

CUMBRIAN WHITE-TAILED EAGLE PROJECT

History



What records do we have of white-tailed eagles in Britain?

White-tailed eagle bones have been found at several archaeological sites suggesting that eagles were widespread in Britain from the end of the last ice age. Some evidence is even much older, such as eagle claws found alongside remains of waterbirds, dating back to some 130,000 years ago.

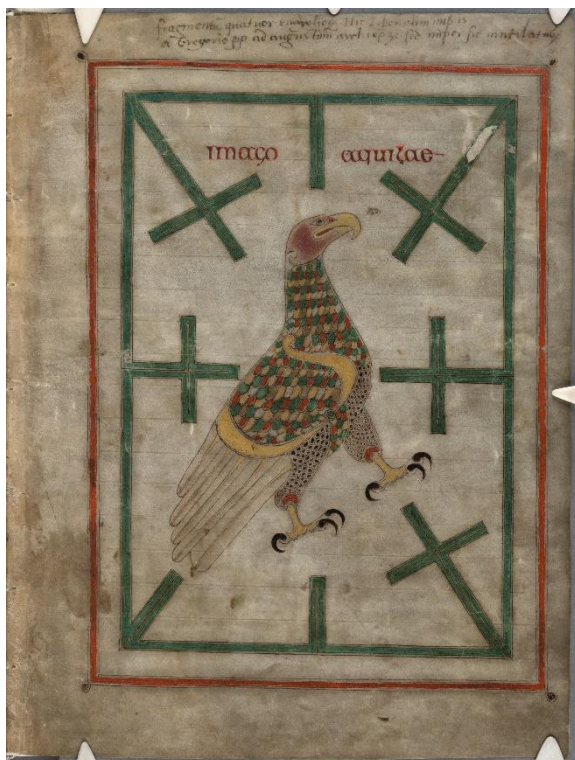


Figure 1: Drawing of an eagle in The Northumbrian Gospels (Image credit: The Parker Library, Corpus Christi College Cambridge; CCC, MS 197B, The Northumbrian Gospels, p. 245; <https://parker.stanford.edu/parker/catalog/qw038wz9710>; Creative Commons BY-NC 4.0; <https://creativecommons.org/licenses/by-nc/4.0/deed.en>).

It appears that white-tailed eagles were culturally important in Britain. Several symbol stones in Scotland were carved with eagle figures by the Picts (group of people who lived in northern Scotland in the Early Middle Ages). It is sometimes difficult to determine whether the symbol stone is based on a golden or white-tailed eagle. However, some are pictured with a fish, suggesting that they are more likely to be white-tailed eagle, as golden eagles mostly eat mammals and birds. A stone from the Knowe of Burrian in Orkney shows an intricate carving of an eagle, with an appearance more similar to a white-tailed eagle. The eagle is the symbol of St. John (a religious figure who converted individuals to the Christian faith), and often pictured with a fish in medieval gospels. The beautiful eagle illustration in the 8th century Northumbrian gospels of the Corpus Christi Collection (Figure 1), with its bare tarsi (legs), large beak, and white tail, is unmistakably a white-tailed eagle. References to these eagles can be found in several Anglo-Saxon poems.

In Cumbria, historical evidence of white-tailed eagles can be found in place names. In some cases, 'heron', 'iron', and 'arn' are thought to be derived from 'erne', the Old English word for eagle often used to refer to white-tailed eagles in particular. The word 'wallow' is also thought to be derived from 'iolair', the Gaelic for eagle.

In his book *A Vertebrate Fauna of Lakeland*, Macpherson (1892) provides references of white-tailed eagles in Cumbria. The references suggest that they nested on Wallow Crag near Haweswater, as well as in Borrowdale and Eskdale.

One study used place names to map out the former range of white-tailed and golden eagles (Evans et al., 2012; Figure 2) suggesting that white-tailed eagles were widespread across the country.

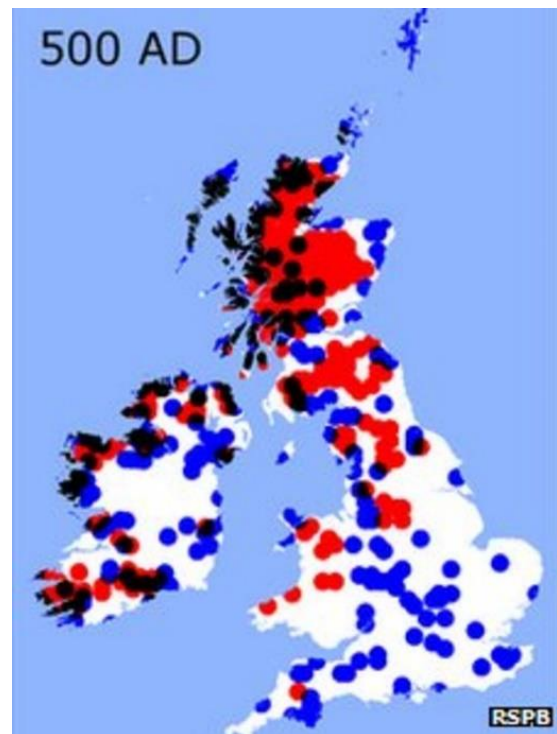


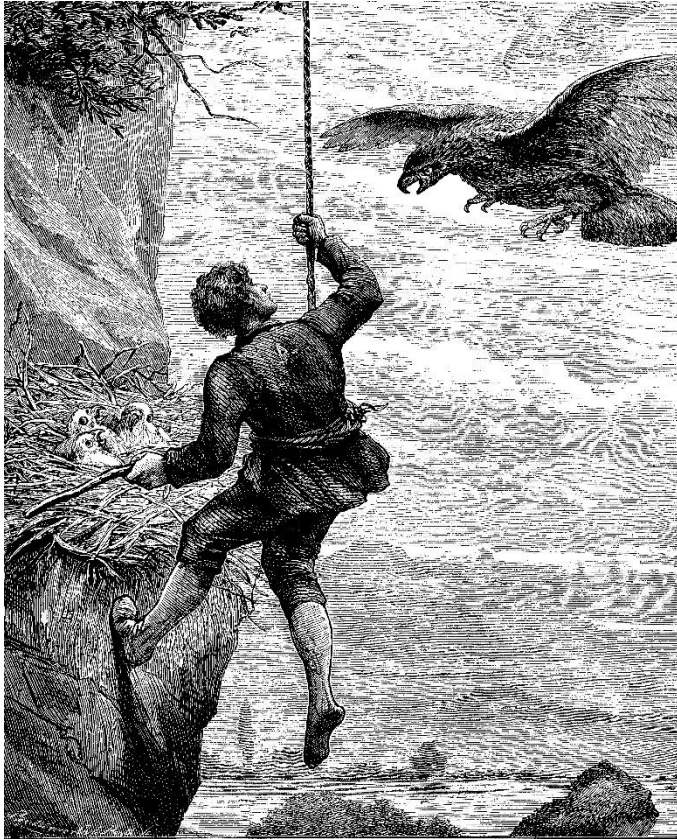
Figure 2. Suggested historical range of eagles at approximately 500 AD considering place names and documentary evidence. Red dots represent golden eagles, blue dots white-tailed eagles, and black dots indicate possible overlap of both species (Image credit: RSPB (rspb-images.com)).

Why did white-tailed eagle numbers decline?

Like many other birds, white-tailed eagles suffered from loss of places to live (habitat loss) due to changes in the landscape.

White-tailed eagles were also disturbed, harmed, and killed in the 19th and 20th century which contributed to population declines across their range. Nests were robbed of their eggs or young eaglets, which impacted the number of young reaching adulthood. Macpherson (1892) provides several references to nest robbing events in Cumbria, and suggest that persecution (the disturbing, harming, and killing) of these birds led to their absence from the county. Additionally, there are descriptions of a nest robbing at Grange in Borrowdale from the Works of Thomas Gray (Figure 3).

Across their range white-tailed eagle populations also suffered from habitat loss and persecution, and later from the use of pesticides such as dichloro-diphenyl-trichloroethane (DDT) – a manmade and toxic chemical.



"He was let down from the cliff in ropes to the shelf of the rock on which the nest was built, the people above shouting and hollowing to fright the old birds, which flew screaming round, but did not dare to attack him. He brought off the Eaglet (for there is rarely more than one) and an addle egg."

Figure 3. Description of a nest robbing at Grange in Borrowdale from the Works of Thomas Gray, vol. ii. p. 265. (Image credit: iStock.com/Cannasue)

When were these birds absent in Britain?

Before their complete absence in England, the last successful and confirmed breeding record dates back to 1780 on the Isle of Wight. The last breeding record in Britain was on the Isle of Skye in 1916, with the last white-tailed eagle in Britain shot on Shetland in 1918.

In Cumbria the last breeding attempt is thought to have taken place on Wallow Crag in 1787. There are reports of a pair seen near Ullswater in 1835, but no breeding attempt was recorded.

How are populations recovering now?

White-tailed eagles have legal protection across much of their range. These birds have also benefited from the ban of pesticides and a positive change in public opinion on birds of prey. This has allowed some populations to recover naturally, and white-tailed eagles are now listed as a Least Concern species by the International Union for the Conservation of Nature. Even though some populations are recovering, white-tailed eagles have continued to remain absent from areas

due to their low dispersal rate (when an animal moves to a different place). This is what has led to several reintroduction projects in Britain and Europe.

In England, white-tailed eagles are strictly protected under the Wildlife and Countryside Act of 1981 and are on the Amber List of UK Birds of Conservation Concern. In Scotland a breeding population was established through reintroduction, and two breeding events have now taken place in southern England following a recent reintroduction.

Disturbance, harm, deliberate killings and accidental poisonings remain a threat to many birds of prey, including white-tailed eagles, both in the United Kingdom and across their range. Modern threats to their survival also include power lines and wind turbines.

Where have they been reintroduced?



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Scotland

The first white-tailed eagle reintroduction attempts in Britain took place on Fair Isle between 1959 and 1968, led by the Nature Conservancy Council. Although ultimately unsuccessful, they allowed the people involved to learn from the experience and develop methods for future projects.

The second attempt took place on Rum, led by Scottish Natural Heritage, from 1980 in partnership with the RSPB, where 82 juveniles translocated from Norway



were released between 1975 and 1985. After a long wait, a pair finally bred in 1985, with one eaglet successfully leaving the nest.

A further 58 juveniles were later released in Wester Ross between 1993 and 1998 to support the slow expansion of the existing west coast population.

As the population remained mostly in the west, 85 juveniles were released on the east coast of Scotland between 2007 and 2012 to support their range expansion across the country. There are now over 130 breeding pairs in Scotland.

There has been some controversy around the return of white-tailed eagles to Scotland, in particular around the potential risk to livestock. However, white-tailed eagles have been successful in boosting the local economy on the west coast, especially on the Isle of Mull where tours have been organised to give visitors a chance to observe the bird.

Ireland

White-tailed eagles were completely absent in Ireland by the early 20th century. A reintroduction programme was started by the National Parks and Wildlife Service and the Golden Eagle Trust, with 100 juveniles translocated from Norway and released in Killarney National Park, County Kerry between 2007 and 2011. The first breeding event was recorded in 2012, and by 2024, 64 chicks had successfully fledged (left their nests) across the country.

Despite successful breeding events, a review found that the newly established population was vulnerable. A second phase of reintroduction was therefore started in 2020, with a further 97 Norwegian juveniles released across a number of sites as of 2024. There are now several breeding pairs across the country. The project has been working with farming communities from the start to address worries and provide support in living with these eagles. The farming community are now involved in monitoring the birds' movements and breeding attempts.

Isle of Wight

The English White-tailed Eagle Reintroduction Project is a partnership between the Roy Dennis Wildlife Foundation and Forestry England aiming to restore a breeding population of white-tailed eagles to the Isle of Wight and nearby areas. They were given a licence by Natural England to release 60 juvenile eagles at a location on the Isle of Wight. Birds were sourced from Scotland under licence from NatureScot and the releases started in 2019.

As of 2024, 37 birds have been released. Several pairs have now established territories in the south and have been showing breeding behaviours. In 2023, a pair of reintroduced birds bred successfully, and the first confirmed English white-tailed eaglet in 243 years successfully left the nest in the summer. In 2024, the same pair has successfully had two eaglets fledge.



Mainland Europe

Several reintroductions and population reinforcements have taken place in Europe.

For example, after no breeding events were recorded in almost 100 years, a small breeding population reestablished itself in the Czech Republic in the 1980s, supported by releases of captive bred birds in the 1970s and 1980s. The population was then able to live in areas across the country, but it is still suffering from persecution.

In Spain, 25 juveniles were translocated from Norway in 2021 and 2022. The project is planning further releases of 75 birds but is currently on hold. In France, Les Aigles du Léman started a programme of releases of captive bred juveniles in 2022. They plan to release up to 86 juveniles by 2030.

Why do we need to bring white-tailed eagles to Cumbria if they are already in other places in the UK?

Cumbria is a location of strategic importance for white-tailed eagle populations. Establishing a population in the county would create a stepping stone between other reintroduced populations of Ireland, Scotland and the Isle of Wight. After exploring in their first year or two, juvenile eagles tend to come back to the area where they fledged to establish a territory and breed, and usually lay only one to three eggs. This means that the birds expanding back into areas is extremely slow, and it could take decades for white-tailed eagles to live back in Cumbria.

How do we know white-tailed eagles could once again live in the county?

The landscape of Cumbria is ideal for this species with its many lakes, long coastline, and woodlands. However, a wide range of aspects needs to be considered before a translocation (moving birds from place to another) can take place.

The Cumbrian White-Tailed Eagle Project has explored the possibility of white-tailed eagles returning to Cumbria. Computer modelling work looked at whether there were areas where the bird could nest and eat, and where potential risks such as powerlines and wind turbines were. This work showed that there is plenty of suitable areas for white-tailed eagles to live in Cumbria, especially in the



southern half of the county (see Modelling report summary and Full modelling report).

We explored whether a population of white-tailed eagles could survive in Cumbria using an approach called 'population viability analysis'. It showed that when following the methods of previous projects, a translocation to Cumbria could result in a breeding eagle population (see Population Viability Analysis report).

A review of white-tailed eagle diet in Europe was carried out and we compared findings to species records for Cumbria. These indicate that there is enough food for white-tailed eagles to eat in Cumbria, with many of the key species across food groups present in the county (see diet Tiny doc and Diet report).

These results collectively support the idea that the landscape is suitable to bring the white-tailed eagle back to Cumbria, and we are now exploring whether people would like this bird back in the landscape. We would like to understand people's views on the potential return of the white-tailed eagles in Cumbria. The biggest threats to birds of prey are deliberate killings and accidental poisonings, so it is important to engage with the communities who could be sharing the beautiful Cumbrian landscape with this spectacular bird and raise awareness about the bird's biology and behaviour.

Evans, R.J., O'Toole, L. and Whitfield, D.P. (2012) 'The history of eagles in Britain and Ireland: an ecological review of placename and documentary evidence from the last 1500 years', *Bird Study*, 59(3), pp.335-349.

Macpherson, H.A. (1892) *A vertebrate fauna of Lakeland: including Cumberland and Westmorland with Lancashire north of the sands*. Edinburgh: David Douglas.