After 600 barren years, white storks deliver hope at rewilding project

The Times visits the Knepp estate in Sussex where the birds have been breeding successfully for the first time in Britain since the Battle of Agincourt

Until the white storks were bred here four years ago, the most recent hatching in the UK had been in Edinburgh in 1416

TIMES PHOTOGRAPHER JACK HILL

Rhys Blakely, Science Correspondent

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As the research team approaches the nest, one of the chicks rises to its feet. A bundle of downy fluff supported by two improbably long legs, it throws its head back and repeatedly claps shut its large bill. A resonant “tock, tock, tock, tock, tock” fills the air.

It is a sound that, until quite recently, had not been heard in the wild in Britain for 600 years — that of a very young white stork saying hello.

In addition to being the UK's largest bird, the white stork (Ciconia ciconia) may also be the avian species most surrounded by folklore. Credited in fairytales with delivering human infants, it has been seen as a symbol of hope and new life.

It feels fitting, then, that a reintroduction project at Knepp in Sussex is on course for a bumper year for stork chicks.

Until the birds first bred here four years ago, the most recent record of a wild white stork hatching on these islands dated back to 1416, a year after the Battle of Agincourt, when a pair nested on the roof of St Giles' Cathedral in Edinburgh.

In 2020, four chicks fledged at Knepp, the most famous rewilding site in Britain. In 2021 there were 15, a year later 18, and last year there were 26.

This year the project appears to have truly taken flight, with hopes that more than 40 young birds will leave their nests in the coming weeks.

“We are delighted with how they’re doing,” said Laura Vaughan-Hirsch, who oversees the reintroduction scheme. “They’re showing us how quickly, given the chance, that nature can recover.”

The storks are part of a broader success story. In 2000, Sir Charles Burrell and his wife Isabella Tree embarked on England’s first large-scale lowland rewilding project at Knepp, transforming what had been a loss-making dairy farm. They didn’t abandon the land, but began to manage it in a dramatically different way. Old English longhorn cattle, Exmoor ponies and Tamworth pigs were brought in as proxies for the aurochs, tarpan and wild boar that would once have roamed the British countryside. Intensively farmed fields reverted to thorny scrub; thousands of jay-planted acorns sprouted into oak saplings.

The storks have been introduced at the Knepp estate in West Sussex. Their nests can weigh up to a quarter of a tonne

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In the summer of 2007, the first turtle doves were sighted at Knepp, their population having plummeted by 98 per cent across the rest of the country. In 2009, the first ravens were spotted. And in 2012, a study identified scores of nightingales, a critically endangered species that had been absent a decade earlier.

But the storks are perhaps the most charismatic newcomers. High in the skies above Knepp, the adult birds “kettle” — the term used to describe how they circle and rise as they use their two-metre wingspans to ride the thermal updrafts. Vaughan-Hirsch said he suspected they were practising the flying techniques they will use to reach continental Europe and north Africa when they migrate south for the winter.

Most have nested high in veteran oaks, with one tree boasting four massive nests and ten chicks. But on the ground, there are even a group of “bonus chicks” — youngsters whose parents had not been expected to breed.

The reintroduction project involved two sets of birds. Twenty storks that could fly were brought in from Poland in 2018. However, two years earlier, 34 injured storks had been introduced, also from Poland.

None of this first group could fly, many of them having lost large portions of their wings after crashing into pylons or in traffic accidents. They formed a kind of welcome party, Vaughan-Hirsch explained.

The White Stork project also involves taking in injured birds from abroad, primarily Poland, and some of these injured birds will pair with those that can fly

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“They are a very social species,” she said. Kept in a predator-proof enclosure, the job of the flightless birds was to signal to the flying storks that Knepp was a suitable home.

Their injuries meant the invalid birds were unbalanced, which reduces the chances of their eggs being fertilised. Against the odds, however, nine of their chicks are on course to fledge this year, having been reared in nests on the ground.

And it is the nests themselves, most of them high in veteran oak trees, that are now the focus of researchers from the Natural History Museum. To raise their young, each breeding pair of storks will construct a ramshackle platform of twigs a couple of metres across.

A newly constructed nest can include 70kg of rotting wood and plant matter. There is a good chance it will be reused the following year, in which case the adult birds will add yet more material. A single nest could eventually weigh a quarter of a tonne.

Douglas Russell, the senior curator for birds' eggs and nests at the Natural History Museum, said: "The nests are fantastic,

there's nothing else like them in England. And by reintroducing the immense nests of storks, we are reintroducing a habitat for insects which hasn't been seen in 600 years — it will be fascinating to see what we find in there."

White storks are sometimes described as an "umbrella species", a label given to a popular, charismatic animal whose conservation results in habitats being preserved that support other less glamorous creatures.

But a study published earlier this year in the Journal of Ornithology highlighted how their nests serve as "micro-habitat biodiversity hotspots, providing numerous organisms shelter, food, and opportunities for breeding."

Laura Vaughan-Hirsch, right, who oversees the reintroduction scheme, said that she was “delighted” with how it was progressing. Here she is assisted by Becky Bowie

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It is possible, then, that the storks are not just umbrella animals but also a keystone species — an animal that other creatures, especially the insects that live in their nests, rely on.

In Poland, researchers found that areas around stork nests had more swallows, martins and swifts, which hunt insects on the wing. “The protection of white storks and their nests is important for other species, not only those directly using the nests but also for those foraging in their vicinity,” they concluded.

Work is now underway to explore the storks' nests at Knepp. The Times was given exclusive access as a team of researchers from the Natural History Museum team placed insect traps in nests, using a cherry picker platform to reach about 13 metres into to the oaks the birds had chosen. The adult birds regurgitate their prey — they mostly eat insects but may take small mammals — to provide a kind of buffet of arthropods for their young.

Having already heard the birds clatter their beaks together, the museum team would meet with another sensory experience not witnessed on these shores for centuries — the ripe, very pungent stink of a well-used stork nest.

The story of the white storks at Knepp is featured in a new exhibition at the National History Museum, Birds: Brilliant and Bizarre.