

The background of the entire page is a photograph of a sea with small, choppy waves. The water is a muted blue-grey color. In the lower-middle part of the image, there is a small, dark, rounded object floating on the surface, which appears to be a seal's head.

*LAST
CHANCE
TO SEE*
in the UK

C.W. Patterson

Introduction



“Hope is the thing with feathers”

Emily Dickenson

The waters of Loch Ken are choppy and white. A few days earlier a storm had blown across Scotland and the wind had not yet settled.

I am pushing my way across to the opposite bank, with my kayak rising and falling with the waves. Behind me is farmland and a small collection of caravans and tents. In front of me is a dense wall of Scots pine, part of a large plantation growing on the less travelled side of the loch. Driving, it would have taken several hours, and a four by four, to reach it. However, it is a short trip across the water and my bow soon hits the pebbles of a small beach that marks an opening to the forest looming above me. Upon pulling the kayak above the water line and scrabbling up the bank, through a thick knot of branches, I emerge onto an old logging track. Waist high saplings protrude from the unused tire tracks. Turning, the road goes up, steeply, into the pines. It’s a short walk to the abandoned structures I’ve come to find.

At the end of the track, the pines part into a large clearing. The grass is growing tall and brambles have begun to entangle the ten or so wooden huts that border the edge of the clearing. Each has a bolted door and a window of thick wire mesh. Some of the doors swing open in the wind, others lodged closed with rust. At the centre is a lichen covered workbench with a rusted meat cleaver buried into its centre.

Although my surroundings would appear to be well suited for making a horror movie, this is actually the setting for one of the UK's most successful conservation projects. This abandoned falconry, hidden in between pines, has been a victim of its own success; the comeback of the Red Kite.

The Red Kite used to be one of the most common birds of prey in the UK. However, during the 19th century, it was relentlessly persecuted. First because it was viewed as a pest by gamekeepers, and then, as it became rarer, a valued commodity for feather and egg collectors. By the start of the 20th century it was nearing extinction. The last remaining British birds clung on for 90 years, hidden in the remote southern hills of Wales.

It did survive elsewhere in Europe, but its range had dramatically declined. The species, much like other raptors, was hit hard by the indiscriminate use of pesticides, such as DDT and PCBs. These helped kickstart the Green revolution but came at a severe cost to wildlife. In birds, especially raptors, these chemicals cause their egg shells to thin and their ability to raise a chick falls. The largest remaining populations were, therefore, found in the remote areas of Scandinavia, Germany, and the Iberian Peninsula.

In the UK, the Red Kites near eradication was brought about by humans, yet, it has been the collective effort of humans that has brought them back. Here, in Dumfries and Galloway, the rusted shells of the release cages are a testament to that effort.

Beginning in 1989, Kites were captured from Sweden and shipped to Scotland. With the hope that, if enough were released, a stable breeding population would establish itself and spread to the rest of the UK.

Within four years the population was a conservation success story. Not only were the released birds breeding, but chicks of those birds had grown up and raised their own young. Additional release programmes sprung up further south that were so successful, within five years, individuals no longer needed to be translocated from the continent, but moved from within the growing populations of the UK. This collective effort now means the Red Kite is found in abundance across small, but ever expanding, areas of the UK, with its numbers only increasing.

Milvus milvus is a magnificent animal, its wide wing span, rusted colour, and unmistakable forked tail mark it out from all other British raptors. During lunch breaks, at my summer job stacking shelves in a local supermarket, I repeatedly see its silhouette hovering above the outer suburbs of north Leeds, not far from where they were released in 1999. Until visiting the decaying falconry, which had its secret location disclosed to the public once it was no longer required to maintain the population, I'd grown up believing the Red Kite to be a common bird of the British landscape. As it is now, in certain pockets of the country.

However, not all of Britain's wildlife can be talked about with such hope. 20 years ago, it would have been a fanciful dream to talk about how common the Red Kite has become in certain areas of the UK. Yet, it would also have been a horrendous nightmare to talk about how quickly other species have declined. Some have always been rare, bird species not included in the average garden bird book, such as the Western capercaillie. Others are sprinkled throughout our cultural memory, characters from children's books such as the Hedgehog.

This book covers a selection of these threatened creatures. Each has its own complicated array of factors to explain why they have been decreasing in number. But none, as of yet, have completely disappeared.

27 years ago, Douglas Adams and the zoologist Mark Carwardine travelled the world in search of species that were being driven towards global extinction. When Carwardine returned, 20 years later with Steven Fry, it was too late to see the Baiji, more commonly known as the Yahtzee river dolphin. Yet, other species had managed to cling on and some, like the Red Kite in the UK, had even increased in number.

In much the same way, this book aims to travel the UK, searching for species not facing global extinction but being pushed towards local extinction. By exploring the reasons for their decline, and looking for solutions, it is hoped that this will not be the last chance to see them.

Chapter 1: The Lark descending



“Singing still dost soar, and soaring ever singest”

Percy Shelley

Many threats to wildlife have been caused by the dominance humans have over the world. Yet, some species have been benefitting from the alterations humans made to the landscape. Now, however, some of those benefits are being taken away and their numbers have started to fall.

The British countryside is also a factory. That being, the majority of land is managed in order to produce some kind of commodity, predominately food. Whilst causing many habitats to decline, woodland, wetland, etc, this mass geo-engineering has also produced an abundance of habitats that would have been exceedingly rare before the advent of farming some 10,000 years ago.

For certain songbirds, that prefer an amalgamation of habitats, chopping down the broadleaf forest - that used to cover most of the British lowlands - was a great idea. Farmland is composed of several different habitats within close proximity to each other. Hedgerows, grassland, woodland, and the farm buildings themselves can be easily found within a short distance of each other.

Yet, now this mixture of landscapes has begun to disappear. Farmers, under pressure to sell cheaper and cheaper food, have been forced to increase their yields, which can be done by expanding the size of their

fields. As discussed in a later chapter, this has caused a dramatic decline in the number of hedgerows in Britain.

Farming techniques have also changed. This is, again, with the aim of keeping farms profitable as food prices fall. One such crop is cereal - wheat and barley - which cover a great deal of Great Britain. Historically, these have been sown in the spring and harvested in the autumn. Now, however, it has been discovered that sowing in the winter, and harvesting in the summer, can boost a crops output by a considerable degree. For farmers and their customers this has been a great success, but for ground nesting birds - for instance the Eurasian Skylark - it has been a disaster.

The spring sown cereals provided the Skylark with a vast expanse of ideal nesting habitat. The short stems, of the newly sown wheat and barley, are tall enough to conceal them from predators, but not yet overgrown enough that constructing their nests becomes impossible. And the sparsely built up vegetation allowed them to flit in and out of the fields unimpeded, finding insects and seeds on the bare patches of ground in between the stems.

Unfortunately, winter sown cereal, which is now adopted by nearly all farmers in the UK and Europe, does not provide such an ideal home. By the time of the breeding season the cereals have become tall and dense and the Skylarks are forced to build their nests away from the protection of the fields interior and instead on the crops edges. Some Skylarks even attempt to build their nests on the fields tramlines, the baron tracks left by tractors. Here, the survival of the eggs, and chicks, further drops as they are easily picked off by predators and occasionally destroyed by farmland transport. The denser undergrowth of the cereals also forces the Skylarks to forage further afield from their nests, leaving them for

longer periods of time and, therefore, less protected. This further increases the chance of predation.

Being a ground nesting bird, the risk of predators is always high for the Skylark. They get around this by attempting to raise several clutches a year. Meaning if one is lost they still have the chance to raise another. Now, however, the breeding season is cut short as a dense matt of cereal covers the farmland by mid-June.

Nearly all cereals grown in the UK are now sown in winter and the population of Skylarks has halved. This is alongside other farmland birds such as the Corn Bunting and the Tree Sparrow, both of which have declined by more than 90% in 50 years.

Not all Skylarks are found on farmland, however, some make their home in upland valleys and moors, anywhere that the grasses are left to grow long and thick. Although, not as much as winter sown cereals. Here, the Skylarks fashion nests within the woven grassland and the males put on a show that makes the Skylark one of the most impressive sights in the UK.

Halfway up the slope of Ingleborough, in the Yorkshire Dales, the land is still technically a factory. However, here, the sheep fields do not become a uniform mass of short grazed grass. Instead, the limestone pavement, a jigsaw of rock protruding out from the ground, breaks up the landscape creating pockmarks of shelter where the grass can grow wild. Here, especially in the breeding season, the males' displays are a musical marvel.

The males start by ascending into the sky, rising above the grassland up to a hundred metres and hovering in the sky. They angle and flap their

wings to remain as stationary as possible and try to sing the longest, loudest and most complicated song they can.

The one that has risen above me now is no more than a dot in the sky but its high-pitched vocals are clearly heard, even above the wind. Its melody of whistles and drills can excel for up to twenty minutes and have over seven hundred syllables. Imagine singing Bohemian Rhapsody, as loudly as you can, non-stop, 18 words a second, hovering a hundred metres above the ground, twice.

Sadly, however, even here this has become a much rarer sight. The reasons for this upland decline aren't yet understood, so acting against them has been impossible. As numerous small, flapping, singing, specs further ascend around me, I hope that this will not be a mystery for much longer. In the lowlands, however, where the reasons for the collapse is much better understood, action is starting to be taken.

Ideally, cereals would be again sown in the spring. Unfortunately, this would be at a significant cost to any farmer who was altruistic enough to take such action. One solution, however, that has been tested and spearhead by the RSPB's research farm - in Cambridgeshire - is that of making 'Skylark plots'. At the farm, the charity can grow crops in a variety of different methods and then measure their impact on the local wildlife without having to worrying about a loss to revenue. The aim as such is to find methods that give a boost to the local wildlife, without also having an impact to farmers' profits.

Over five years, the workers at Hope Farm, experimented with leaving small patches of field unsown. These plots were simple to create and easy to maintain. All the farmers had to do was turn off their seed dispersal machines for a few seconds when the crop was first planted. For the rest of the growing season the field could be managed like any

other. It was thought that plots would provide food for foraging and space for nesting, whilst also providing protection from predators. As such the Skylarks would no longer need to use the tramlines and field edges, which they had been forced into using on other farms.

It took only a small effort on the part of the farmers, but the effect on the Skylarks was celebratory. Skylarks, on the farm, increased by 30% and the number of nests doubled. Towards the end of the breeding season, when Skylarks were normally being throttled by the overgrowing cereals, each nest could, on average, rear one and a half more chicks than in other fields. This increased the total number of fledglings by 50%. This, of course, increased the number of birds seen singing high above the wheat fields, a sound that is for many the anthem for the coming of British summer.

Reducing the number of seeds planted does, however, still decrease the profits of a crop. About £5 per hectare. Due to the success of the project, however, Natural England has now started a compensation scheme of £9 per hectare, if farmers start leaving patches of land barren. Studies following up on these farms have indeed found a rise in the number of Skylarks as well as other farmland birds that are able to live in the surrounding landscape. This has not, as of yet, fully reversed the national decline.

As farmers struggle to produce enough food to sell at the low prices demanded by supermarkets, more and more farming is being conducted with larger and more intensive methods. This has had a significant cost on the counties wildlife.

The landscape that the Skylark has made a success out of, is not a 'natural' one. Yet, that does not mean its destruction should be left unquestioned. Farmland, managed in the right way, can have a higher

biodiversity than some of the UK's national parks. For many, the cost of the bursary, given to farmers for making Skylark plots, is nothing compared to losing the Skylark from the UK's skies. It is likely, however, that the money will not last forever. It is sad to say that the number of Skylarks, like many creatures in the UK, will be decided by humans. Arguing for the artificial maintenance of an artificial landscape is an interesting position for nature conservation, in the UK, to have reached. Therefore, the fate of the Skylark in Britain, and indeed much of Europe, remains to be seen.

Notes

Introduction

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Glossary

Altruistic – Unselfish, improving the life of something else at a cost to yourself.

Amalgamation – A mixture or combination of multiple entities.

Baiji – More commonly known as the Yangtze River Dolphin, this fresh water dolphin is classed as ‘critically endangered’. Although no evidence has been found of a surviving individual for many years.

Biodiversity – The variety of plant and animal life in an area

Bow – The front of a water vessel, opposite of the stern

Broadleaf forest – Temperate forests which typically include species such as oak, beech, maple, and birch.

Clutch – A group of eggs laid by a bird, or other egg laying animal.

DDT – Dichlorodiphenyltrichloroethane, an insecticide banned in 1972 due to its detrimental effects on wildlife, especially birds.

Dumfries and Galloway – An area of southern Scotland.

Extinction – When the last remaining individual of a species dies.

Falconry – A place where raptors, or birds of prey, are kept and raised, sometimes trained.

Fledgling – A young bird that has just left its nest.

Forage – The act of an animal searching/finding food.

Geo-engineering – Altering the landscape, function, and climate of an ecosystem.

Green revolution – The change in farming technology that allowed for a huge increase in the output of food during the 1930’s and 60’s.

Habitat – The environment in which an animal/plant lives.

- Harvested** – When a crop is gathered at the end of the growing season.
- Hectare** – A measurement of surface area, equal to 10,000 square metres.
- Hedgehog** – *Erinaceus europaeus*, A small mammal found mainly active at night. Covered in spines which it uses for protection. Also known as a Land urchin.
- Iberian Peninsula** – The protrusion of land in-between mainland France and the Mediterranean, mainly made up of the countries Spain and Portugal
- Invasive species** – A species that has expanded out of its traditional range, may cause detrimental effects to species found in its new habitat
- Loch** – The Scottish word for lake.
- Lichen** – An organism made up of algae and bacteria, mainly found covering rocks, trees, and old buildings.
- Limestone pavement** – A flat, often weather-beaten expanse of the rock limestone.
- Natural England** – The UK governments environmental advisors and policy makers
- PCBs** - Polychlorinated biphenyl, a manmade compound used in manufacturing, but found to have dramatic impacts on wildlife. Banned in the United States and EU, however, due to its stability is still found in the environment.
- Pesticides** – Chemicals used to deter or kill pest species.
- Predators/Predation** – A species which interacts with other individuals by killing them, typically for food.
- Sapling** – A young tree.
- Scandinavia** – An area of Northern Europe, typically described as containing Norway, Sweden, and Finland.

Scots pine - *Pinus sylvestris*, a tree species found in Eurasia, one of the three pine species native to the UK.

Raptor – A bird of prey, a species of bird that preys on other animals.

RSPB – The Royal Society for the Protection of Birds, a charity set up for the conservation and protection of Birds, mainly in the UK

Western capercaillie - *Tetrao urogallus*, a large species of ground bird found in the highlands of Northern Europe. The only population in the UK is found in Scotland, where its numbers are falling.

Some of the most iconic and celebrated British animals are in decline.

Even hedgehogs and songbirds, like the Skylark, are becoming harder to find.

Why?

From the Cairngorm plateau to the fields of Cambridgeshire, this book journeys throughout the UK, searching for species that have begun to fall in number and to answer the question, why this may be the last chance to see them.

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