survival. Kindly sponsored by Hampden & Co, tickets cost £25 and include lunch. For more information please see gwct.org.uk/grousesymposium or by emailing office@pheasant.org.uk.

New faces

Changes to the team in Scotland

WE ARE DELIGHTED TO WELCOME POPULATION ECOLOGIST **SCOTT NEWEY** AS A senior researcher (top right), who will lead the Scottish uplands research focusing on mountain hare and heather management projects. Louise de Raad, our head of research Scotland, said: "Scott is a fantastic addition to our team and we are pleased that he is moving back to the GWCT. He is renowned for his expertise in mountain hare ecology, and is well placed to develop and grow our research."

Dyfan Jenkins and his family (middle right) moved to our demonstration farm at Auchnerran in October and started as its new head shepherd/livestock manager taking over the role from Allan Wright. Dyfan hails from Wales where he worked on the family farm with its 3,000 breeding ewes in the Preseli mountains, much of which lies in the Pembrokeshire Coast National Park.

Dyfan is joined by placement students **Adam Watts** and **Panagiotis Nikolaou** (bottom right), who are looking forward to getting involved in the farm's various projects, especially the wader nest monitoring. We would also like to welcome **Rhiannon Wooldridge** and **Rebecca Mills**, the new lowland placement students, who are keen to develop their fieldwork skills while working for the GWCT.



Charlie Brownlow joined the fundraising team last year, taking over responsibility for major donors. Since 2008 Charlie has run his own sporting agency in Scotland and is a fly-fishing instructor. He hopes to develop a solid group of next generation supporters from the shooting, farming and conservation communities.

(Top) Scott Newey; Dyfan Jenkins and family; Adam Watts and Panagiotis Nikolaou; (Inset) Charlie Brownlow.





Dave Parish was a familiar face at the grey partridge demonstration sites, always keen to impart his knowledge.

Thank you Dave Parish

Head of lowland research
leaves to join NatureScot

WE WERE SAD THAT DAVE PARISH left the GWCT after 25 years for a new post with the ornithology team at NatureScot. Dave joined the Trust in 1997 as a post-doc straight from Durham University and describes his original role as a 'pheasant biologist, ornithologist and ecologist'. Latterly he was head of lowland research in Scotland and oversaw the research work at the grey partridge demonstration sites and at Auchnerran, our demonstration farm. He was also involved in a number of research papers including for the EU Life Laser Fence and Interreg PARTRIDGE projects. We wish him all the best in his new post.

Save the date 30 June-2 July

THE GWCT SCOTTISH GAME FAIR returns from the 30 June to 2 July this year. There's a packed country pursuits programme from fishing to shooting, archery to falconry. With lots of educational events, the cookery theatre celebrating the best of Scottish food and many retail stands, there's something for everyone. To book go to scottishfair.com.

By creating specific habitat like this predatory insect-mix, grey partridges at Balgonie have increased and pair density is more than double the average for Scotland.



Balgonie partridge success

Grey partridges respond and increase by 260%

BALGONIE ESTATE IS THE MOST SUCCESSFUL PARTRIDGE DEMONSTRATION SITE IN Scotland. Funded by the EU's North Sea Region Interreg programme, the project aims to show how farmland biodiversity can be supported alongside productive agriculture, by a variety of measures designed originally to benefit the grey partridge. The team at Balgonie, in partnership with Kingdom Farming, Kings Crops and Scottish Agronomy, increased grey partridge populations through targeted management interventions, primarily in the form of novel habitats.

We wanted to provide safe nesting cover, insect-food for chicks, winter food and winter cover (protection from predators) and see how grey partridges responded. Our grey partridge counts in 2022 underlined the

success of this project, with spring pairs increasing by 40% and autumn totals by 260% since 2014. Compared with data from the GWCT's Partridge Count Scheme, pair density at Balgonie is more than double the average for Scotland and autumn density is approaching three times as high. This is against a backdrop of continual grey partridge declines in the UK, with breeding populations falling by 92% since the late 1960s.



© Laurie Campbell



LAND MANAGEMENT CHANGES

Ross MacLeod examines the implications of two Scottish Bills

Two very significant Bills are in progress through Scottish Parliament following public consultation late in 2022. GWCT (Scotland) took the opportunity to respond to both the Agriculture Bill and the Wildlife Management (Grouse) Bill proposals. We highlight the main components of these Bills, our concerns and steps we would like to see taken to ensure pragmatic legislation.

Agriculture Bill – public payment for public goods

The Agriculture Bill is enabling legislation, which will pave the way for introduction of payments in return for positive

| KEY CONCERNS - AGRICULTURE BILL | GWCT SOLUTIONS |
|--|--|
| Scottish Government must strike a balance between support for efficient, high quality food production and biodiversity stewardship. | Make best use of the most productive agricultural land, with careful management of other ground suitable for biodiversity. |
| Advisory support to farmers needs to underpin the development of this balance. | Advisory consultants must have the skill-sets to foster productive farming and biodiversity stewardship. |
| Landscape-scale support is mentioned in the Bill, but no clear mechanisms proposed, such as financial support for Farmer Clusters. | Facilitation funding to establish and maintain Farmer Clusters made as widely available as possible. |

environmental outcomes. An outline structure for this approach is set out within the Bill, yet Scottish Farmers remain uncertain about the level of support they are likely to

receive compared with present funding. This makes it extremely difficult to plan ahead.

Wildlife management (Grouse) Bill – licensing proposals

Scottish Government announced its intention to license grouse shooting and muirburn in November 2021. The Bill consultation in late 2022 set out proposals for the operation of a grouse shoot licence and conditions under which this may be obtained and removed. The consultation also proposed restriction

on muirburn based on a precautionary approach, and further regulation of predator control. ■



| KEY CONCERNS - WILDLIFE MANAGEMENT (GROUSE) BILL - LICENSING PROPOSALS | GWCT SOLUTIONS |
|---|--|
| Loss of rare heather habitat and biodiversity if licensing is so onerous as to reduce or remove grouse management. | Regulation that balances proportionate licensing with encouragement of best practice. |
| A precautionary approach may restrict muirburn to areas with peat depth of less than 40cm, when there is no strong evidence of damage to peat. | Adaptive management, establishing environmental constraint maps, plans and monitoring of muirburn ignition points. |
| A potential ban on snaring may be added to the Bill, which would further limit management for conservation purposes. | Maintain the use of humane cable restraints, subject to daily record-keeping and reporting requirements. |

Ross MacLeod is head of policy in Scotland and is keen to highlight the wide range of land management Bills that the GWCT is contributing to.



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Looking to the future

A founder member of the GWCT Wales Farming Community, Peter Loxdale believes restoring soil and the environment will improve the farm's self-sufficiency and profitability





Peter Loxdale runs Castle Hill Farm near Aberystwyth with his father Patrick. In 2008, the beef and sheep operation was converted to organic and since then, it has moved to an increasingly regenerative approach. As part of this they have installed a muck store with the help of a Government grant to make better use of their farmyard manure. Previously, it was stored in heaps on the fields but over winter rain had leached a lot of the goodness out and it took a long time to break down. The concrete structure shelters the manure and allows it to be turned every fortnight. This system ensures expensive bedding straw is used more efficiently as it's well composted with the muck and returns organic matter to the soil.

Patrick said: "Within 12 weeks it has composted enough to be spread on the fields and the muck is absorbed much more rapidly. That must mean it's a good product and that the soil is healthy because worms are coming up and taking it. The quick absorption allows us to use it in a similar fashion to artificial fertiliser by applying little and often between silage cuts."

Another big change has been towards intensive rotational grazing of diverse swards whereby high densities of stock are moved round more regularly, giving the grass longer recovery periods. This method

Where we want to take this farm in the future is driven by improving soil and the environment

Project Profile

Location: Castle Hill Farm, near Aberystwyth

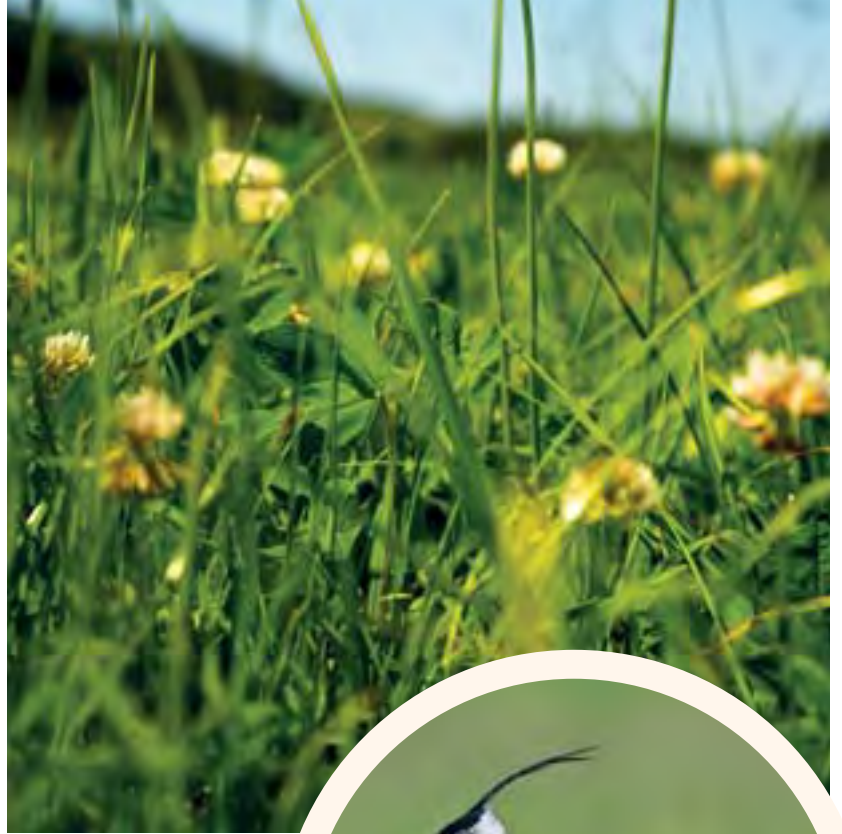
Type of landscape: Favourable flat grazing and silage pasture and relatively productive upland pasture

Acreage: 700 acres

Farm type: 800 breeding ewes producing 1,350 lambs and 220 cattle including 80 suckler cows

Conservation focus: Soil health and fertility

Conservation measures: Intensive/adaptive rotational grazing, adaptive water systems, manure management, areas of low density grazing and mosaic topping of rushes to encourage waders.



© Voodison328

A united front

Sue Evans
Director GWCT Wales



The GWCT Wales Farming Community has been set up to provide a platform for farmers across the country who are keen to integrate biodiversity restoration and climate change mitigation with profitable farming enterprises. These Working Conservationists are evidence that the farming community wants to increase biodiversity in the farmed environment and understands how to achieve it. They should be heard by those responsible for shaping farming policy in these challenging times.

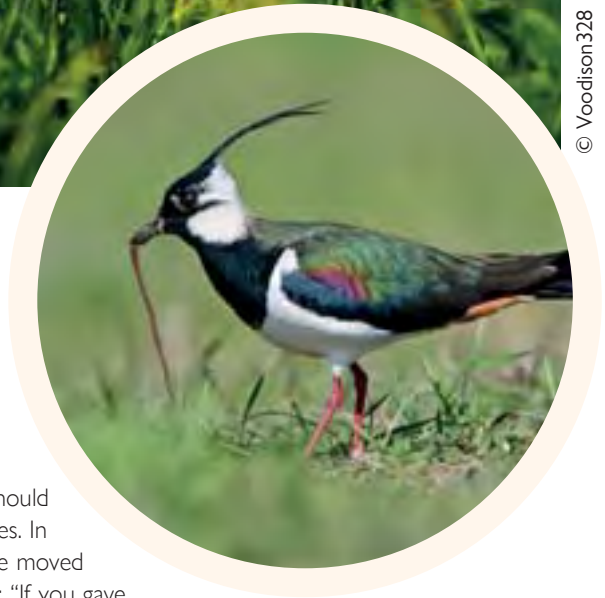
Our new Farming Community offers a network for farmers to share knowledge and experience, and a united voice to send a powerful message to Welsh Government. We want to ensure that the people on the ground are at the heart of a new approach to agri-environment policy, which is adequately funded and fit to deliver urgently needed public goods.

If wildlife declines are to be reversed and carbon targets reached, conservation measures must be on a landscape scale and involve local communities. Having developed the Farmer Cluster approach, we've seen what farmers can achieve when they have the right support to help them work together.

Nature reserves and protective designations will play a part in reversing biodiversity loss and sequestering carbon, but the vast majority of the Welsh countryside is managed by private land managers, from small family farms to larger scale businesses. GWCT Wales' Farming Community recognises that their skills and commitment, combined with adequate financial support and good advice grounded in science, is the essential recipe for success. Join at gwct.wales.

has seen big increases in yields, which is important for an organic system where artificial fertilisers are not permitted. The rise in forage production has allowed an increase in stocking densities, which should in turn see greater revenues. In a typical rotation sheep are moved every two days. Peter said: "If you gave them six days on one area, they'll have eaten all the best quality grass in the first two and then spend four picking through the rest. By dividing this same area, for example, into three sections they eat better quality grass more regularly and don't churn it up by walking from one end to another. On the second day they have to pick through the rest and then they're moved on. We also switched to deferred grazing rather than forage crops in winter, which has reduced costs and means the sheep come in the shed cleaner before lambing."

Peter has easy-to-put-out modern fencing systems, which enable him to set up a 220 metre fence line in five minutes. He uses Kiwitech drag troughs fed by well systems and a solar pump, so he can move water to the sheep rather than the other way round. He said: "Where we want to take this farm in the future is driven by restoring soil and the environment. By doing that, we also improve the farm's self-sufficiency and profitability, which is increasingly important with reduction in subsidies and schemes and global factors beyond our control." ■



(Clockwise from above) Intensive rotational grazing of diverse swards whereby high densities of stock are moved round more regularly, gives the grass longer recovery periods; the farm is completely organic which benefits wildlife such as this lapwing.

Joe Dimbleby is our head of communications who is keen to highlight people on the ground making a huge difference to the environment and biodiversity.



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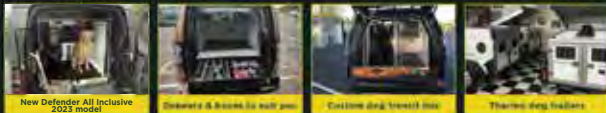
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Biochar – the bionic application?

Henrietta Appleton explores the role of biochar in both the lowlands and uplands, and whether it is the answer to storing carbon

Biochar is simply the charred carboniferous material produced by the incomplete combustion or pyrolysis of organic matter during fires. The result is a very stable and persistent store of carbon, which can resist further oxidation. It has a role to play both in carbon storage in agricultural soils and in the carbon budgets of upland peatland.

If applied to agricultural soils, biochar is seen as a way of storing more carbon enabling farming to contribute to UK climate targets. But there are concerns that it might have adverse effects by increasing the persistence of pesticides, which in-turn result in undesirable effects on non-target biota such as earthworms. In addition, the provenance of the biochar feedstock is an important part of the carbon equation: burning virgin forestry would be counterproductive, whereas pyrolysis of wheat chaff could be beneficial. However, pretty much any organic matter can be burnt providing an opportunity to 'recycle' and store the carbon in crop residues and food waste. Given the potential importance of biochar to future Greenhouse Gas (GHG) land-based removal, the Allerton Project (see page 17) is just starting a UK Research and Innovation funded experiment with Nottingham University. It aims to explore whether biochar becomes incorporated in the soil as stored carbon and whether how it's produced, applied and managed influences its net benefit. A wide array of data will be collected including the impact on soil pH, moisture, carbon and GHG flux and biology.

In the uplands its role is equally debated. The historic and current production of biochar following landscape fires is not yet accounted for in UK peatland models, and yet it is increasingly acknowledged as a significant sink for atmospheric CO₂. Consequently, its production during the prescribed burning of heather moorland is likely to be an important contributor to carbon storage in peatlands over time as the amount produced is influenced by weather conditions, fuel loads, fuel types and fire characteristics (such as fire temperature). As most studies ignore this benefit, the carbon storage potential of burning management may have been underestimated, especially

The carbon storage potential of burning management may have been underestimated, especially in flat wet areas of blanket bog where peat erosion is limited

in flat wet areas of blanket bog where peat erosion is limited. Biochar also has the potential to mitigate other GHG emissions (such as methane) and may aid peatland restoration through its interaction with the soil microbiome and benefits to soil structure and stability.

Although this article has focused on its carbon credentials, biochar is also considered to have other benefits when applied to soils such as improving soil health through acting as a nutrient and microbial carrier, acting as a remediation for contaminated soil and water by immobilising toxic metals and organic contaminants, mitigating GHG emissions and improving animal health and nutrient intake efficiency. ■

DID YOU KNOW?

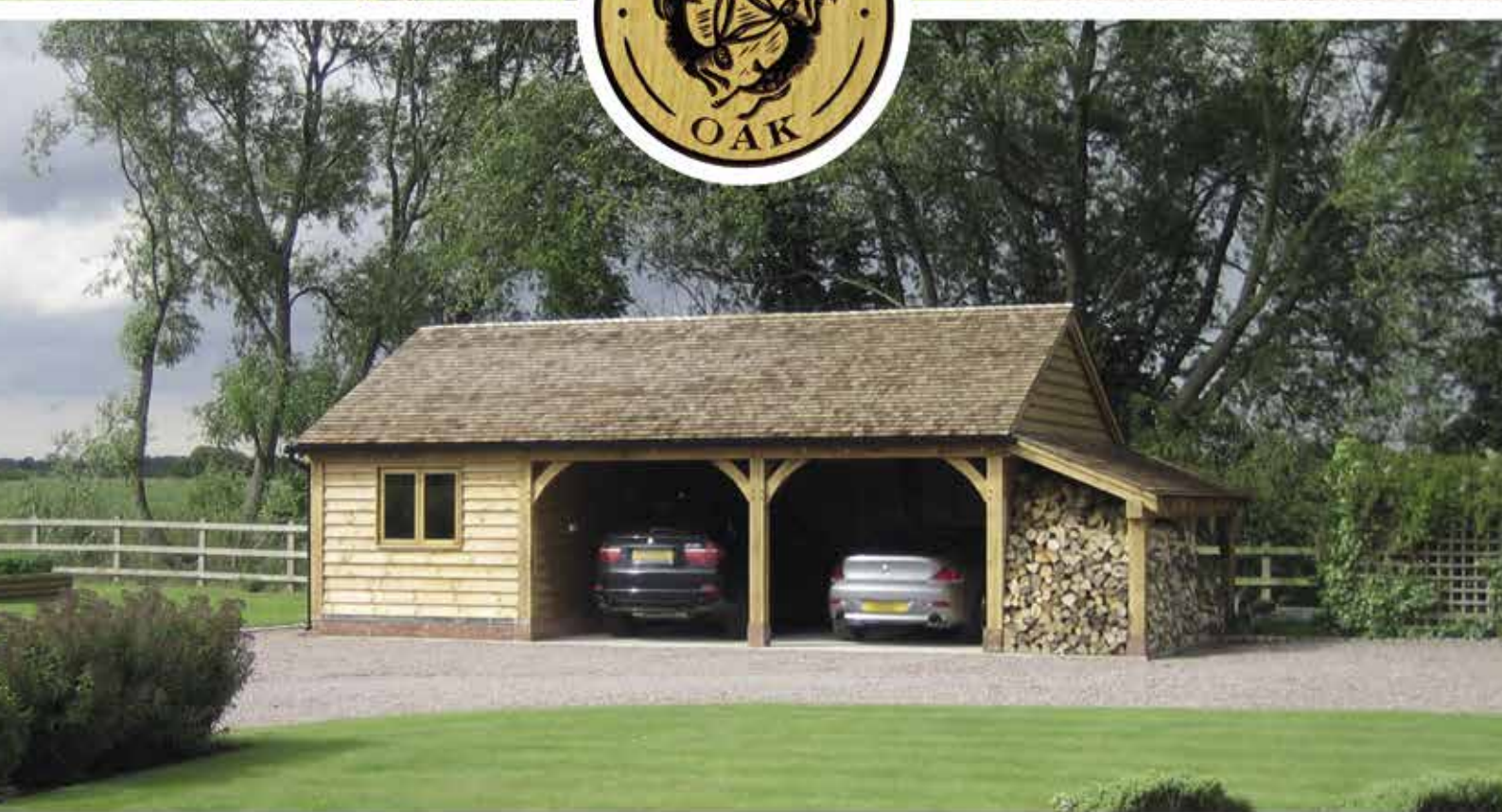
Terra Preta is often referred to as Amazon fertile/dark/black/super soil or Indian black earth. It's a highly fertile anthropologic (man-made) soil specific to the Amazon region created by Amazonian civilisations from approximately 7,000 years ago. It's not known whether they realised the benefit to crop yields of adding biochar to the soil.

Henrietta Appleton is our policy officer (England) who believes that a new research project at the Allerton Project will help further our understanding of biochar and the role it could play.



The production of biochar during the prescribed burning of heather moorland is likely to be an important contributor to carbon storage in peatlands over time.





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In Brief



Celebrating birds in the 10th Big Farmland Bird count

FOR THE 10TH YEAR THE GWCT BIG Farmland Bird Count returned in February with farmers, land managers and gamekeepers taking to their fields to count some of the iconic British birds that share their land. Farmland birds have declined by 63% since 1970 and desperately need our help. To know how we can best reverse this decline, it is important to have information from long-term initiatives like the count, which is supported by the NFU. Full results will be reported in the next issue, but feedback has been very positive with one farmer saying: "The count gives me an idea of the health of the farm and the potential for improvement, such as coppicing or placing of feeders to support populations."

No change in Scotland

THERE ARE NO CHANGES TO THE suite of 2023 General Licences in Scotland from the 2022 General Licences. They can all be viewed here: gwct.org.uk/scottishgl.

Gamekeepers Welfare Trust

Being there for gamekeepers, stalkers and ghillies. For more information see thegamekeeperswelfaretrust.com.



Around the shoots

Innovative research on the farm

GWSDF Auchnerran Shoot

A total of five rabbit days, two mixed species days and an evening duck flying took place during the 2022/2023 shoot season. However, last season saw a decline in pheasant numbers and the game crops struggled to grow with dry soils, little rain and rabbit damage. The game crop seed mix which is sown each year is the KALB1 Kings Alba Mix. It is a wild bird seed mix comprised of fodder radish, Kings kale rape, phacelia, spring triticale, spring barley, utopia and vitasso brown mustard. The establishment of these game crops is fundamental to the shoot and the health of resident bird populations, benefiting both game and songbirds, with large numbers of linnets and chaffinch often seen feeding on them.

In addition to the supplementary provision of feed and game crops for gamebirds, the duck flying pond (pictured above) has been fed with barley since autumn/winter 2021 and encroaching trees and shrubs have been removed to open up the pond to attract waterfowl such as mallard, teal and wigeon. Come December 2021, a number of mallard and a few teal had returned to the pond. Last October, we held our first duck flying evening and we hope to hold further duck flights in the future.

Allerton Project Shoot, Loddington

We finished the final few shoot days in sodden weather, which made us all dream of warmer spring days and planning ahead for the following year. We will be undertaking extensive woodland thinning work across the farm, but focusing on a couple of principle pen areas and drives to benefit us next season. This will also have positive benefits for farmland birds and other wildlife across the farm. Gamekeeper, Matt Coupe, will be continuing with an extensive predation control programme, as well as yearly wildlife monitoring such as brown hare counts. We were delighted with our Big Farmland Bird Count in February, where we counted many bird species, including 11 yellowhammers, five skylarks and two redpoll which are all thriving under the management on the farm.

On the ground



NUMBERS OF SOLITARY BEES have declined but bare ground (scrapes) create better nesting habitat for ground-nesting bees.



This spring

SPEND TIME READING OUR

Guidelines for sustainable gamebird releasing to enhance your releasing strategy. Maintain 1,000 pheasant poults per hectare of release pen within plantation woodlands and 700 poults per hectare within sensitive ancient woodlands.

USE TARGETED PREDATION

control to help game and wildlife thrive. Carefully positioned Larsen traps, tunnel traps and humane cable restraints can be utilised to help relieve pressure on our most struggling species.

ATTEND A GWCT BEST PRACTICE

course. Keep up to date with the changes in corvid control, tunnel trapping, fox snaring and game management. Strive to be the best in the industry.

CONSIDER SHOOTING NON-LEAD.

We are implementing a non-lead season for our demonstration shoot at the Allerton Project. There are various cartridges on the market so speak to your gunsmith about switching.

CLEAN AND DISINFECT ALL SHOOT

infrastructure to prevent potential disease issues, especially with the threat of avian influenza. Store disused feeders, drinkers, top nets and pen sections in a barn until needed.



A mink raft is effective at detecting and trapping mink.

HOW TO...

run a GWCT mink raft

Since its invention by the GWCT in 2002, the mink raft has revolutionised mink control through the last two decades. American mink are not native to the UK and are a serious game and wildlife predator, and a key driver of water vole decline. The mink raft is highly effective at revealing if mink are present, and once mink are detected, goes on to make the perfect trap site. The free GWCT fact sheet on how to use it gives detailed instructions: gwct.org.uk/minkraft.

1. When in detection mode the raft can be checked whenever convenient; we suggest once every two weeks.

2. Good quality clay and a glass smooth surface is the key to success; please do not use riverside mud.

3. When mink tracks are detected, the raft makes a perfect trap site and you can expect to catch within just a few days; often on the first night.

4. Mink tracks are easy to identify; note the five-toed star like shape, around four centimetres across (see inset).

5. Cage trapping on mink rafts results in very little bycatch, and almost all, including water voles, can be released unharmed.

6. Contact us for more advice. Email: advisory@gwct.org.uk.



DID YOU KNOW?

One raft per kilometre of river gives you multiple opportunities to detect each mink. Left for two weeks within the range of a mink it has a 50% chance of detecting that mink.

DID YOU KNOW? We help and advise on a wide variety of upland issues for game and wildlife, from moorland restoration and muirburn planning, to population monitoring and disease management.



FOR MORE ADVICE – book a visit or join one of our courses. Get in touch: 01425 651013 (England/Wales) or 0131 202 7670 (Scotland). gwct.org.uk/advisory



CREATING THE ULTIMATE...

Spring game plan

Include additional small bird feeders to aid songbird survival over the breeding season.

For gamekeepers and land managers, spring is a productive time of a year where they can deliver even greater benefits for game and wildlife. Just making a few improvements will reap rewards. Here are a few ideas to consider.

Feeding: Continue supplementary feeding through to April/May to give gamebirds and songbirds the best chance of breeding successfully. Include additional small bird feeders to aid songbird survival over the breeding season. Move gamebird feeders from drives to areas suitable for breeding territories, such as hedgerows for partridges and woodland edges for pheasants. Moving hoppers regularly also reduces a build-up of rat populations and therefore reduces the need to use anticoagulant rat poisons.

Cover crops

Shoots are increasingly turning to agri-environment options that deliver scientifically proven conservation benefits and reliable farm income, while benefiting the shoot overall. Utilising small seed-

Supplementary feeding has been included as part of Stewardship schemes since

2013

due to GWCT research

bearing crops such as chicory, kale, millet, triticale, sweet clover and fodder radish has been proven to benefit a whole host of other wildlife as well as game, by increasing nesting and brood-rearing cover and winter food. With unpredictable weather, perennial game cover crops can be a real asset as they last for many years, reducing overall establishment costs and enhancing biodiversity.

Predation control

Spring is the best time to implement a predation control strategy, and run at least one Larsen trap to manage the population of magpies and crows to benefit songbirds, flora and fauna, protect crops and livestock. Tunnel trapping to control rats, squirrels, weasels, mink and stoats will also be

beneficial. The GL38 licence for stoat control clearly states that the use of MK4 Fenn traps are now illegal in controlling this mustelid. Fenn traps are only permitted to be used in areas where stoats do not occur. Foxes will need to be controlled using rifles to help ground-nesting birds. When the cover grows too tall you may want to run a few humane cable restraints. See: gwct.org.uk/snaring.

Release pens

Consider increasing the size of the release pen to conform to sustainable releasing guidelines, to cause the least amount of damage to the flora and fauna. Tidy up around the perimeter fence before the ground flora grows too thick, and remove fallen/overhanging branches. Carrying out these maintenance jobs early will save time later in the year.

Alex Keeble is our central England advisor, who is keen to share his knowledge to help gamekeepers and land managers demonstrate how their work benefits game and wildlife.





Tree sparrows live in colonies and eat seeds and insects, preferring open farmland with hedgerows and access to wild bird mix plots.

SPECIES SPOTLIGHT...

A welcome sight

Living at 650 feet above sea level on the end of the North Pennines, we are at the edge of the tree sparrows range, but they are a welcome sight at our garden bird feeders. Tree sparrows are a red list species of conservation concern and are smaller and shyer than the more common house sparrow. They prefer open farmland with hedgerows, boundary trees, small woodland or pollarded willows along slow-flowing rivers, streams and ditches. In winter they will often utilise game covers and over-winter stubbles in search of food.

WHAT CAN YOU DO TO HELP?

- 1.** Chicks are entirely dependent on insects and spiders for the first two weeks of life, so create insect-rich habitats, for example pollen and nectar mixes.
- 2.** Adults eat small seeds and insects, and if you can entice them into your garden they will also eat fat balls and peanuts. Supplementary feeding over winter is very important.
- 3.** Establish diverse seed-rich wild bird mix plots with a range of seed-producing plant species.

- 4.** Old trees and willow pollards provide excellent nest sites. Tree sparrows will also use nest boxes but as they live in colonies, erect several boxes per tree.
- 5.** Leave areas of uncut grassland adjacent to thick hedgerows to provide grass seed heads.

Jennie Stafford is our northern farmland biodiversity advisor working with landowners to improve habitats for game and wildlife on their land.

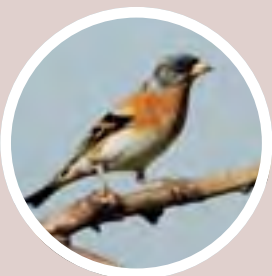


THIS WORK ALSO BENEFITS

Grey partridge

Brambling

Tit species (long-tailed)



Tree sparrows breed between April and early August and can have

2 or 3 broods per season





Bespoke advice

Latest training in Scotland

We plan to run the following best practice training courses in early March. Successful candidates will receive a GWCT certificate to help demonstrate due diligence and responsibility as required under the W&NE Act. Please contact us on 0131 202 7670 or scottishhq@gwct.org.uk to register your interest or book a place.

Snaring: Our latest Scottish Government approved fox and rabbit snaring course provides candidates with the necessary certificate to obtain their unique ID number, which must by law be attached to all snares set in Scotland. Fundamental to the course is the emphasis placed on welfare, in addition to best practice, species conservation and legal updates.

Muirburn: This half day course covers the latest Muirburn Code, the aims and benefits of heather burning for upland species including grouse and grazing animals. Current legislation, including W&NE (Scotland) Act 2011, along with fire and personal safety, preparation of burning plans and out-of-season burning licences will be carefully detailed, along with best practice muirburn guidance and planning.

Corvid control is a vital tool for countryside managers. When done well it can be hugely beneficial to the conservation of our game and wildlife. This course has been developed to ensure those practicing corvid control can do so with the confidence that they are operating within the law, while demonstrating due diligence and welfare considerations.

Mustelid: With the recent significant changes to tunnel trapping legislation throughout the UK, this course keeps trappers fully up to date with both legal and humane control issues. The session addresses the legal aspects of the various methods of stoat, weasel and rodent control employed by keepers and wildlife managers, as well as the equipment required and best practice advice.

Grouse health & disease: This training opportunity addresses the increasing need for grouse moors to assemble documented evidence to demonstrate best practice. It focuses on the latest management techniques for the control of strongyle worm burdens and tick in red grouse.

For March dates and locations please see gwct.org.uk/scotcourses.

In Brief



Purdey Award winner

WE ARE DELIGHTED THAT LONG-term GWCT member George Ponsonby's (pictured above) Lemhill and Greenhill shoot in Gloucestershire has won the Purdey gold award. Thoughtful use of Countryside Stewardship, combined with first rate wild bird keeping by George's keeper, Frank Snudden, have done wonders for farmland wildlife, while restoring a healthy wild grey partridge population, allowing driven partridge days for the first time in 50 years.

Receiving the silver award was the Godmersham Park shoot in Kent. Manager, Ben Palmer, has been the driving force for great conservation alongside a traditional driven pheasant shoot. The Bronze award went to Dee Ward for his great works at Rottal in Angus. We congratulate all the winners for their great demonstrations of how good game management and good conservation go hand in hand.



CONTACT US

FOR ADVICE OR A COMPLETE LIST of training courses please email advisory@gwct.org.uk or ring our specialist advisors on 01425 651013 (England), 07741 902021 (Wales) or 0131 202 7670 (Scotland). gwct.org.uk/advisory

GAME 2023 CONFERENCE - SHREWSBURY

Game 2023 takes place on 23 March and aims to update game managers with the latest research and advice relevant to lowland game shooting, as well as promoting good practice in the game and wildlife management sector. Held at the Shropshire Conference Centre, Shrewsbury, the range of talks, delivered by industry experts, will be highly relevant to the future of shooting. To book see gwct.org.uk/game23.



CHARD AND WENSLEYDALE PIE

Mike Short shares his passion for wild and home-grown food

This dense savoury pie is my Anglified version of the famous Greek dish, Spanakopita which is made with spinach and feta cheese. In my book, Wensleydale cheese is every bit as good as feta, but you could also use Cheshire cheese or a crumbly goats or sheep cheese if you can find one.

Swiss chard is one of my favourite vegetables to grow, because once it's established very little goes wrong. It stands all through the winter, and when the veggie patch starts looking barren and sparse in the spring, there are the ever-reliable upright stems of chard with their wonderful glossy green leaves. If you can't get hold of chard for this recipe, then use spinach, but please do support British cheese makers.

INGREDIENTS (serves 8)

250g chard or spinach leaves, washed and stems removed
 50g flat-leaf parsley leaves
 50g garden mint leaves
 Knob of butter
 8 spring onions skinned and sliced diagonally
 100g toasted pumpkin seeds
 5 eggs beaten
 1 tsp dried oregano

1 tsp ground mace
 Grated zest of 1 unwaxed lemon
 250g Wensleydale cheese, crumbled
 270g packet of fresh filo pastry sheets – (7 sheets)
 Onion seeds
 Olive oil

METHOD

1. Melt a knob of butter in a large frying pan and with the lid on, slowly wilt the chard, parsley and mint leaves. Use tongs to mix the greens together, then remove to cool.
2. Add the spring onions to the pan and sweat until cooked through. Remove and set aside.
3. Once the leaves are softened to your liking, toss them with a good knob of butter and squeeze of lemon juice, and season with several twists of black pepper.
4. Turn up the heat and toast the pumpkin seeds until they start to pop and skitter around the pan. Remove and set aside.
5. In a large mixing bowl, beat together the five eggs and season with salt and pepper. Add the oregano, ground mace, grated lemon zest and the crumbled Wensleydale cheese.
6. Line the bottom of a metal rectangular roasting tin with greaseproof paper. Brush the first sheet of pastry with a little olive oil and lay it lengthways in the tin, pushing it in

to the corners. Add two more sheets laying them crossways, each time brushing with olive oil and gently pushing the pastry down. Add a fourth sheet, laying it the same way as the first.

7. Add the wilted greens to the egg and cheese mixture. Use tongs to combine the pie filling and scrape it into the pastry case, levelling and compacting with a spoon.

8. Oil and lay three more sheets of pastry lengthways over the top to form a lid. Lightly scrunch together the edges of the sheets where they overlap the pan, to form a pie crust.

9. Sprinkle onion seeds over the pie and bake in a hot oven (approximately 200°C) for 15 or 20 minutes until browned. Be careful as filo pastry burns very easily.

10. This pie is good straight from the oven, but perhaps even nicer served cold the following day. I like to eat it with a big dollop of homemade quince jelly, which is always a winner with cheese. ■

Mike Short is our head of predation research specialising in mammal research. He is passionate about wild and home-grown food, and here shares his enthusiasm for tasty ingredients.



Would you bet your life on any ambulance service response time, to a rural location?

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86 Parallelo – A Modern Classic in the Making

Beretta's popular 486 Parallelo has been restyled and now features a deep relief, scroll engraving created using the latest five axis laser technology. The beautifully proportioned, round body receiver sports a deep scroll, floral motif which gives a fresh yet elegant look to this classic side by side shotgun.

Five axis laser technology is capable of embellishing rounded surfaces while maintaining perfect continuity in the design. This type of highly figured, contrast effect engraving typically characterises premium shotguns. With the deep scroll motif extended to the receiver shoulders, top lever, trigger guard, forend iron and forend tip, the action of this gun is completely captivating.

Additionally, the 486 still benefits from the same technological features; Beretta's exclusive Triblock system, with its modified demi block design, allows for a seamless barrel profile in the best English tradition. Whilst the single trigger and V spring mechanism ensure fast, crisp pulls. Add to this Beretta's renowned Steelium barrels with their excellent ballistics, and you have the most modern, reliable and sumptuous side by side. Available with a traditional straight hand or pistol grip stock, in 12 and 20ga with either 28" or 30" O/C.HP barrels. Consequently, all 486 Parallelo side by side shotguns are superior steel shot proofed. This new design is completed with 2.5 grade walnut, carefully selected in terms of colour, density and grain, to give impeccable aesthetics. Balance is further taken into consideration by precisely distributing the weight of all components. The result is a gun which is easy to handle, and swings beautifully while shooting. A wooden butt pad is carefully matched to the stock for a flawless finish.

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THE FINAL WORD

PÉTER PÁL HAJAS

Focusing on the grey partridge, Peter is showcasing that sustainable agriculture is possible in Hungary

Péter Pál Hajas runs a 460-hectare farm near Kozárd, in north-east Hungary, that was re-established by the family in the early nineties. A life member of the GWCT, he kindly hosted a field trip for the Interreg PARTRIDGE Project and a visit by GWCT chairman, Jim Paice, to demonstrate his own successful grey partridge conservation efforts.

When did you first come across the GWCT?

I discovered the GWCT annual *Reviews* 26 years ago. As a student I was deeply impressed by the research, but never thought I'd have the chance to work with the Trust.

Describe your method of farming?

As a former advisor on grey partridge reintroduction and recovery for the Ministry

of Agriculture, I understand the importance of restoring the farmland ecosystem and adopt these measures more consciously than most farmers. I not only create habitats for farmland wildlife, but also use regenerative farming methods to conserve soil and minimise fertiliser and chemical use.

Why do you think an international approach to conservation is important?

Working on a specific issue for an extended period can make it difficult to think creatively and identify obvious solutions that are already being implemented in other regions. The exchange of ideas, experiences and scientific findings, drives progress and helps prevent stagnation. Additionally, social interaction with like-minded people can provide support and motivation to continue the often-isolated work on the farm.

As Hungary was slower to adopt modern farming techniques, is there more nature in the countryside?

During the socialist era in the 1970s and 1980s, Hungary was a leader in agricultural intensification, but this was also the time when the country's grey partridge population plummeted. The older farming community still remembers this period as 'good agricultural practice' and this trend has likely resulted in the loss of even more farmland wildlife in Hungary than in the UK.

Can biodiversity recovery and climate mitigation be part of a profitable and productive farming system?

I not only believe that it is possible, but I am actively working to demonstrate it to other farmers. The transition to more sustainable farming methods is slow and costly, but my work with partridges has helped me develop the patience to see it through.

What's the concept behind your restaurant and what's your favourite dish?

The Vadvirág (Wildflower) restaurant embodies the farm-to-table concept by sourcing local and sustainable produce and using the expertise of talented chefs to create appealing dishes. Unfortunately, due to the Covid pandemic and an impending energy crisis, the restaurant is closed for 2023. It's challenging to name a signature dish, but the water buffalo goulash or donkey steak may pique the reader's imagination.

How would you define sustainable game management?

I managed a small shoot from 2003 to 2011, but lost the hunting rights to a group that focused solely on big game. Within two years, the small game population declined due to a lack of predation management and supplementary feeding. I regained the hunting rights in 2018 and in addition to wildlife-friendly farming practices, reinstated predation control and supplementary feeding. It is a wild bird shoot with a growing population of pheasants, a small number of partridges and a rapidly increasing brown hare population.

What is your favourite wildflower?

The pheasant's eye (*Adonis vernalis*). ■



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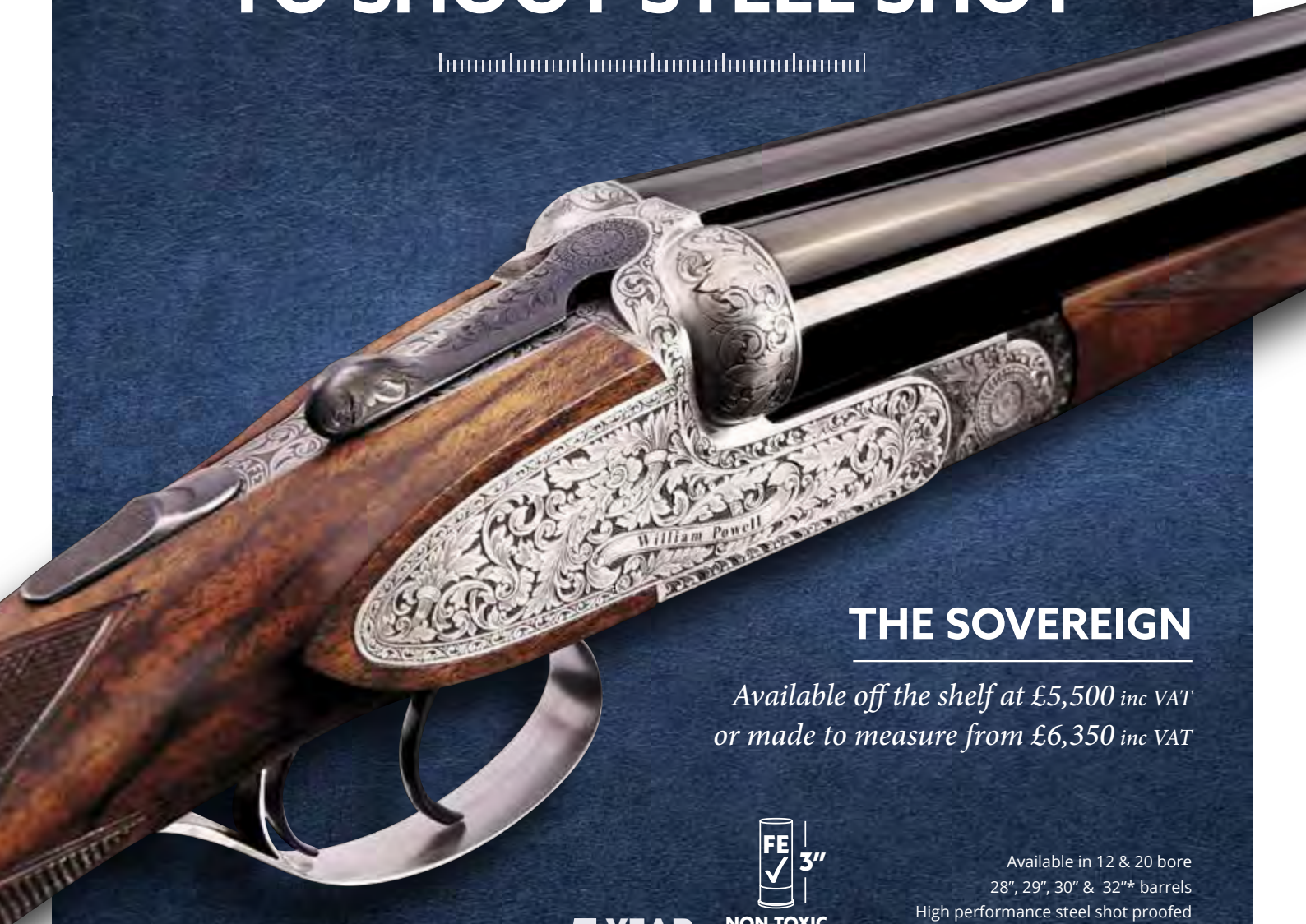


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