



Grey partridge News

Issue 10: Autumn 2008/spring 2009

Introduction

My main message to all of you that are putting so much effort into managing for grey partridges is third time lucky! 2008 offered once again a fairly dismal summer, so surely this summer has to be much better!

It is clear that some farms and estates did have a reasonable production of greys, despite the overcast and damp weather. The common denominator among these 'successful' places is that they provide round-the-year management for grey partridges in the form of nesting and brood-rearing habitats, spring feeding, predator control and winter cover. Many of you are doing a huge amount, but do you have brood-rearing cover in place and is your fox control really what it should be?

I know it is much easier to say, but a lot harder to achieve on the ground especially with limited time and staff. Perhaps you only have one thing left to put in place and this would make a big difference to your partridge numbers this coming year. Finally, if you have dismissed the Higher Level Scheme as far too difficult, then take another look this year. It may well be that the 'missing element' that your partridges need is within this scheme. If you would like me to look over your land and to write you a grey partridge management plan, so that you can then give your local Natural England advisor a ring to see what they think your chances are of putting in a successful HLS application, I would of course be delighted to help.

Peter Thompson
Biodiversity Advisor

News in brief

New awards for 2009

The Scottish Borders grey partridge group will be awarding the Wallace of Kelso Grey Partridge Trophy at a meeting in early spring. All participating farmers in the Farming for Sparrows (Tree) and Partridges Project and our Partridge Count Scheme will be invited.

The Cumbria and Lancashire grey partridge trophy will also be awarded for the first time this year. So watch out for your invitation to the spring meeting and make sure you get your partridge counts in on time in early May!

If you have any hatching records of grey partridges we would be interested to hear from you.

Hatching records needed

If any reader, particularly gamekeepers, shoots and land managers, has records (notebooks, scraps of paper etc) of dates when grey partridge hatching was first noted, then we would be very interested to hear from you. Whether you have records from the last five years or the

last 50, all records are needed, from throughout the country, especially if you have noted hatching dates during several years (these don't have to be consecutive).

If you have information that could help us, or for further details, please call Neville Kingdon on 01425 651066 or email nkingdon@gct.org.uk



www.gct.org.uk

Special thanks to all those individuals, gamekeepers, landowners and estates, who have contributed to the Partridge Count Scheme.



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Partridge Count Scheme



The Manx Game Preservation Society is keen to restore grey partridges on the island.

A passion for partridge on the Isle of Man

Grey partridges have suffered a massive 86% decline nationally in the last 40 years and this picture is replicated on the Isle of Man, where partridge numbers are thought to be as low as just 50 pairs according to the Manx Bird Atlas.

John Crellin, chairman of the Manx Game Preservation Society, is passionate about restoring grey partridges on the island and said: "I remember in the 1950s when there were no pheasants, and we just shot greys, woodcock and duck. We had a covey of partridges in every field and I would love to see that again. Through the Manx Game Preservation Society, I am keen to encourage more people to get involved in partridge conservation



The Isle of Man team.



The varied habitat of the Isle of Man

and to sign up to the grey Partridge Count Scheme, so that we can boost their population on the island."

To kick-start partridge recovery, John Crellin invited Peter Thompson and

Neville Kingdon over to the island to offer partridge conservation advice to local farmers and landowners, and to investigate whether it would be possible to boost the extremely low grey partridge population.

Neville Kingdon, our Partridge Count Scheme Co-ordinator, estimates that the island could support at least 300 pairs of grey partridges, once necessary habitat improvements have been made. Neville said: "It would be really disappointing if grey partridges died out on the island. On the mainland, our figures show that members of our grey Partridge Count Scheme are making a real difference in reversing their decline, because as well as counting their birds they are also putting in the right conservation measures."

One of the most notable factors in favour of grey partridge restoration is that

our previous work on the Isle of Man, indicates few, if any, foxes present. Peter Thompson, our Farmland Biodiversity Advisor explains: "Foxes are a major predator of grey partridges, so once important habitats such as insect-rich brood-rearing habitat have been created, the species has a good chance of recovery, particularly if people are providing extra food during the leanest months of winter."

To further boost partridge recovery on the island, we are keen to set up a grey partridge group, which will be the 17th across the country. Peter Thompson said: "There is a lot of enthusiasm for grey partridges on the island and we hope that setting up a new recovery group, as well as getting more people involved in counting their birds, will help to boost grey partridge numbers on the island."

Grey Partridge Recovery Project Update

In the autumn of 2007 we were hoping that if we maintained the over-winter survival figures for grey partridges from previous years on the Grey Partridge Recovery Project, we would have 170 pairs of grey partridges on the demonstration area in spring 2008. Unfortunately this was not the case and we ended up with 158 pairs, 12 pairs short of the total hoped for. The wet summer of 2008 resulted in a disappointing young-to-old ratio (similar to 2007). The young-to-old ratio was 1.5 young per old bird with the chick survival rate at 31% – slightly higher than 2007's 27%, but a long way off the average of 46% over the previous four years. Similar to last winter, we again need to conserve our stock of greys, making the provision of over-winter cover particularly important. If the over-winter survival is the same as last year (38%) we will have as few as 127 grey partridge pairs on the demonstration area next spring, a similar number to what was seen in 2006. This illustrates the importance that two bad breeding years in succession can have on grey partridge numbers. Luckily, with an average clutch size of 14, grey partridges can recover quickly if the conditions are right.

Spring	Grey partridges (pairs per 100ha)	Red-legged partridges (pairs per 100ha)
2002	2.9	4.9
2003	5.1	6.6
2004	8.0	13.2
2005	11.2	18.9
2006	13.0	15.4
2007	18.4	18.2
2008	15.8	16.0
Target	18.6	18.6

	Grey partridges				Red-legged partridges			
	Autumn	Adults	Young	Y:O	Density (birds per 100ha)	Adults	Young	Y:O
2001	33	20	0.6	7.6	81	28	0.3	15.7
2002	71	216	3.0	28.8	88	96	1.1	18.4
2003	100	290	2.9	29.0	135	303	2.2	43.9
2004	142	391	2.8	53.4	201	237	1.2	43.9
2005	206	401	1.9	60.8	307	276	0.9	58.4
2006	245	631	2.6	87.8	306	467	1.5	77.5
2007	333	503	1.5	83.8	328	214	0.7	54.3
2008	275	424	1.5	70.0	337	167	0.5	50.5

Feeding grey partridges



Putting food out for wild game will help them through a hard winter.

In an ideal world, wild grey partridges would not need to be artificially fed. Farmland habitats, either natural or created, alongside mixed cropping would provide

their daily needs, but most modern farms have far from ideal conditions to hold on to a healthy stock of greys. Therefore putting food out for them and other wild game will help them through a hard winter.

On the Grey Partridge Recovery Project, near Royston, Hertfordshire, the wild game is provided with extra food from autumn to spring. From the end of August to the following April, wheat is made available mainly through the use of hoppers. During the shooting season, hoppers are concentrated around the main driving areas, which would be normal practice on any shooting estate.

From 1 February to 1 April, 250 hoppers are spread out over the 1,000-hectare site (six farms), usually adjacent to any available winter holding or nesting

cover. Each hopper holds around 40lbs (18kgs) of wheat and they are regularly topped up until the end of March. As the hoppers in total hold three to four tonnes of wheat, depending on the concentration of birds at each hopper, they can still be in use well into May. After March attention is concentrated on predation control.

This will give you some idea of the amount of grain that is used, and obviously it depends on the amount of game present and what is shot.

Last season 2007–2008.

We shot 309 red-legged partridges, 194 pheasants and 10 grey partridges, plus over 300 hares. The total amount of grain used from August 2007 to April 2008 was 16.5 tonnes.

Partridge Count Scheme

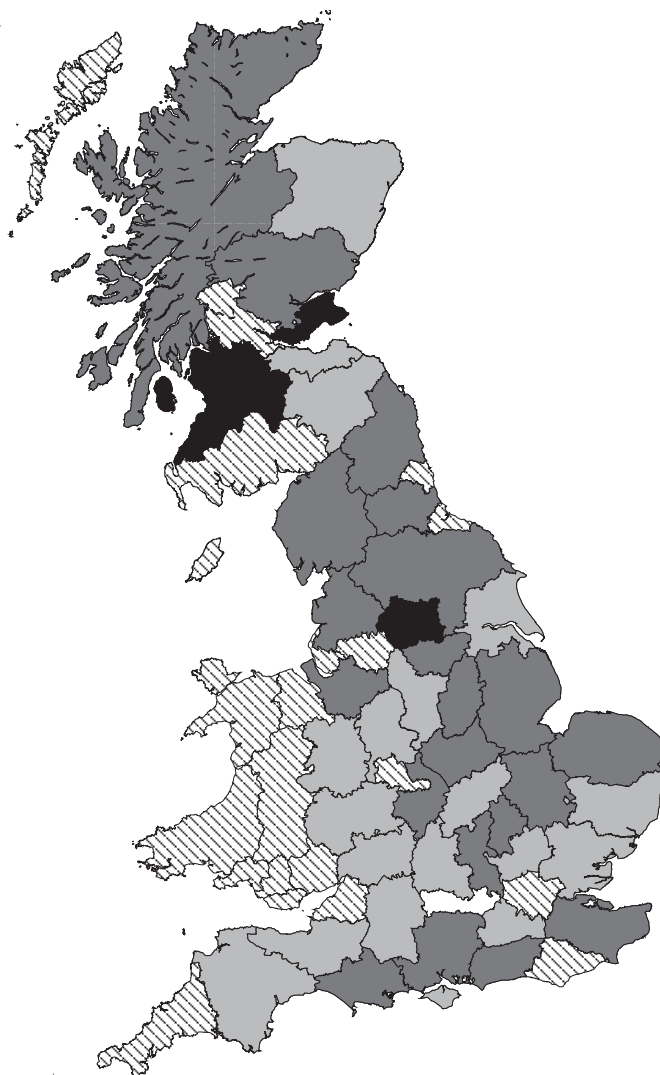
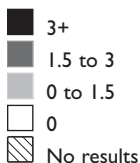
Autumn 2008 will probably be remembered as one of the most difficult in which to undertake a partridge count for many years. August was wet, delaying harvest and making autumn counts difficult for many. Harvesting and planting took place within a very short weather window and many participants could count only small areas of ground compared with normal, or counted much later than usual, making the separation of old and young in many coveys difficult. A measure of this delay was that it was only on 24 November that the number of returned counts reached 500, a month later than usual. The number of autumn counts returned was 15% less than the number returned in 2007, reflecting the difficulties in counting (see Table 3).

The average young-to-old ratio overall was similar to last year, with northern and eastern England figures higher than in 2007. Examining the young-to-old ratio on a county basis showed that the production of young was above the important 1.6 young per old bird needed to keep densities stable in counties of northern England, down through to Lincolnshire (see Figure 1).

The higher young-to-old ratio in northern England fed into higher autumn densities in 2008 compared with 2007 – one of the few positive signs from what was not a particularly good year for partridges. Overall the average grey partridge autumn density declined by 5%, which will not help restore this Biodiversity Action Plan species. It is important that we retain all the birds that we can following

Figure 1
Grey partridge productivity

Average young-to-old (Y:O) ratio



the second poor breeding season in a row. Holding on to cover during the spring will allow pairs to hide from predators, and maintaining supplementary feeding for as

long as possible also allows the birds that remain to go into the breeding season in optimal condition.

Even though these results may not be the best of news, the grey partridge is a bird that is held in strong affection by many. The thousands of hours put in by everyone involved in the PCS indicates their determination to help this species become a more familiar sight across the UK. It is important that the necessary management for grey partridges is provided – some of the members of the scheme are showing the way (see page 5) and it is vital that more follow their example. We look forward to receiving all your counts this spring.

Please get your friends and neighbours to join the scheme by visiting our website (www.gct.org.uk/partridge) or contact Neville Kingdon by email nkingdon@gct.org.uk or ring 01425 651066.

Table 3

Results from the Partridge Count Scheme for autumn 2007 and 2008

Region	Number of sites*		Young-to-old ratio**		Autumn density*** (birds per 100ha)	
	2007	2008	2007	2008	2007	2008
South	114	117	1.8	1.5	6.3	6.6
Eastern	194	164	1.7	2.0	27.5	24.5
Midlands	137	115	1.6	1.4	15.1	9.2
Wales	3	1	1.8	-	6.2	0
Northern	175	155	1.8	2.0	24.4	29.9
Scotland	136	119	1.9	1.6	14	10.2
Overall	759	674	1.8	1.8	18.8	17.6

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

** Calculated from estates where at least one adult grey partridge was counted.

*** From those estates that reported the area they had counted.



Lincolnshire group trophy kindly sponsored by Jas Martin & Co. (L-R) Charlie Theaker from Caythorpe, Martin Tickler and David Theaker (winner).



East Lothian group kindly sponsored by Dodseed. (L-R) Hugo Straker, James Grant-Suttie of Sheriff Hall and Balgone Farms, with David Cunningham (Dodseed).



Wessex group kindly sponsored by Dreweatt Neate. (L-R) Anthony Grieve and Susie Sheldon of Kings Manor Farm, Isle of Wight, and Christopher Langford, (Dreweatt Neate).



Cotswold group kindly sponsored by Ruffer. (L-R) Mark Tufnell, Calmsden Estate, and Jane Tufnell (Ruffer).

The winners of the 2008 grey partridge awards are...



Yorkshire group kindly sponsored by Savills. (L-R) Wyne Bennett, Headkeeper at Castle Howard, and The Hon. Simon Howard.



Central England group kindly sponsored by Carter Jonas. (L-R) Andrew Pitts (Chairmen), Sandra Baines (keeper), John Pochin of the Edmondthorpe Estate and Philip Cowan (Carter Jonas).

Norfolk group trophy kindly sponsored by Mills & Reeve. (L-R) Justin Ripman (Mills & Reeve) and Sir Nicholas Bacon of Raveningham Estate.



East Anglia group kindly sponsored by CastleAcre Insurance and Carter Jonas. (L-R) David Watson of Frostenden Hall Farm and Richard Hawkins (CastleAcre Insurance).



Northumberland group kindly sponsored by The Glenlivet. (L-R) Jennifer Lovett of Wark Farm, Cornhill-on-Tweed and Hugo Straker.



North-West group kindly sponsored by Carter Jonas. (L-R) Charles Lawson (Carter Jonas) and Frank Jones of the Mossland Syndicate.



South-East group kindly sponsored by BTF and Complete Land Management. (L-R) Richard Thomas (BTF) and Tom Goodridge of The Duke of Norfolk's Arundel Estate.



South-West group kindly sponsored by Strutt & Parker. (L-R) Richard Lang of Home Farm, Curry Rivel and James Baker (Strutt & Parker).



Durham & Northern Dales group kindly sponsored by Gray's Chartered Surveyors. (L-R) Geoff Oliver of The Rookhope Syndicate and David Gray.



The crux of not losing greys during winter



Come February, have you ever wondered why a substantial number of your seemingly settled released or even wild grey partridges have suddenly disappeared? At Royston, where we managed to increase the density of greys from three to 18 spring pairs in only five years, and despite good winter cover, we lose on average 58% of our autumn stock every year. As to why, we have no idea. Malcolm Brockless carries out a strict predator control programme and even the sparrowhawks couldn't have eaten that many. Therefore to understand the factors triggering winter dispersal, we have launched a new project. In December

2008 we caught 60 wild greys within a one-km² block at Royston and radio-tagged and colour-ringed each of them. Until early May we shall relocate each individual several times a week. We expect that the results of this pilot study will give us the background to design a proper experiment, where we can manipulate at least some of what we think must be the triggering factors. This should then lead us to formulate guidelines, which people can apply on their own piece of ground. If done properly everyone should end up with more spring pairs and therefore, ultimately, higher autumn stocks. We will update you on our progress.

Meanwhile if you wish to hold more birds into the spring there are three basic things you can do.

1) Provide good over-winter cover right into April. Simply relying on game covers, which usually only last until the end of the shooting season, will not be good enough. Think where you might like to spend your daytime foraging, safe from hawk attacks!

2) Plan your drives having your partridges in mind. Don't flush them much more than twice, as this is likely to trigger dispersal. Try not to flush them at all where you find the highest partridge numbers. Work your drives around that area and establish your redleg and pheasant covers accordingly. However, don't forget to provide your greys with cover, otherwise they are likely to end up in your drives anyway.

3) If you release greys, we advise you to colour-ring them. That way you or your neighbour will recognise them in the bag. You also will be able to identify them during your spring counts as leg rings are relatively easily spotted using binoculars. This will give you a good idea about where your birds might go and where your ground holds them best.

Keeping the wild greys healthy

In the 1930s a report on disease in the grey partridge listed coccidiosis, strongylosis, pneumonia (due to changes in temperature), enteritis and gapeworms as conditions that commonly affect them. Other parasites recorded were roundworms, tapeworms and ectoparasites eg. feather lice. A similar list could be made today for reared birds with the exception of strongylosis, which appears to have declined in incidence.

The healthy wild grey partridges we have post-mortemed recently have shown a distinct lack of pathogens. This is not surprising as sick birds do not fly and are not often shot (the main cause of death in the survey). To get a true picture of the disease threats to wild birds we need to post-mortem many more sick birds if we can find them.

The interesting thing about the above list is that most of the pathogens were parasites, both internal and external, and that the other two (enteritis and

pneumonia) were symptoms rather than diseases *per se*. These symptoms may be caused by a variety of disease organisms which may commonly infect a range of other avian species.

One of the first points to make is that finding a few parasites does not mean that they are necessarily doing any harm. We need to be wary of making a diagnosis of parasitism unless the numbers involved are significant.

Assuming that the birds are healthy in the first place, one must consider the potential source of new infections and infestations. Many of the disease organisms mentioned above are commonly found in wild birds (both game and non-game), domestic fowl and in released pheasants and partridges.

Any disease is easily spread in overcrowded conditions owing to direct contact eg. shared dusting places and contaminated feed and water.

For shared diseases we must always count the number of susceptible individuals

of any species in the area, for instance, the gape worm is hosted by red-legged partridges, pheasants, domestic fowl, rooks and many other passerines. Now consider whether the grey partridge areas are overcrowded, especially if the wild greys are near to a redleg game cover strip, next to a pheasant release pen, near a free-range poultry unit, next door to a rookery and with feed spread on the ground to attract the finches etc. Not to mention the rats, badgers and flies, which may act as passive carriers of many diseases.

Red-legged partridges have their own coccidial species and seem not to host strongyle worms, but they do share many other diseases with grey partridges. A stable population of wild greys and redlegs may reach disease equilibrium, but if birds are to be released in the proximity to greys, it pays to think of disease security and avoid overcrowding near feeders and dusting areas.

Viewpoint from members on the ground

James Grant-Suttie – East Lothian

Balgone and Sheriffhall farms have the advantage of a very mixed terrain including woodland, permanent grass and open arable fields. Therefore, we have in-built natural diversity which makes management for partridges much easier. Through various schemes we have established new hedgerows, rejuvenated old ones, planted grass margins and beetle banks, protected scrubland and sown species-rich grass. Additionally we have established set-aside wild bird cover, as well as unharvested crops under our local East Lothian grey partridge recovery project. Overall we have integrated grey partridge conservation with practical farm management, with more work planned. I have had great co-operation from other farms under my management, especially Alan Purves, who helps with predator control, feeding and counting partridges. I believe this partridge project is making a real difference to numbers in the area. A small contribution from many, is the best way forward for the birds' survival and future health.

John Bowman – Natural England, Cumbria

2008 will be remembered for the summer that never was, constant rain from mid-June onwards. Cumbria is already a high-rainfall county, so suffered more than some. Therefore it's no surprise that even previously successful grey partridge enthusiasts in the north Cumbria area are reporting barren pairs, or pairs with only one or two chicks successfully reared. However, there have been some success stories with a number of reports of reasonable coveys, well into the mid to high teens.

The weather also affected habitat creation, as wild bird seed mixtures were sown late resulting in stunted growth and poor winter food. This shortfall will be partly replaced by the increase in winter stubbles available due to the almost impossible conditions for sowing winter cereals, and also some areas of grain which still remain unharvested.

So here's to 2009. With an increasing area of year-round habitat being created through agri-environment schemes, good weather during the breeding season would make a huge difference to successfully increasing grey partridge numbers.

Mark Tufnell – Calmsden Estate, Cotswolds

We were lucky to have 10 strong grey partridge pairs in the spring of 2008 and



Classic partridge country.

I was looking forward to an increased number on the farm in the autumn. Ascot week was poor and then the 'summer' was horrendous. The monsoon in the first two weeks of September seemed to be the final nail in the coffin and we finished harvest on 27 September. However, when we finally started drilling in October, we counted eight good coveys. They must have moved around the farm ahead of the combine, returning to their favourite ground once we had left them in peace and quiet. They will now act as a core springboard for 2009 and beyond.

I have worked hard to use the various agri-environment schemes, and the Conservation Grade scheme run by Jordans, to provide suitable habitat for grey partridges and other farmland birds. I am delighted that Natural England has decided to focus the Higher Level Scheme (HLS) on farmland birds, and we are fortunate to be in a target area. The silver lining for 2009 is that we should be able to sign up to an HLS agreement and carry out further additional work to help and support the grey partridge.

Wyne Bennett – Castle Howard Estate

Castle Howard and its keeping staff have put in a lot of time and effort to try and restore the grey partridge. Habitat is very important and we have 135 kilometres of grass margins that provide excellent nesting cover. We have 1,000 acres of arable and a quarter is cropped each year. Three fields are split into plots growing kale, linseed, cereals and fallow, creating good old-fashioned crop rotation. One mistake we used to make was to top all the game strips straight after the season ended. Now we leave them as late as possible

to provide cover from attacks by raptors, and to provide food into the lean months, February and March.

2007 was a really bad year and we only counted four broods of greys. The pairs seemed to come through to spring 2008 as we counted 27 pairs. Last year turned out better than expected with some really good broods ranging from nine to 18. Our greys are very elusive and we didn't see a brood of greys until after the very late harvest. Now we need a very good spring and summer for the greys to continue to multiply.

David Clark – Norfolk

The partridges here have done very well this year, although we did lose several of our early broods to bad weather. However, the birds recovered and nested for a second time producing some very good broods. We have had a very good shooting season and have left a good stock of healthy birds. The key factors regarding our success are predator control, winter feeding so that birds are in good condition going into the spring, habitat management, and of course, the weather. We are now extending some of our field boundary habitat and are looking forward to this year.

Ian Smith – South-East

In east Kent generally the greys are holding their own. The prolonged wet summer during hatching wasn't good for chick production, however, there has been a lot of good habitat created locally that has significantly raised pair numbers.

Unfortunately, where numbers had increased to a greater degree, certain predators have increased in the normal lag pattern and are now severely limiting abundance.



Regional round-up

The Central England Grey Partridge Group meeting.

The southern grey partridge events kicked off on 23 October with the South-East group meeting at the wonderful Squerryes Court in Westerham, Kent. We decided to get a representative from Natural England to talk at all our autumn grey partridge group meetings, updating the attendees on the changes to the Entry Level (ELS) and High Level Stewardship (HLS) schemes. Not only do these schemes offer the land manager a wide range of different options, but many of them have been researched and created by us, and therefore are key to bringing back the grey partridge. The Natural England speakers were particularly asked to point out recent changes to the schemes. For instance, the new 'unharvested cereal option' in ELS is an important new addition. This option allows the grower to plant three, four, five or six metres of cereal around any crop and then leave it in-situ through the summer, providing an insect-rich foraging area for partridges, pheasants and songbirds to feed their young. The strip is then left over-winter so that the cereal and weed seeds can be consumed – proving an important food source. This option can also be moved around the farm, so that weed problems etc, do not become a problem. This option delivers all the benefits of a conservation headland (and winter food) without the 'hassle' of managing it within a commercial crop.

Some of the other important changes included are that insecticides are now allowed on 'wild bird seed' mixes to aid establishment, and the area that can be planted has increased to three hectares in every 100 hectares of land. Both Natural England personnel and their schemes are key to the future of the grey partridge and it is good that we are working closely with them to deliver good habitat management.

Malcolm Brockless (Grey Partridge Recovery Project Keeper) spoke not only

at the South-East group meeting, but also at the Wessex, Cotswold and Central England groups. He gave a fascinating talk on how he has achieved the large increases in grey partridge numbers at Royston, and emphasised that alongside habitat management, predation control (especially foxes), is key to successfully increasing grey partridge populations.

Jake Fiennes, head keeper at The Raveningham Hall Estate in Norfolk (and winner of the Norfolk trophy this year), addressed both the Norfolk and East Anglian groups with his experiences of keeping for grey partridges. Jake is a very forward-thinking keeper who is always prepared to try new ideas and push the boundaries of modern-day keeping. As a result he gave an inspiring talk that was enthusiastically received by both audiences.

Finally, the South-West group, the newest group in the southern half of the country, also had an update on stewardship schemes, but were then shown the film of Jacques Hicter's farm in the Aisne region of northern France, where densities of 80 pairs of wild grey partridges per 250 acres have been achieved. There were many positive comments about the management that Jacques had implemented for his partridges and attendees gleaned many good ideas to take home with them.

The four northern grey partridge groups, Yorkshire, Durham & Northern Dales, Northumberland and Cumbria, met in November on consecutive nights. Each meeting followed the same format with a presentation on the Partridge Count Scheme, followed by Natural England and ADAS running through the key changes to ELS and HLS and their relevance to grey partridges. The key speaker was our grey partridge ecologist, Francis Buner, who explained the best methods for restoring grey partridge populations. Where grey

partridge pair densities were more than two pairs per 100 hectares on at least 400 hectares, Francis explained that by using habitat management, predation control, supplementary feeding and minimising disturbance, population recovery was possible as demonstrated at our recovery project at Royston. However, in the instances where grey partridge numbers have dropped below this level, then releasing autumn coverts followed by fostering to barren pairs is the best approach. He also provided some useful practical tips and advice on rearing and releasing techniques.

Finally we would like to thank everyone who attended, the group and trophy sponsors, Philip Bull of ADAS, Jonathan Payne and Rachel Webster of Natural England, John Bowman of Natural England and the chairmen for their help in putting on interesting and informative evenings.



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Partridge Count Scheme

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

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