

SEEDS OF SUCCESS

HOW **AGRI-ENVIRONMENT** CAN YIELD
RESULTS FOR NATURE AND FARMING



nature's voice

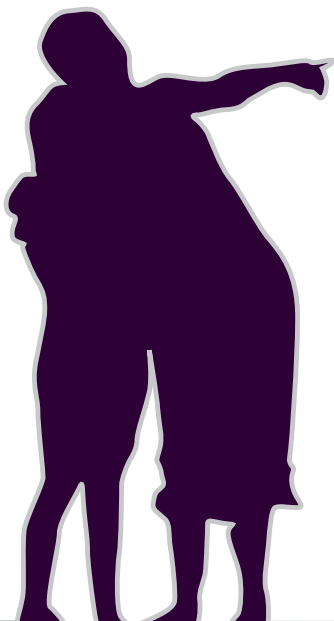


INTRODUCTION

In a gloomy world of threatened natural and financial resources, this document sets to one side the problems and celebrates the best that the Common Agricultural Policy (CAP) has delivered. We showcase excellent examples of agri-environment schemes in action, and illustrate how these achievements could be replicated and spread right across Europe.

It's not all bad news.

Europe's countryside is facing huge challenges. The historical damage associated with the CAP must be reversed. In many member states wildlife is declining, water quality and availability is still a great cause for concern, and many farming systems continue to contribute significantly more to greenhouse gas emissions than they need to.



In some areas more traditional farming systems persist. This farming, which has delivered benefits for society for generations, is however changing. In response to poor market returns and an inadequate share of the CAP support, people in these areas are

abandoning traditional practices, with serious consequences for local communities and the wildlife dependent on their farming systems.

What we need from the next Common Agricultural Policy is therefore action on a scale not seen since the Policy was developed. The CAP must face up to existing and new challenges. In particular, Europe committed at the UN biodiversity conference in Nagoya, Japan to halting the loss of biodiversity and the degradation of ecosystem services by 2020. Europe is committed to reducing greenhouse gas emissions by 20% by 2020. European farming must play a new role in helping to secure global food security. All this must be achieved at a time when the financial pressures facing Europe are enormous.

Set against this gloomy picture, the task for decision makers seems impossible. But we must not forget that the CAP has already taken huge steps in starting to address previous problems and in supporting benefits, other than food production, that the farmed countryside can give to society.

Agri-environment schemes have been compulsory for all member states since 1992. These schemes are intended to target money at farming practices and measures, which allow wildlife to thrive, maintain clean air and water, and protect the cultural landscape.

However, the funding available for these schemes is still tiny in comparison to money available for direct subsidies, and more is desperately needed.

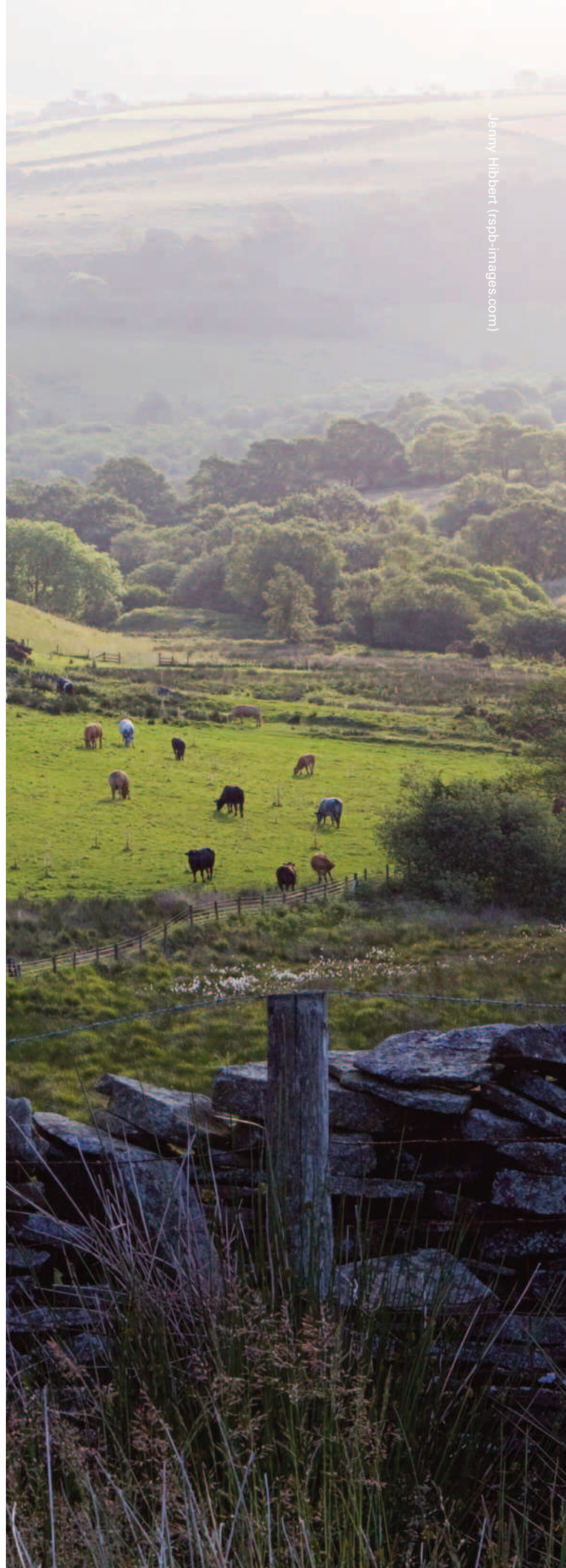
In High Nature Value farming systems the agri-environment model of compensating for the income lost by opting for more wildlife friendly farming does not work due to low market returns. A new model is required to tackle the challenges of these vulnerable systems. Furthermore, some agri-environment money is used to support damaging or inappropriate practices and some good schemes are poorly targeted and monitored so the benefits are not realised properly.

Although these issues must be addressed, there are a number of examples from across Europe where agri-environment has delivered visible and tangible benefits. Here we showcase some of the best.

Wildlife has been the focus of many agri-environment schemes and we look here at a number of approaches, from widely available schemes to targeted work aimed at specific species. Some are new measures, some build on long-standing agri-environment efforts. All are examples of member states embracing agri-environment and delivering real benefits for wildlife and people.

In difficult times there are reasons to feel positive. These case studies are shining examples of how agri-environment money properly spent by Governments and farmers can achieve amazing things.

We hope you enjoy them and will join us in taking action to make sure agri-environment schemes are at the centre of the new CAP.



Jenny Hibbert (pspb-images.com)

MEDITERRANEAN LANDSCAPES – PROTECTING PORTUGAL'S CEREAL STEPPES

The Castro Verde in Portugal is one of Europe's last remaining magnificent extensive cereal steppe landscapes. Restored to its former glory using agri-environment, steppe wildlife and traditional farming are both thriving.

Historically much of Mediterranean Europe's farmland consisted of a mosaic of cereal fields, fallow land, pastures and ploughed fields, created by a rotational regime of low-intensity cereal cultivation. However in recent years, changes in land use, such as agricultural intensification, land abandonment and afforestation, have led to losses of the type of land steppe wildlife depends on, and many of the most vulnerable species have suffered serious declines. The cereal steppes of the Castro Verde in southern Portugal are one of the last refuges in southern Europe for unique steppe wildlife, including the great bustard, little bustard, black-bellied sandgrouse and lesser kestrel.

To turn around these losses, the Castro Verde Zonal Programme agri-environmental scheme was launched in 1995. This programme aims to protect the traditional management of the area and its wildlife. It supports farmers for maintaining traditional rotational farming practices and promotes the reduced use of insecticides and herbicides, and the control of grazing levels.

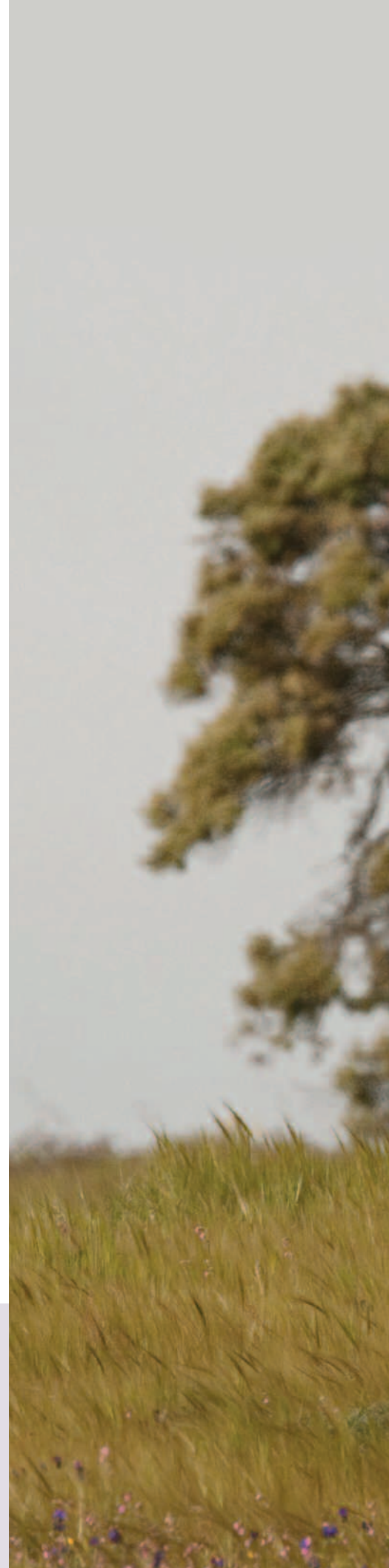
Since the programme began, the types and numbers of both threatened and non-threatened bird species have increased significantly. The great bustard population has more than doubled, in stark contrast to the steep declines seen elsewhere in the region. Populations of other birds, including the lesser kestrel and little bustard, have also improved.

Basic measures can deliver huge benefits to wildlife. Simply by promoting the use of traditional practices and limiting agricultural intensification, the Castro Verde Zonal Programme has created a 64,000 hectare area of high-value steppe where some of Europe's most threatened farmland birds can thrive.

FARMLAND WILDLIFE OFTEN DEPENDS on traditional farming practices.

Using agri-environment to help farmers continue these practices, when they would otherwise be forced to give them up, allows traditions and wildlife to survive together.

FOCUSING RESOURCES on farms within a high-priority target area can deliver excellent results for wildlife.







HOPE FOR FARMLAND WILDLIFE

In the flat, intensive arable fields of Cambridgeshire, in the UK lies a small oasis rich in wildlife, where the volume of birdsong has been turned up loud and the fields hum with insects.

Hope Farm is the source of the noise and the cause is the successful use of the English widespread entry-level scheme.

Purchased in 2000 by BirdLife UK (the RSPB), with the aim of developing and trialling farming techniques that could produce food and still provide for wildlife, the farm is a medium-sized arable farm like any other. Conventionally managed like 95% of all arable farms in England, with a typical rotation of winter sown wheat, oilseed rape and spring sown beans, Hope Farm does not at first appear remarkable.

What is remarkable is the recovery of farmland bird numbers. The “farmland bird indicator” – the combined trend in numbers of a suite of farmland birds – has rocketed by 200% over the last 10 years. This is more impressive when viewed alongside continued regional and national declines. What may surprise some is that this recovery has been accompanied by an increase in food production.

Threatened species have fared particularly well on the farm. It now hosts 41 pairs of skylark compared to just 10 in 2000, yellowhammers number 36 pairs rather than 16, and grey partridge, lapwing and yellow wagtail have all returned to breed.

These results have been achieved by using a combination of simple measures available in a widespread agri-environment scheme (the so-called farmland bird package). Flower-rich grass margins, wild bird cover, pollen and nectar mixtures and skylark plots all combine to meet the requirements of farmland birds. Give farmland birds nesting sites, winter seed food and summer insect food – the “Big 3” of all they need to survive and breed – and the response can be miraculous.

Hope Farm does indeed give us hope for the future of farmland birds. Without sacrificing food production we can turn the volume up across Europe.

THE RIGHT COMBINATION OF OPTIONS implemented in the right place can result in dramatic widespread scheme success.

FARMING CAN BE PRODUCTIVE and profitable and still deliver astonishing results for wildlife.

ALL INTENSIVELY FARMED ARABLE LAND across Europe could look and sound like Hope Farm.

FLYING HIGH IN THE NETHERLANDS

The wide skies of Groningen, Netherlands, are once again graced with the majesty of the Montagu's harrier.

The story of the recovery of this magnificent bird of prey begins with a happy accident, but continues with the implementation of beneficial agricultural policies including agri-environment.

In 1990, in the open arable fields of the most north-eastern part of the Netherlands, Ben Koks, the founder of the Montagu's Harrier Foundation stumbled upon a Montagu's harrier nest. At that time farmers and conservationists had almost given up this harrier as a Dutch breeding bird.

A flurry of activity followed to ensure the nest survived, and to attempt to increase numbers in future years. The first step on the road to recovery was to protect nests from farming operations. The second was to make the area more harrier friendly.

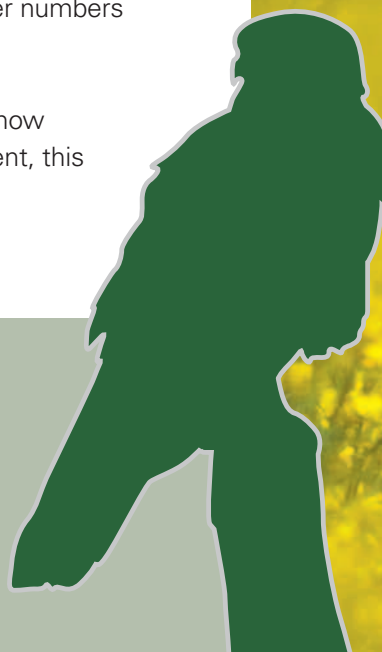
The introduction of set-aside in the late 1980s was a great help to the harriers and may have encouraged them back as a breeding bird. Set-aside provided uncropped land and allowed common voles to flourish, giving the birds plenty of food-laden tables in the countryside.

Dedicated agri-environment schemes followed in the 1990s and have been fundamental to the harriers' success. Field margins of between nine and 12 metres wide provide essential feeding areas. These features contain a variety of grasses and herbs of different heights, as well as some open patches – ideal for hunting. The patchwork of the wider landscape is also important. Around 7-10% of the area needs a covering of suitable features such as field margins for Montagu's harrier numbers to really take off.

The Montagu's harrier population of Groningen, Netherlands now exceeds 60 breeding pairs. With more of the right management, this bird is becoming a familiar sight.

IT IS POSSIBLE to bring species back from the brink using agri-environment schemes.

SCRAPPING OF BENEFICIAL POLICIES such as set-aside can have unintended consequences and tools should be put in place to ensure their benefits can be delivered in other ways.







FARMING IN ROMANIA – MAINTAINING TRADITIONS TO HELP WILDLIFE

In Romania, the first examples of agri-environment schemes are operating alongside non-governmental projects to maintain traditional farming systems, which provide a landscape extraordinarily rich in wildlife.

The Romanian agricultural landscape is populated by large numbers of small-scale farmers. Many of these employ High Nature Value farming systems, producing remarkable wildlife and landscapes. In many areas these systems are faced with abandonment or intensification. Although they maintain crucial environmental benefits, they are not sufficiently rewarded economically so the farming practice is becoming increasingly unviable.

Agri-environment is one possible solution. The Romanian Government has designated areas with over 50% of permanent grassland as eligible for grassland support. This has allowed the introduction of a basic scheme where farmers are required to limit stocking levels, nutrient input and comply with set mowing dates. For a higher payment level, use of machinery is prohibited. Since the scheme was introduced, hay meadows are being brought back into operation and grazing rotation is more rigorously maintained, bringing security for the wildlife that depends on this type of management.

However, 1.9 million farms across Romania are excluded from support because of their small size. In areas like this local partnership projects are extremely valuable. The organisation, Fundația ADEPT (Agricultural Development and Environmental Protection in Transylvania www.fundatia-adept.org) has been running local projects in Romania since 2003, particularly in the Târnava Mare area. This semi-natural landscape of exceptional value has recently been designated a Natura 2000 site. The ADEPT team works with farmers to bring them into support schemes. Together with Government, it works to improve scheme design to ensure accessibility for small-scale farmers.

It is early days for agri-environment in this corner of Eastern Europe, but the signs are promising. With the right delivery of the right schemes, Romania's hugely important farming systems can be maintained into the future.

LOCAL PARTNERSHIPS have proved essential for the adjustment of measures and delivery of results from agri-environment in areas where agri-environment schemes are new for farmers and authorities.

LOW-INTENSITY AND SMALL-SCALE FARMING often deliver significant benefits. It is crucial these farming types are not excluded from basic support.

ENVIRONMENTAL BENEFITS are sometimes provided by the farming system itself. In these cases, paying farmers the income they lose through farming in a more wildlife friendly way does not work. Alternative ways of maintaining these systems are needed to secure the benefits they provide.

SILAGE SANCTUARIES – SAVING THE CORN BUNTING IN SCOTLAND

In a quiet corner of Western Europe, corn buntings have taken their tentative first flight towards recovery.

The east of Scotland in the UK is a patchwork of sheep and cattle farming, mixed with spring and winter cereals. Oats, wheat, barley and potatoes are grown alongside hay and silage. But in this apparent farmland bird paradise, something went wrong, and corn buntings were one of the casualties.

Once widespread across the lowland arable landscape of Western Europe, corn bunting numbers have plummeted. The well-known story of 1970s and '80s CAP policies encouraging boundary and margin removal, winter cultivation, loss of mixed farming, herbicide use and grassland intensification began to play out in this bit of Scotland as it did elsewhere.

But here a happy ending could be written to this story.

Targeted agri-environment schemes delivered with advice have increased corn bunting numbers, while outside the agri-environment area numbers continue to fall.

Success for corn buntings came partly from an option to provide annually sown, unharvested crop patches, which increased cereal food availability. But only when the scheme was tweaked part-way through to delay cutting of silage was dramatic recovery witnessed – proof that monitoring and responding to results is essential for agri-environment schemes to work.

The task now is to deliver this success across a bigger area. To allow the people of eastern Scotland to see good numbers of corn buntings again, three-quarters of the bird's population needs to benefit from targeted agri-environment. This might sound daunting, but in fact this would only cost 0.02% of the agricultural and agri-environment subsidies paid out annually in Scotland.

Surely not too much to ask for such a satisfying reward?

TARGETED AGR-ENVIRONMENT delivered with advice can result in impressive responses in rare and declining farmland birds.

FLEXIBILITY TO ALLOW MISTAKES to be fixed and improvements to be made can boost scheme success.

TARGETED DOES NOT MEAN small scale. Wider roll-out of tested, targeted approaches could produce results at a national or European scale, using a tiny fraction of total subsidy payments.







COLOURING IN THE COUNTRYSIDE

Summer days are that bit more magical in south-west England thanks to agri-environment support for the marsh fritillary.

Numbers of the stunning marsh fritillary have crashed across Europe, and the butterfly is now extinct in many former strongholds. This loss of colour is visible across the farmed countryside. But in parts of the UK, the agri-environment paintbrushes are out, and the marsh fritillary is returning.

Loss of damp and chalk grassland, together with a lack of suitable grazing on the sites that remain, has driven the decline of the marsh fritillary. The butterfly has an extraordinary life cycle, and disruptions to the caterpillar stage have a huge impact on numbers.

The caterpillars are dependent on one food-plant, the Devil's-bit Scabious, which grows in grasslands with an uneven patchwork of short and tall vegetation. The ideal way to create these grasslands is through light grazing by cattle and horses, but this type of grazing is disappearing. A further complication is that the marsh fritillary lives in a network of connected colonies. Small populations tend to die out and new ones are founded from nearby sites. Most good sites, therefore, comprise several small patches within an area.

The agri-environment success story in south-west England began in the 1980s. Schemes containing a special cattle grazing supplement were designed to encourage the marsh fritillary and other insects. The sophistication of the schemes grew, and the targeted higher-level scheme now allows for flexibility in grazing. It can be tailored to the site and can either be by cattle or traditional horse breeds that are suited to wet ground.

Many populations of the fritillary have stabilised or are increasing, and you can once again marvel at this natural beauty in places where the marsh fritillary was once lost.

Care should be taken to maintain and support traditional management where it still exists, and avoid further wildlife losses in Europe.

NECTAR SOURCES ALONE WILL NOT WORK for many butterflies. It is important to understand the life cycle and requirements of plants and animals when designing agri-environment measures, or money could be wasted.

A MOSAIC OF FEEDING AND BREEDING patches within a wider area can be important to support populations. Targeting wildlife only where it exists currently may not deliver results.

PROJECTS AND SUCCESSES begun under previous schemes must not be lost when new schemes are put in place, but must be enhanced and built upon.





THE COMMON HAMSTER – A RODENT PROBLEM SOLVED

The arable fields of Limburg, Netherlands are rustling with rodents. The return of the common hamster is cause for celebration.

Once widespread across Western Europe, the common hamster became extinct in the Netherlands in 2002. Hamsters have high natural death rates and need at least two litters a year to maintain their numbers. This is not possible on conventionally managed fields, where early mowing of alfalfa or harvesting of cereals reduces cover and food, and prevents further breeding.

Conservationists trapped 15 of the last wild hamsters in 1999 and took them into a captive breeding programme to try to save the population. A number were reintroduced in 2002, and agri-environment scheme trials began to make the environment more hamster friendly.

Although hamsters' preference for crops such as alfalfa and cereals is well known, the first agri-environment attempts in these crops were not at all successful. The first management contracts contained complicated requirements and were unpopular with farmers. The contracts included instructions for fields to be small, almost unharvested and to contain at least 15 different herbs. Farmers had to monitor hamster numbers themselves, and fertilisers and herbicides were banned. The fields were largely left unmanaged, and quickly became unsuitable for hamsters.

As understanding of hamster requirements increased, management prescriptions could be changed to be both more hamster friendly and more acceptable to farmers.

Schemes which delay mowing and restrict harvesting, provide food and cover in summer until hibernation. This allows second litters to survive and has been successful at increasing hamster numbers.

The hamster population grew rapidly between 2002 and 2009, and continues to increase, proving that wildlife can often thrive alongside conventional farming, if the right agri-environment options are in place. The measures have also benefited other wildlife including wintering birds.

AGRI-ENVIRONMENT PRESCRIPTIONS may not always be correct when based on best guesses. Testing is essential to ensure options deliver results.

REINTRODUCTIONS WILL ONLY WORK if the problems in the countryside which caused the original extinction are fixed.

MONITORING OF DELIVERY is crucial to highlight where it is failing, and to take steps to put it right.

AUDIBLE SUCCESS – RECOVERING THE CORNCRAKE IN SCOTLAND

At the farthest reaches of north-western Europe, on the Scottish islands, agri-environment schemes have reversed the fortunes of the corncrake, one of Europe's most threatened farmland birds.

At the end of the 19th century, corncrakes bred in every region of the UK. By the mid-1980s, they were restricted to the far north and western fringe of Scotland, with the population numbering less than 500 calling males. The primary drivers of this massive decline and range reduction was the loss of hay meadows, and increasingly early grassland harvest dates, which reduced the birds' breeding success.

Alternative, corncrake-friendly yet agriculturally viable management and harvesting techniques were developed, refined and demonstrated on BirdLife nature reserves, and the Scottish corncrake conservation programme began in 1991. Initially, this involved approaching farmers with corncrakes on their land and offering conservation funds for delaying harvesting and mowing grass fields from the inside out. The best corncrake areas were designated under EU nature law.

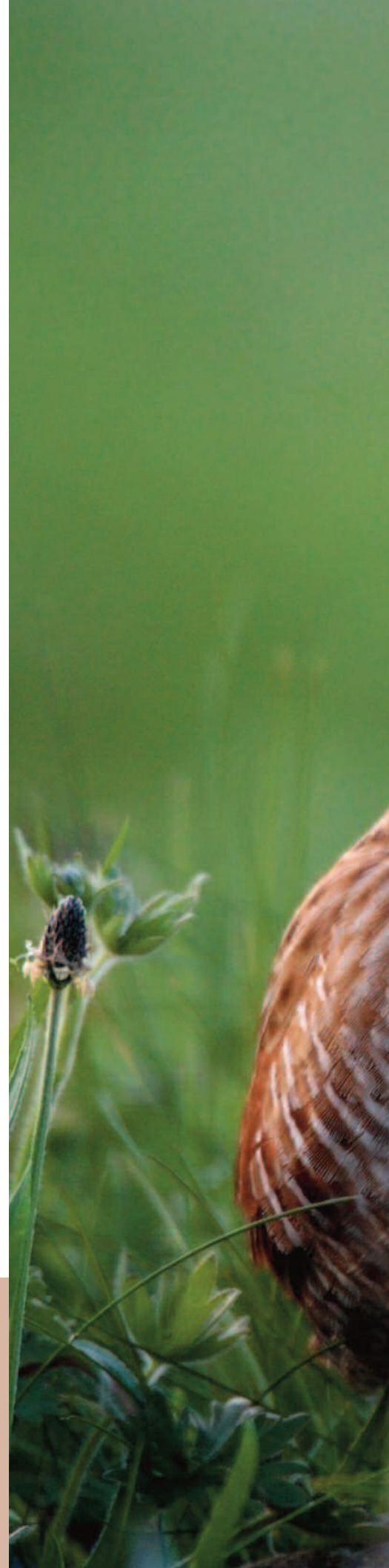
A partnership between agricultural communities, conservationists, government and agencies devised simple corncrake management prescriptions to halt the decline and incorporated these into standard agri-environment schemes. Dedicated advisory support and outreach work from nature reserves helped farmers access the payments. By 1998, the majority of grassland managed for corncrakes in Scotland was being funded by EU-sourced agri-environment schemes, and the proportion continued to rise under successive schemes.

The result is a spectacular reversal in the UK corncrake population. Numbers have trebled since the early 1990s. Corncrake payments now form a significant part of agricultural incomes in the High Nature Value extensive cattle areas of the Scottish Highlands and Islands, and the species is a national flagship for successful partnerships and the conservation of farmland wildlife.

PROPERLY TESTED AND TRIALLED agri-environment prescriptions can deliver impressive recovery in breeding bird numbers.

WHEN AGRI-ENVIRONMENT PAYMENTS form a substantial part of incomes in areas where farming is less economically viable, both farming and wildlife can persist.

THE CORNCRAKE WAS ONCE WIDESPREAD. We must not wait until our widespread wildlife reaches the same critical state as the corncrake before we act to protect the last remaining few.





LITTLE BUSTARD – BOOSTING THE POPULATION IN WESTERN FRANCE

Across the vast agricultural plains of Europe, little bustard numbers have suffered a serious decline. The loss and change of habitat as a result of farming changes (a move from grassland to arable and the increased use of agro-chemicals) have pushed this once widespread species to extinction in at least 10 European countries. In one region of western France, however, this bird is once more beginning to thrive.

Since a targeted agri-environment scheme was introduced to the Poitou Charentes region in 2004, the area has seen numbers of little bustard begin to bounce back. The scheme aims to tackle the two major causes of the bird's decline: nest destruction and starvation. With options that include conversion from annual crops to fodder crops and grassland; reduction in mowing on set-aside and alfalfa fields; and banning of insecticides and herbicides, this scheme has been a great success.

Before 2004, almost 50% of little bustard nests were destroyed during mowing and harvesting, and few chicks survived to adulthood. In the first four years of the new scheme, only 5.4% of nests in fields under agri-environment were lost and female productivity more than doubled. The range of plants and numbers of insects is far greater in fields under the scheme, helping to provide shelter and food for chicks, and delivering benefits to a range of other wildlife.

In an area that saw an 80% loss in the little bustard population in just eight years, more than 1,300 hectares of land are now involved in a scheme aimed at its protection. From just six breeding males in 2003, the population increased to around 30 in 2009.

This is an example of how agri-environment schemes can make a huge difference to farmland wildlife, creating safe havens for even the most severely threatened species. By making simple changes to the way we manage the land, we can reverse the fortunes of declining wildlife across Europe.

TARGETED AGRICULTURE-ENVIRONMENT SCHEMES, containing options designed to reverse the causes of wildlife loss, can have quick and dramatic impacts on wildlife numbers.

EVEN IN INTENSIVELY-FARMED AREAS, mechanisms can be put in place to make space for farmland wildlife.

SOME SPECIES REQUIRE VERY SPECIFIC ACTIONS to bring about their recovery. With proper testing and targeting of actions, wildlife with seemingly complex requirements can be recovered.





CONCLUSIONS

This document showcases and celebrates examples of successful agri-environment schemes across Europe. From the western reaches of Scotland to Romania in the east, from the Mediterranean to the Netherlands, each study is a shining example of how farmers are using European taxpayers' support to deliver amazing reversals in wildlife declines.

Without these schemes much of this wildlife would be lost. Individually these case studies are inspiring, but together they teach us important lessons about the direction agri-environment should take in the future.

European budgets are under extreme pressure.

During the upcoming round of CAP reform and creation of new Rural Development Programmes in member states, every area of spend will, rightly, be scrutinised and questioned. This is at a time when many are calling for increased money for tackling climate change and addressing food security

concerns. Protection of natural resources, such as soil and water, remain critically important issues to be tackled. Whole farming systems in High Nature Value areas are under threat from abandonment, as farmers respond to the lack of market reward and leave their way of life.

Knowing where and how to place wildlife conservation in the CAP's growing to-do list will be difficult. What we do know is that taxpayers and consumers, who value wildlife but are facing economic difficulties in their own lives and sectors, will not accept careless spending on areas that do not deliver benefits for the public as a whole.

We also know that agri-environment schemes, which meet certain criteria, have been proven to deliver widespread results. The examples here all contain elements of:

- **APPROPRIATE FUNDING** to secure sufficient scheme coverage and good delivery.
- **STRUCTURING OF SCHEMES** to ensure the highest chances of delivery.
- **TARGETING OF SCHEMES** to the appropriate area, be it for widespread wildlife or range restricted species.
- **SCIENCE-BASED PRESCRIPTIONS** designed, tested and trialled to meet the needs of the focus species and groups of species.
- **MONITORING TO RECORD** success or failure, and inform future scheme developments.

This success must not be abandoned in upcoming reviews of the CAP and Rural Development Programmes. Europe has led the way in developing agri-environment and this must continue into the future. We must build on and increase the successes that we see here.



- **FUNDING FOR AGRI-ENVIRONMENT** must continue and increase, despite growing pressures on Europe's budgets. European taxpayers will scrutinise all areas of public spending, and unless spending can be shown to be delivering environmental public goods for society as a whole, its acceptability will be challenged. Europe depends on the benefits farming provides. Benefits, which have no markets, yet are of European and international priority, must be supported.
- **WILDLIFE RECOVERY** and protection must continue to be a top priority for agri-environment support. This approach delivers impressive results for wildlife and beyond, and at present there is no alternative means of delivering international and European commitments for biodiversity.
- **SUPPORT FOR HIGH NATURE VALUE** farming systems must improve. These systems frequently provide huge benefits for people, wildlife and natural resources as part of the farming practice, but the systems themselves are under threat. CAP support must evolve to provide for these highly valuable systems, where agri-environment alone cannot deliver.

Europe should be proud of what many agri-environment schemes have delivered to date. The future of farming support in Europe should build on and spread these approaches, enabling Europe to meet its conservation targets and reward and support farmers delivering a variety of benefits. A sustainable farming future lies in enabling and supporting farmers to produce sufficient food, while sustaining and enhancing soils, water and wildlife, as well as addressing the challenges of climate change.

With the right policy mechanisms in place, farmers can reverse the fortunes in farmland wildlife while delivering long-term, sustainable food production and enhancing the natural environment.





This publication celebrates the successes that agri-environment schemes have already delivered for farmland wildlife across Europe. Agri-environment measures should continue to be supported and extended for the benefit of farmers and farmland wildlife.



<http://europe.birdlife.org>



This publication is part-financed by the European Union.



Common Agricultural Policy reform will determine the future of Europe's countryside wildlife. Delivering a countryside fit for wildlife is a key component of the RSPB's Stepping Up for Nature campaign. Find out more at www.rspb.org.uk/steppingup