CAN WE BRING BACK THE WRYNECK?

In the 1800s, the Wryneck was a familiar sight in Britain, but it's now extinct here. So, what happened? And why aren't we trying to bring it back?

WORDS: BEN MACDONALD

Last September, I read that a Wryneck had been seen in south Gloucestershire. A migrant to our shores, this cryptic woodpecker was presumably heading back to tropical Africa from its breeding grounds in Scandinavia. Each year, Wrynecks pass through Britain. In spring, a lucky few birders discover them on our south and eastern coasts. In autumn, they return, in greater numbers. But 200 years ago, the naturalists of south Gloucestershire would not need to wait till autumn to see the 'Cuckoo's Mate'.

Wrynecks once called from every orchard in the Severn Vale, as in much of the English countryside. Today, our generation regards these cryptic wonders as transients – heading north and south. How exciting that this extraordinary woodpecker once bred across the whole of England. How odd that its decline still puzzles us. How disappointing that we have never sought to bring it back. So, how did we lose the Wryneck – and how can we restore it to our countryside?

At the start of the 18th Century, Wrynecks nested throughout the lowlands of every English county, except Northumberland, in the north, and Cornwall, in the west. Their range extended to the entirety of Wales. The Wryneck's familiarity to non-naturalists across Britain at that time is attested by the amount of folklore that accumulated around it.

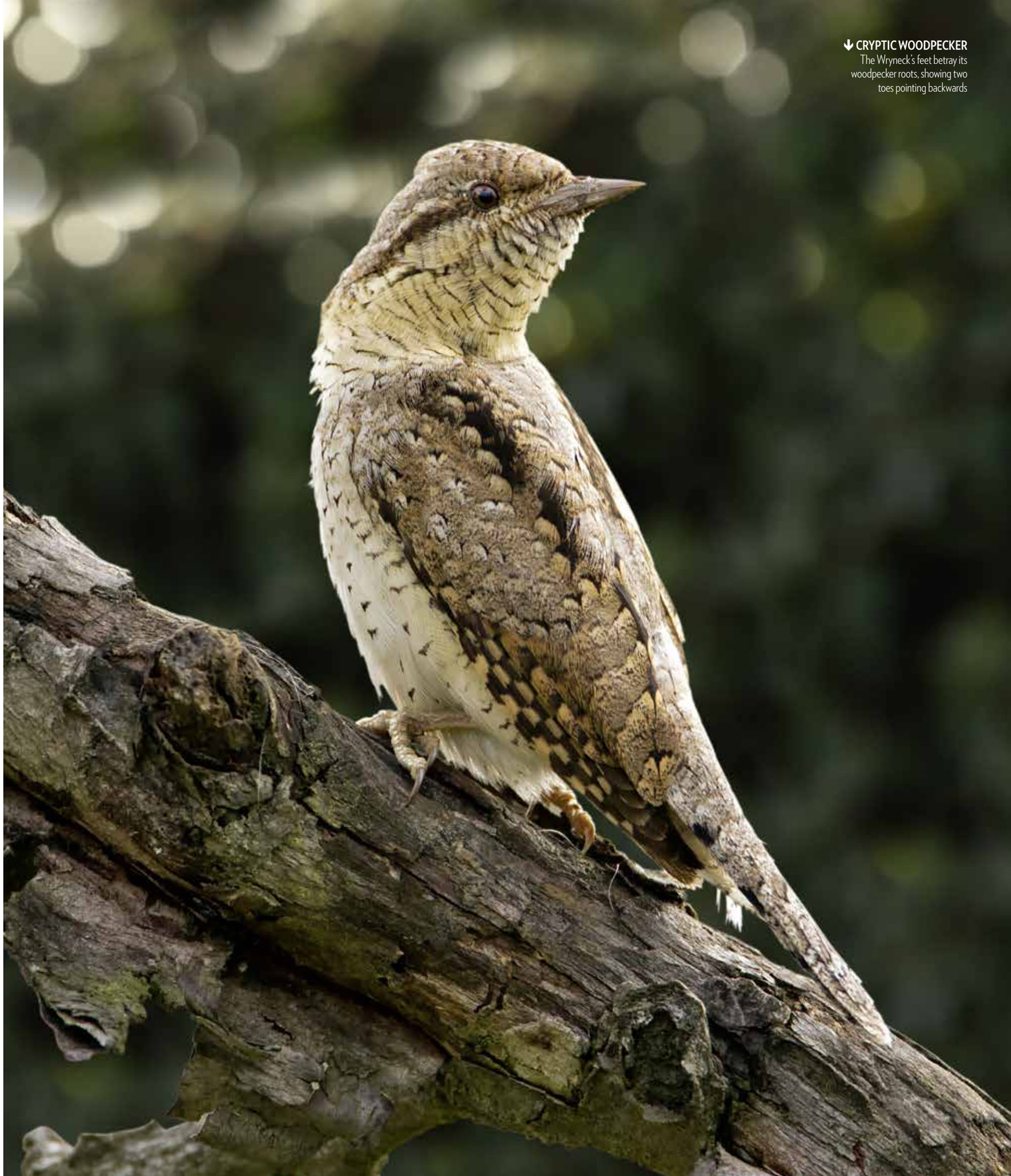
Wrynecks were called 'Cuckoo's Mate', because of their arrival in Britain days before this other familiar visitor. In Gloucestershire, they were referred to as 'Cuckoo's Footmen'. In the Midlands, Tunstall, in 1784, called them the 'Cuckoo's Maiden'. The Welsh name, 'Gwas-y-Gog', meaning 'Cuckoo's Servant', reflected the belief that Wrynecks used to build the nest and hatch the young of the Cuckoo.

Across Europe, Wrynecks were believed to hold powers of sexual magic – their head-turning able to turn the heads of wives back to 'cuckolded' husbands. The Wryneck's use in witchcraft and ritual was, likewise, due to fascination with its snake-like head movements – twisting, while hissing, if disturbed at a nest.

The first part of the Wryneck's Latin name, *Jynx torquilla*, refers to the 'jinx' that birds were believed to cast in turning their head. The familiarity of a species is often attested by how well it becomes ingrained in the folklore of a country. At the start of the 19th Century, Wrynecks, it seems, were everywhere. A century and a half later, they were all but extinct.

The best summary of the Wryneck's decline is written by J F Monk (1963). In the early 19th Century, Wrynecks were common across most of England. By the 1820s, the first retractions in range became apparent. In Durham, for example, birds common in the 1830s had declined 'lamentably' by the 1840s, and were largely lost by the 1850s. In Derbyshire, birds were regular until 1831, but rare by 1880. By the 1850s, birds were considered uncommon across Wales, with the last breeding in the north confirmed in 1866. Populations in Cumbria and Lancashire, well-established in the 1820s, were scarce by 1850.

Between 1850 and 1900, massive declines of the Wryneck were underway. Each county seems to have followed specific trends of its own. Gloucestershire, for example, had birds commonly until at least 1829, from when on they declined. Cambridgeshire had good numbers from 1827 to 1869, but birds were scarce by 1880. On the Isle of Wight, birds were relatively common in 1845 but rare by 1860. In Essex, birds were 'heard in all directions' in 1832, but the species was localised by 1890.



CRYPTIC WOODPECKER
The Wryneck's feet betray its woodpecker roots, showing two toes pointing backwards

IMAGEBROKER.THOMAS HINSCHE/Imagebroker/FLPA

It's important to note that this wasn't a simple 'withdrawal' from north to south. Wrynecks were declining everywhere but in core counties, like Surrey, there were simply more to begin with. In 1834, birds here were 'heard in every direction', but considered much scarcer by 1910. Populations would crash suddenly in one county, yet remain strong in the next. In Sussex, birds were 'familiar and well-represented' in 1890 and 1905, yet, by 1920, an 'unaccountable and appreciable decrease' led to extinction by 1938. In Kent, meanwhile, birds remained common. But the writing was on the wall for the Wryneck's extinction.

By 1905, Wrynecks had been lost from Wales. By the 1930s, they had gone from northern England, the Isle of Wight, and most of the Midlands. Until the 1940s, birds persisted in the orchard-rich counties of Herefordshire, Worcestershire, Warwickshire and Somerset, but had gone by the 1950s. By this time, Wrynecks bred regularly only in the Home Counties (Oxfordshire, Buckinghamshire, Hertfordshire and Berkshire); East Anglia (Norfolk and Suffolk) and south-east England (Surrey and Kent). By 1954-58, there were 150-400 pairs of Wryneck remaining in England, a figure later revised to 100-200 pairs. By 1966, 40-80 pairs remained, largely in Kent. And by 1973, a pair carrying food in Kent, and nesting in an orchard, in Hertfordshire, signaled the end. Single pairs have bred in south-east England in 1974-79 and 1985-87 – and never since.

During this time, the Spey Valley, Deeside and other areas of the Scottish Highlands offered hope of a new colonisation from Scandinavia. From 1969, nesting took place annually here in pine, Aspen and Birch pasture – peaking at seven confirmed pairs in 1977. After this time, the population here declined, with the most recent confirmed breeding in 2002, when a nest was found in Ross-shire. Today, the New Bird Atlas, and data from the Rare Breeding Birds Panel, suggests that 1-5 singing Wrynecks persist in Scotland every year – still, mainly, in Strathspey. Birds here rarely, if ever, use the same site in consecutive years, and no viable population exists, even though annual breeding, and a degree of under-recording, seems possible. This, then, is the current situation for the Wryneck in Britain. The Cuckoo has lost its mate.

The Wryneck's sudden demise, from abundance, before 1820, to extinction, by 1973, has caused a deal of puzzlement in the ornithological community. This is rather strange as no bird has, perhaps, been lost for clearer reasons. The first thing to consider is that the Eurasian Wryneck, like its African counterpart, the Red-throated Wryneck, is a bird of wooded savannah.

This habitat provides the Wryneck with its two essential requirements – cavities, for nesting, and abundant and accessible ant-hills, for feeding. Before the advent of agriculture, natural wood-pasture, wild orchards, low grasslands with trees, and spacious, open woodlands – like Sessile Oak and Birch – may all have created the proximity of cavities to ant-rich, open ground. Short vegetation would have been retained by grazing, as well as unchecked processes like large-scale wildfires.

The advent of agriculture helped the Wryneck as it helped many other birds, like the Corn Crake and the Red-backed Shrike. Vast areas of dense forest were converted into habitats for the grazing of horses, cattle and sheep. Orchards came to dominate whole counties, replicating natural wood pasture. Commons, a habitat largely relict today, were developed for the grazing of livestock.

The creation of estates and gardens, at a more localised level, would have increased the availability of bare ground and scattered trees. From the Iron Age onwards, then, the British landscape developed vast tracts of wooded savannah as a consequence of human livestock grazing. The removal of trees in these landscapes was not deemed necessary. Ant colonies would have thrived wherever bare ground was present. And so, the two perfect ingredients for Wryneck survival were, quite accidentally, created across England. Look at the paintings of Constable, Gainsborough and others, and you can see how vast tracts of our country once consisted of wooded grassland with bare earth – more similar in structure to the Serengeti than the Britain of today. This was the realm of the Wryneck – and there was plenty of it.

Wryneck survival has a very precise set of parameters. These are every bit as nuanced as those of a bird like the Bittern. Nesting takes place in tree cavities, including old woodpecker holes. Nest sites must be close to areas of bare ground,

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PAUL STERRY/Nature Photographers

THE WRYNECK IN EUROPE

Across Europe today, Wrynecks, like Corn Crakes, have declined in disparate regions. Their overall distribution shows a bias that can be clearly linked to subsistence agriculture and fruit-growing, but not overall climatic or geographical patterns. In France, for example, Atlas Nicheurs reveals that traditional fruit-growing regions such as the Loire Valley and the Ile d'Oleron still retain this species, as does a large band of the eastern counties, where vineyards predominate.

In Spain, the species still survives in the orange groves of Extremedura and thrives on Mallorca. In Switzerland, tracts of the Rhone Valley, containing abundant pear-orchards, have proven optimal habitat for the species.

Like other low-intensity grassland users, such as Corn Crakes, Wryneck populations then pick up in the east, in subsidence farmland from eastern Poland, Belarus, Latvia and Lithuania eastwards into Russia. Where ancient natural pastures flourish on a large scale – in southern Finland or the Bialowieza Forest, for example – Wrynecks still thrive in pre-agricultural habitats.

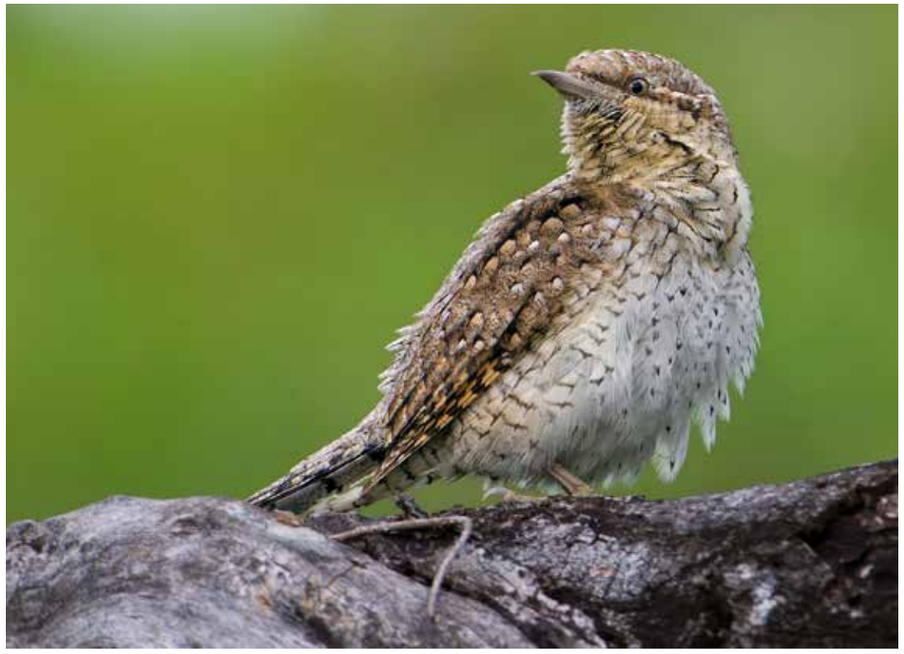
There is no mystical factor dictating Wryneck distribution. Cavities. Abundant ant nests. Landscapes large enough for these resources to sustain migrant populations. It may be many years before we combine the vision and resources to rebuild savannah in Britain, and use natal imprinting to bring Wrynecks back to our shores.

But, in the meantime, we can't allow the Wryneck's cryptic plumage to hide the reasons for its extinction.

To bring it back, we must accept why the Wryneck left us to begin with. Then, in decades to come, we can rebuild its grasslands and ant-hills, and give the Cuckoo's mate a home once more.

↑ ANTEATER
Wrynecks feed mostly on the ground, probing with a long sticky tongue for ant larvae

→ BARK LOOKALIKE
Just as a Green Woodpecker blends into its grassy habitat, so the Wryneck is beautifully camouflaged against tree bark



Thomas Hinsche, BIA/Minden Pictures/FLPA

SPECIES FACTFILE

WRYNECK

Scientific name: *Jynx torquilla*
Length: 16-18cm
Wingspan: 25-27cm
UK numbers: 0-1 pairs
Habitat: Open pine and birch woods
Diet: Ants

where ant nests are accessible and abundant. Mermod (2009) found that Wryneck densities are positively related to the amount of bare ground in a territory. Birds use these areas in a highly specialized manner. When provisioning young, Wrynecks visit one ant nest per feeding trip.

Crucially, birds feed exclusively from these nests, not the wider surroundings (Freitag, 2000). Foraging is most intense in the morning, because afternoon heat drives ants deeper into their colonies, rendering them less accessible. Any factors obscuring ant nests, such as vegetation, are likely to hamper colony formation or prevent Wrynecks from accessing their prey. Importantly, Wrynecks do not feed on adult ants. They predominantly take larvae and nymphs from the upper layers of nests.

The fact that Wrynecks were once common across Britain does not mean their requirements were ever general. It just means that pastoral agriculture was able to meet their specialism on a massive scale. This is absolutely vital in understanding the Wryneck's decline. Our willingness to consider the species a landscape generalist is perhaps behind our confusion as to its extinction. In reality, while subsistence agriculture promotes Wryneck requirements, almost any form of increased activity eradicates the species from a landscape. Grazing, cutting,

> "In Britain, we were the first to begin doing too much for the Wryneck to survive. Its loss forms part of an Industrial narrative"

burning and gentle tilling are the only processes that reliably create ant-rich bare ground. Deep ploughing disrupts colonies, and these can take months or years to reform. Crop-planting hampers colony formation and conceals remaining ant nests. Any application of chemicals can have devastating impacts on ant abundance. Forms of improvement will usually lead to adverse changes in grassland composition – either increasing sward length or decreasing the density of ants. However, a lack of pastoral processes, like grazing, means grasses will grow too long for Wrynecks to forage, and wooded pasture will develop a ground layer unsuitable for accessing food. What Wrynecks need, therefore, is for humans to do something – but very little – with the landscape.

In Britain, we were the first to begin doing too much for the Wryneck to survive. Its loss forms part of an Industrial narrative – not a climatic or migratory one – that has occurred in a series of stages, and impacted on every aspect of our countryside. Between 1750 and 1850, the agrarian revolution transformed the British countryside. Most food was now grown for markets, not for farmers and their families. As a national market and transport infrastructure developed, including canals and railways, our ability to export massive yields increased. Large fields under single ownership – enclosures – took the place of feudal strip-farming systems that had existed since the 12th Century.

This would have enormously reduced small-scale heterogeneity in the English countryside. Then came a crucial change in the Wryneck's fortunes – a 30% growth in arable land, most of it converted from pasture. Even in these early decades of the Wryneck's decline, an enormous shift was taking place – from endless small-holdings, with pastoral grazing, to large-scale agricultural estates, with arable crops. Arable farming promoted monoculture with tall vegetation – anathema to ant colony formation and Wryneck feeding requirements.

The Wryneck's relentless decline

In my view, the Wryneck's fate was sealed earlier than any other bird of the wider countryside. Only early, simple forms of agriculture can benefit it. These are associated with subsistence cultures, where small-scale livestock grazing and fruit-growing are the sole demands placed on a landscape. This is why the Wryneck's decline has been relentless across industrialised Europe, and started so early, yet has been less severe in traditional farmland in the Eastern Bloc or the fruit-growing landscapes of places like Mallorca or southern Italy. Like Corn Crakes and Red-backed Shrikes, Wrynecks, a grassland specialist, committed, early on, to the matrices of subsistence agriculture. Over the past two centuries, they have paid the price.

If the Wryneck's main decline owes to the fact that we evolved, remorselessly, from doing a 'little' to a 'lot' with agricultural Britain, there is also a curious quirk in its history. Between 1750 and 1850, the percentage of rural (human) population in Britain fell from 46% to 23%. And from the 1860s onwards, large areas of Britain became subject to the 'agricultural depression'. With ongoing rural to urban migration, much of our countryside was, temporarily, depopulated, and pasture and hay-meadows became overgrown.

By the 1900s, records suggest that our remaining Wrynecks were no longer birds of farmland, but had retreated into parkland, orchards, gardens and low-intensity pastures, like the Thames Valley, where bare ground would have persevered. In counties such as Kent, orchards supported Wrynecks at a local level, but as history shows again and again, summer migrants cannot be sustained by small-scale habitats.

Much has been made of their 'south-eastwards' retreat, and this was true. Wrynecks were simply left, at the end, where they were commonest to begin with. The later declines of the Wryneck, with a population already in free-fall, were, in my view, accelerated by our relentless tidying and spraying of the countryside. As far back as 1912, Frohawk observed that, in Surrey, Wrynecks declined markedly when pesticides were applied to their breeding grounds. Wryneck habitat is fundamentally incompatible not only with modern agriculture, but modern horticulture, too.

Across the 20th Century, the continued removal of landscape nuance has been an insidious and cumulative process. In Somerset and Herefordshire, Wryneck declines, like those of the Lesser Spotted Woodpecker, closely followed the grubbing of ancient orchards. Few birds have been so utterly incompatible with our modernising landscape. Today, anyone who believes viable Wryneck habitat exists in England might like to try to find it. If anyone can discover an extensive, wooded pasture in England choked with ant nests – in a landscape large enough to sustain a migrant population – I'd be interested to hear. Today, the low-intensity grassland mosaic of Britain, complete with teeming ants, has vanished on a scale capable of supporting carrying capacity. There may be discrete sites that could support single pairs. But when we lost subsistence agriculture, we removed the Wryneck's true home.

Do Van Dijck/Minden Pictures/FLPA

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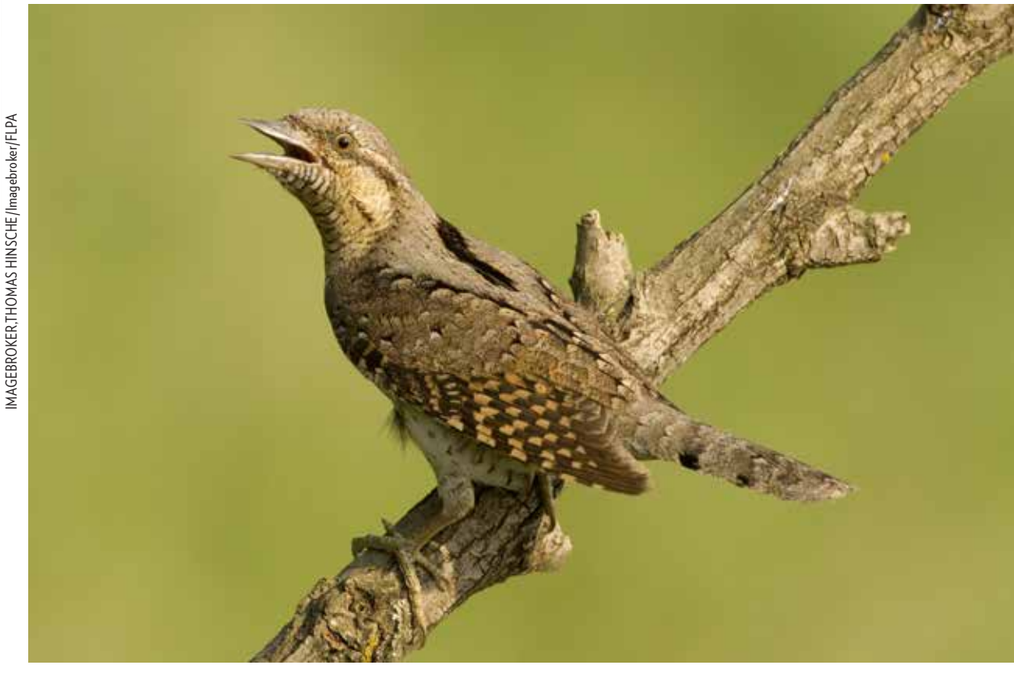

WHERE TO WATCH?

The Wryneck can be seen in spring – usually in May – but they are best looked for on autumn passage in August and September, particularly on the south and east coast, concentrated around migration hotspots. A few passage birds make it inland and may even turn up in gardens across the country. The species breeds from Scandinavia south to North Africa and across the whole sweep of Asia as far east as northern Japan. European birds winter in sub-Saharan Africa and Asiatic birds in southern Asia.

↑ AVIAN CHIMERA
The Wryneck is a woodpecker in Nightjar's clothing, with the shape of a large warbler

↓ RINGING CALL
The falcon-like, whining call of the Wryneck is now largely a thing of the past in the UK