

Issue 18: Winter 2012/spring 2013

Introduction

Reports of a grey partridge accidently shot on a shoot which turned out to have webbed feet, may or may not be true — but this bird would surely have had a distinct advantage over its fellow covey members this year. Last summer's breeding season was a complete disaster, not only for grey partridges, but for many other birds too. This resulted in nearly all wild grey partridge shoots either completely cancelling all shooting or holding only a limited number of drives where stocking densities allowed.

Obviously this is a heartbreaking state of affairs when so much dedicated hard work and long, often unsociable hours has been put in by keepers and farm staff. Many farms new to managing wild game, now have everything in place to provide partridges (and pheasants) with their round-the-year needs, only to have hopes of maybe showing some birds over the gun line dashed by the monsoon conditions of last summer.

Despite the disappointment of no coveys lifting in front of the tractor, or of a whole winter passing without being able to show bursting coveys of greys over high hedges, the hard work continues. It is crucial that we look after the remaining stock so that the birds have every opportunity to breed well this year and recover their numbers. Who knows, those who shoot may have a chance next winter to harvest a few of our greys once again, rewarding the relentless input by so many keepers and owners.

Don't forget to keep the supplementary feeding going through the so called 'hungry gap' – certainly into May and for many into June as well. The French feed their greys throughout the year and who is to say that they are not right? However, do remember to remove hoppers from the fields before harvest starts as there is nothing better to 'challenge' keeper/farmer relations than a hopper going through the combine header.

Predator control is also vital in the management of grey partridges, especially fox control. The hen bird is particularly vulnerable when she starts to incubate eggs in May, by which time crops have grown up and it becomes much more difficult to shoot foxes. This is the time of year that snares become such an important tool of any serious wild bird keeper, but please use these snares correctly so that we have continued use of them in the future. We have done a lot of research on your behalf, so please up-date yourself with the latest results of this work, which has so radically changed the modern snare of today, compared with the past. Read more by going to: www.gwct.org.uk and look under research and surveys; predation; predation control; fox; and fox snaring, for our latest leaflet. Or book on a snaring refresher course run by our advisory team — please contact Lynda Ferguson on 01425 651013.

Finally, let us all collectively hope for a 'normal' summer this year, without massive extremes of weather. Is that really too much to ask for?

Peter Thompson Biodiversity Advisor

Inside this issue:

Page I...

Introduction; Grey partridge course

Page 2-3...

Enter our photographic competition; Completing the partridge production picture

Page 4-5...

The Partridge Count Scheme

Page 6...

How effective are food hoppers for game?

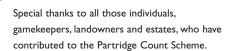
Page 7-8...

News from around the regions; Contacts

Course

Grey partridge re-introduction. Thursday 13 June at the National Agricultural Centre (Stoneleigh Park) Warwickshire -£66 per person including lunch.

Run in conjunction with Perdix Wildlife Supplies this one-day course is designed to ensure your partridge re-introduction is a success and will cover topics such as habitat management, predation control and rearing and releasing methods. In any re-introduction project, attention to detail is paramount and the day will be run by regional advisor Roger Draycott, leading biologist Francis Buner, and David Butler from Perdix Wildlife Supplies, a game biologist who has been rearing grey partridges using extensive systems specifically designed for re-introduction projects. Based on sound science and practical experience, the course will benefit anyone interested in increasing numbers of grey partridges. Please contact Lynda Ferguson 01425 651013 to book (places are limited).







Enter our photographic competition

The first annual GWCT Julian Gardner photographic competition was won by lan Boyd of Whittington, Gloucestershire with his spectacular photo of 'Partridges in the snow'. Ian and his wife Cathy run a thriving organic farm in the Cotswolds, which has won a host of awards for conservation including the RSPB Nature of Farming Award, the Silver Lapwing Award and our own Partridge Trophy for grey partridge conservation. The winning photograph of the 16 and under category was an atmospheric study of muirburn, perfectly captured by Craig McCann from Cleveland.

Both winning images have provided a fantastic start to this annual competition, set up in memory of Julian Gardner, a

Sussex farmer and lifelong supporter of the Trust, who was tragically murdered in October 2010 while defending his property from thieves. Through a very generous donation from Julian's family and friends, this annual competition was established to ensure that Julian's name lives on through the funding of two trophies that will be awarded each year.

We are now inviting entries for the 2013 award. The competition is open to all amateur photographers, not just GWCT members, and we are looking for images that cover all aspects of the countryside, including the people who live and work there, game, wildlife, habitats and of course landscapes. The award is given to the

photograph that best captures the essence and wonder of the British countryside.

The closing date is Friday 31 May and all images submitted will be judged by world-class professional photographer Laurie Campbell, who is renowned for his stunning wildlife images (www.lauriecampbell.com), Peter Thompson (our biodiversity advisor) and Louise Shervington (our publications editor). The winners of both categories will be presented with their trophies at this year's CLA Game Fair at Ragley Hall, Warwickshire, in July.

For more information please visit: www.gwct.org.uk/photocompetition

Completing the partridge production picture



Any recovery from last summer will only occur when the full life-cycle of our grey partridges is properly supported.

After a dismal wet year and a poor breeding season for our precious grey partridges, there will be many who are going into 2013 with a certain amount of trepidation. How many pairs will we have, and how well will they do? At this stage we can only speculate, but one thing to be sure of, is that any recovery from last summer will only occur when the full life-cycle of our birds is properly supported. There are lots of things that you can do that are good for partridges, but this is not a 'pick and mix'. All of the issues below need to be addressed.

Spring feeding

Late winter and spring is a hungry period on a modern farm, with few calories to feed our birds. The green shoots of spring may look attractive, but they are no substitute for hoppers of wheat and the supply should



Beetle banks constitute ideal nesting habitat for grey partridges in an open agricultural landscape.

last into incubation time. This will mean stronger parents at hatch time and a greater chance of a second nesting attempt if the first is lost.

Dry nesting sites

One of the reasons that we promote the creation of beetle banks across larger fields is that open sites like this are preferred by nesting grey partridges. The dry bank also provides a safe over-wintering site for predatory insects. This in turn means more chick food for partridges — and lots of other farmland birds too. Other forms of good nesting cover are hedge bottoms and field edges.

Insects and brood habitat

Good brood-rearing habitat usually attempts to replicate cereal growing before the advent of the agricultural revolution: a none too dense canopy of swelling corn ears over a modicum of weeds. Adjacent to nesting sites, it gives security and cover to

the brood, and the perfect habitat and food source for the creepy crawlies that chicks need. The unfertilised and unharvested cereal headland options of Stewardship schemes come about as close as we can get.

The other big point is that excellent brood habitat is particularly important in cool wet years. Chicks usually hide under mum when it rains, but as soon as it stops they can be out foraging. When this happens they need to find lots of food quickly, to make the best of the brief intervals of good weather. In a warm dry summer there is plenty of time to hunt for food, but in one like 2012, every second of dry time really counts.

Predation control

"What has this got to do with wet weather?" you ask. Well, wild lowland gamebirds, and grey partridges in particular, are programmed to nest at the best time for their survival. Peak hatch for greys at around mid-summer is timed to coincide

It helps to have control of the egg predators such as stoats, rats and corvids.

with the best time for insect availability. It also coincides with the longer days, with maximum daylight foraging hours. This means peak growth rates, and therefore rapidly reducing vulnerability to cold and wet. Making sure that you have control of the egg predators like crows, magpies, stoats and rats early in the season, is also at least a partial insurance against bad weather.

In my early days at the Trust I heard from the then head of research Dick Potts, of his concept of a three-legged stool supporting wild game. To do well, you need the right habitat, including safe dry nesting sites, plenty of food, including insects for chicks, and reasonable freedom from predation. What is more, if any one of these things is not provided, you get collapse — just like the stool when one leg breaks under you. Given a good year, you should reap a real harvest if all the legs of the stool are fully in place, and even in a bad year you should at least hold your own and not collapse.

For more information please contact Mike Swan on 01425 651013 or look out for a grey partridge meeting in your area.







The wettest summer for 100 years had a disastrous effect on grey partridge breeding sucess.

Partridge Count Scheme

The results of the 2012 autumn partridge counts from participants of the Partridge Count Scheme (PCS) are summarised in Table 1. We are again extremely grateful to everyone who took part and submitted their findings.

Looking back to spring 2012, it seems almost farcical that drought zones were being declared and hosepipe bans implemented, only to be followed by the wettest April to June since 1766 and then a July that received over 150% of normal rainfall. This resulted in the wettest summer for 100 years and everyone involved in grey partridge conservation was aware that summer productivity was going to be low. The one exception to all this wet weather

was a drier north-west Scotland, but unfortunately good weather in this area was not going to benefit many grey partridges.

Early reports from the field were not promising. As we prepared to send out the autumn count forms in August, several well-managed estates and long-term PCS contributors were reporting having seen disturbingly few young. As a consequence they had already decided that they would not shoot any greys this autumn. From early counts they knew that they had held onto good adult numbers, but wanted to maximise their over-winter survival and next spring's breeding potential. After our own counts on the Sussex study area in September confirmed the early reports,

we issued a press release, with the backing of several large shoots across the country, advising that shoots should refrain from shooting greys and implement measures to avoid accidental shooting.

The PCS received 640 counts this autumn, 13% fewer returns compared with autumn 2011. However, this is more than expected and the PCS was still receiving counts even into December after farming activity had calmed down. As testimony to the atrocious weather, several late counts made particular note that some land was still unharvested.

The total number of grey partridges recorded nationally was 23,082 birds, which is nearly 35,100 fewer birds (-59%)

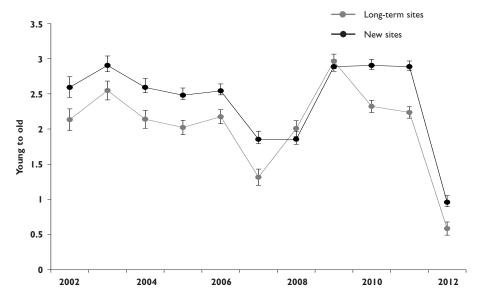
Table I							
		Result	s from the Partridg	ge Count Scheme for a	autumn 2011 and 20	12	
Region	Number of sites*		Young-to-old ratio**		Autumn density***		Comparison
					(birds per 100ha)		
	2011	2012	2011	2012	2011	2012	• • • • • • • • • • • • • • • • • • • •
South	122	109	2.4	1.3	11.8	5.0	-58%
Eastern	198	182	2.9	1.3	37.7	18.8	-50%
Midlands	145	126	2.9	1.1	22.6	9.6	-58%
Wales	1	0	0	-	0	-	-
Northern	191	165	3.0	1.0	34.7	14.5	-58%
Scotland	82	58	2.7	1.2	16.3	8.3	-49%
Overall	739	640	2.9	1.2	27.3	12.7	-54%

^{*} The number that returned any information, even zero counts.

^{*} Calculated from estates where at least one adult grey partridge was recorded.

From those estates that reported the area they had counted.

Figure IMeasuring the effects of summer 2012 on grey partridge productivity



Help expand the PCS

It is only with the interest and involvement of those participating in the PCS that we are demonstrating that grey partridge recovery is achievable. We need to expand this progress to the wider farmed landscape and encourage everyone to get involved. Together, a national recovery in partridge numbers and an expansion in their range back to areas where they used to occur is achievable, but we need your help. If you have neighbours, friends or family who can get involved, please encourage them to join. Every one counts. Go to www.gwct.org.uk/ partridge or contact Neville Kingdon, PCS co-ordinator at nkingdon@gwct.org.uk or call 01425 651066.

than were recorded in 2011. This was despite the promising results in the spring. The average area counted on a PCS site was 290ha, close to the 296ha counted in 2011. Looking in more detail reveals that at PCS sites that returned counts in both autumn 2011 and 2012 and where age was determined (n=574), the density of old birds dropped from 7.7 adults/100 hectares (ha) in 2011 to 7.2 adults/10ha in 2012, a decline of only 7%. This is evidence that adult grey partridges were not affected greatly by the weather, but that the losses are predominantly of young birds.

As was expected, the large decline is down to few young birds being produced last summer. The average Young-to-Old ratio (Y:O, a measure of productivity) of all sites fell to just 1.2 young birds per adult, well below the 1.6 needed to ensure a stable population. Examining young-to-old in more detail (restricting to sites with three or more coveys, with or without young), the long-term sites (those in the PCS before 1999) that had been averaging 2.2 Y:O for the past decade had an average of just 0.6 in 2012, less than a third of the normal figure. New sites (those that joined in 1999 or after), which average a higher young-to-old ratio than long-term sites over the last 10 years, only achieved 1.0 Y:O (see Figure 1).

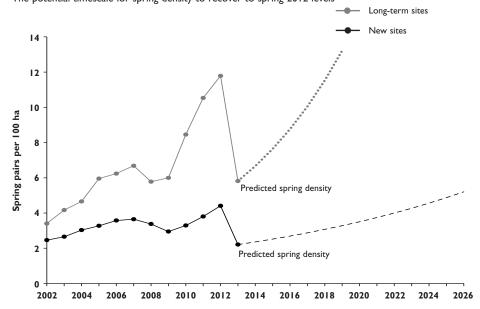
Given the lack of 'new' birds to replace the 2012/13 winter losses, everyone must be prepared for the worst in terms of the spring 2013 count. With further losses over winter, some sites, in particular those with low densities, might lose their stock entirely. Nethertheless we urge everyone in the PCS to carry out a spring count to find out exactly what they have on the ground.

With such poor summer chick production and the subsequent knock-on effect on spring pair density, what does this mean for the improving partridge numbers seen over the past decade in the PCS? Using the average over-winter survival of the past decade (47% – long-term sites; 42% – new sites), we might expect that spring 2013 pair density will be in the region of 5.8 and 2.2 pairs per 100ha on long-term and new sites respectively.

Again, assuming the average conditions of the past decade (weather, production rates, effectiveness of habitats and management etc.) we can use the mean year-on-year increase over the same period (14.6% for long-term sites versus 6.8% for new sites) to calculate when we can expect to see a return to the densities recorded by the PCS in spring of 2012. Long-term sites could return to the density seen in spring 2012 in 2018-19 (six to seven years). On the new sites this might take until 2023-24 (11-12 years) (see Figure 2). Nevertheless, there are some reasons to hope for a quicker return. The habitat that PCS members have put into place should be well established and capable of producing lots of grey partridges, as long as the weather is co-operative. PCS members are now well-schooled in how to look after their grey partridges and this will give them an advantage.

For targeted advice to help your greys recover, please contact Peter Thompson on 01425 651013.

Figure 2
The potential timescale for spring density to recover to spring 2012 levels









(L-R) A pair of grey partridges colour-ringed (with the hen radio-tagged); pheasants and red-legged partridges can share hoppers; small birds such as yellowhammers and chaffinches also benefit.

How effective are food hoppers for game?

Providing supplementary food for game using hoppers is an important management tool for many gamekeepers during the shooting season and into spring, especially on wild bird shoots. Recently, winter supplementary feeding has become an option in the Entry Level Stewardship (ELS) scheme. However, despite the hoppers' undisputed usefulness to keep gamebirds in good body condition during the winter months and hold them in a certain area, it remains unclear how hopper location affects their use. We wanted to determine how the use of feeders affected the vulnerability of birds (especially gamebirds), to what extent hoppers are used by other wildlife (including unwelcome pests) and how much of the grain provided is consumed by which species. All these factors have substantial economic and ecological consequences.

We commenced a feeding experiment in late winter 2011 on one farmland area in Oxfordshire and one in Hampshire, using eight digital motion-sensing cameras. All cameras were set to operate continuously, taking photographs when triggered by movement, recording the date and hour for each picture taken. We studied pairs of hoppers, with one set in cover within a hedge and the other in a straight line at a distance of 40 metres in the open on the adjacent field (winter wheat or rape). So far the cameras have taken nearly 70,000 photos.

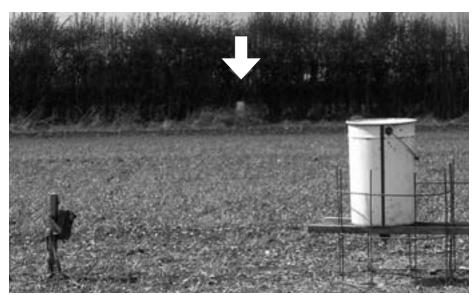
As previously reported at our Allerton Project, Loddington, preliminary results confirm that during the daytime hoppers are mainly used by gamebirds (48% pheasants, 29% grey partridges, 23% redlegs) and songbirds (44% yellowhammers, 36% dunnocks, 6% chaffinches, with a total of 10 different species identified), 19% pigeons and 14% corvids, with a minor proportion of ducks, rabbits and hares, predators and deer (4%). At night, most of the photographs showed rats and mice (>95%).

The majority of photographs were taken at



Be aware, a family of rats can take the grain quite quickly.

We put one hopper out in the open field and one in the cover of the hedgerow (below the arrow).





A colour-ringed covey of grey partridges during the autumn.

hoppers alongside hedgerows (90%) and, except corvids, all species preferred this location in comparison with the open field. Interestingly, no rats were photographed in the open fields but a high proportion of the grain provided was consumed by rodents, especially rats (24-49%).

Additionally we recorded detailed data on grey partridges, as at both study sites greys were radio-tagged and colour-ringed as part of our on-going winter loss research and recovery project (see GWCT Review of 2011 and 2012). Of 23 grey partridge pairs, six used only the hopper in the open, seven only in cover and 10 used both hoppers. Three pairs visited the hoppers daily, although the average number of visits varied from three days per week, to four times a day. The average duration of each visit was approximately seven minutes, with no significant differences between open and cover location or study site. Grey



Rooks feeding from an open field hopper.

partridges followed a marked daily feeding pattern, using hoppers mainly in the early morning and late afternoon. From a total of 2,107 photographs of grey partridges, in 338 (16%) we could see partridges 'sharing' hoppers with other species, mainly yellowhammers, red-legged partridges and pheasants. More detailed results will be published in following issues of the *Grey partridge news*.

News from around the regions



(L-R) Joe Harper, Dods of Haddington, East Lothian trophy winner Niall Donaldson, Tanderlane Farm, and our advisor Hugo Straker.

East Lothian

Niall Donaldson is the worthy winner of the East Lothian Grey Partridge Trophy for the work he has done at Tanderlane Farm. The farm is adjacent to Baro Farm, winners of the award in 2012, and between the two land holdings they ably demonstrate how effective management over contiguous ownerships can further boost the fortunes of this iconic farmland species. Niall Donaldson is wisely utilising his Scottish

Rural Development scheme to implement a good distribution of grass margins for nesting cover and provide specialist crops for brood-rearing and winter holding cover. Foxes and crows are controlled and there is a considerable investment in the provision of feed hoppers. It is gratifying to note how often the resident partridges are found in the crops or seen under feeders. We are very grateful to Dods of Haddington for their continued support.

The North

The Yorkshire and Cumbrian groups had very successful summer events at Dalton Estate and Lorne Farm, but sadly the North-East's autumn meeting, on how to protect your wild stock over the winter, fell foul of the weather.

Northumberland

The Yorkshire and Durham & Northern Dales 2012 trophy winners were reported on in the last newsletter, and we are delighted to announce that the



John and Sarah Glass, neighbouring farmers, with Northumberland trophy winner Ronald Barber (centre) from Melkington.

Northumberland trophy, kindly sponsored by The Glenlivet, was awarded to Ronald Barber near Cornhill in Northumberland. In addition to providing all year round habitat supported by hoppers and predator control, Ronald has a network of dusting shelters which no doubt helped during the wet summer of 2012. When we sent this story out to the press, the *Daily Express* was fascinated and reported on the 'private bathrooms' provided for grey partridges.



For the latest advice on boosting your grey partridges, look out for meetings in your area this summer.

Group news continued

Cumbria and North Lancashire

The Cumbria and North Lancashire trophy was awarded to Martin Baird who farms near Wigton. Martin is a good example of how conservation can be incorporated into a modern intensive dairy farm. Supported



John Bowman of Natural England (left) presenting the trophy to Martin Baird of Red Hall Farm (right).

by agri-environment schemes, Martin has restored a network of hedgerows, created year-round habitat for seed-eating birds and also provided habitat for breeding waders.

Yorkshire Wolds meeting

In 2013 the group meetings will visit three of these winners. On 20 June in the afternoon the Yorkshire group will visit Tim Coleman's farm. The aim of the meeting will be to encourage other farmers on the Wolds to support the wild grey partridges (and other farmland birds) on their farms by adopting some basic principles. In the autumn (details to be confirmed) it is hoped that the North-East group will visit Ronald Barber's farm to learn of the secrets to his success and the Cumbria and North Lancashire group will visit Martin Baird's farm to see how the marginal grey partridge population in the region can be supported.

Don't give up

Although the grey partridge is a bird of the steppe the lack of cover and food provision on many of our farms in the winter leads to high losses, especially with the large amount of snow we have had this winter. Please check your hoppers are full and if your winter cover is lacking consider ways of improving it through enhancing overwinter stubbles, leaving grass margins or field corners unmanaged or growing strips of cover such as wild bird seed mix.

East Anglia

CastleAcre Insurance Director, Hugo Johnsen, took great pleasure in presenting the 2012 CastleAcre East Anglian Grey Partridge Award to David Knott, estate manager and Jamie Stead, gamekeeper, from

manager and Jamie Stead, gamekeeper, irom

(L-R) Hugo Johnsen CastleAcre Insurance Director, David Knott,Trumpington estate manager and Jamie Stead gamekeeper.

the Trumpington Estate. They received the trophy on behalf of the Pemberton family who own the Cambridgeshire estate. The award ceremony which included an enjoyable and informative farm walk, buffet supper and talks on the progress of grey partridge conservation in the East

Anglian region, was kindly hosted by last year's winner Simon Maudlin, at his family farm, Caldecote House, in Upper Caldecote, Bedfordshire.

The judges praised the Trumpington Estate for its considered approach to conservation across the entire estate, which runs to 1,300 hectares, commenting: "Wildlife conservation is an integral part of the overall management of the Trumpington Estate and they have achieved notable success increasing numbers of a wide variety of birds including grey partridges."

For more information on all the grey partridge groups and to register for any of the events go to www.gwct.org.uk/courses or contact Lynda Ferguson on 01425 651013.



For more information on our grey partridge research and further copies of this newsletter, please contact:

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