

CUMBRIAN WHITE-TAILED EAGLE PROJECT

Diet



How do white-tailed eagles feed?

White-tailed eagles are generalist carnivores, both hunting live animals and scavenging on carrion (animals that are already dead). They often use a 'sit and wait' strategy, looking over their hunting ground from a perch and waiting for the best opportunity to catch prey.

These eagles are expert fishers, although it can take them a few years of practice to develop their skills. They fish by flying low over the water and catch the fish sitting below the water surface with their talons (Figure 1).

They catch birds on the ground, in flight, or on the water. When catching birds on the water, the eagles swoop towards them and force them to dive under water making them tired and easier to catch. Injured, sick, or moulting birds can be picked up easily.



Figure 1. A white-tailed eagle fishing (Images credit: Tony – tickspics.com).



Smaller birds can also be taken in flight. These eagles rarely dive, but after catching a heavy prey on the water, they can sometimes be seen 'swimming' back to shore with their wings.

White-tailed eagles are also scavengers, providing an important service by clearing up carcasses of large animals such as sea mammals and deer, although smaller mammals such as rabbits and hares can also be taken as live prey. White-tailed eagles can get food by piracy (snatching from others), waiting for species such as otter, osprey, or even other eagles to hunt and then snatch the prey away.

The eagle's age influences its feeding behaviour. Juveniles who are not yet expert hunters rely more on carrion, and in southern England instances of piracy have been found to increase with age.

Although the birds need to find 200 to 300 grams of food per day (500 to 600 grams when rearing young), these eagles can eat up to 1 kg in one sitting.

What do white-tailed eagles eat?

White-tailed eagles eat a wide range of species of birds, fish, and mammals. There are also a few records of reptiles, amphibians, crustaceans, and molluscs in their diet. Scientists can identify prey species by collecting bones in nests and by observing eagles hunting and fishing. The Cumbrian White-Tailed Eagle Project reviewed studies of this bird's diet in Europe and found records of at least 114 bird species, 52 fish species, and 30 mammal species being consumed.

Fish and birds make the most important contribution to diet, followed by mammals (Figure 2). During the colder months when fish move to warmer deeper waters and become harder to catch, mammals are important in an eagle's diet as they are often bigger and provide more food.

Where the eagles live influences the food they eat, with those that nest in inland freshwater areas favouring fish, whilst coastal pairs may consume more birds.

Important fish species include pike and members of the carp family. In Britain and Ireland, other important species in the white-tailed eagle diet include marine species such as dogfish and mullet.

Bird species eaten by white-tailed eagles in the greatest numbers are usually waterbirds, such as coot, mallard, and geese.

Mammals eaten by these eagles include smaller species such as muskrat (a large rodent introduced to some areas of mainland Europe), hares and rabbits that can be taken as live prey, as well as larger species such as deer that are consumed as carrion. Domestic animal bones, such as lamb bones, can also be found in white-tailed eagle nests. Sheep consumption is discussed in the separate document (White-Tailed Eagles and Livestock).

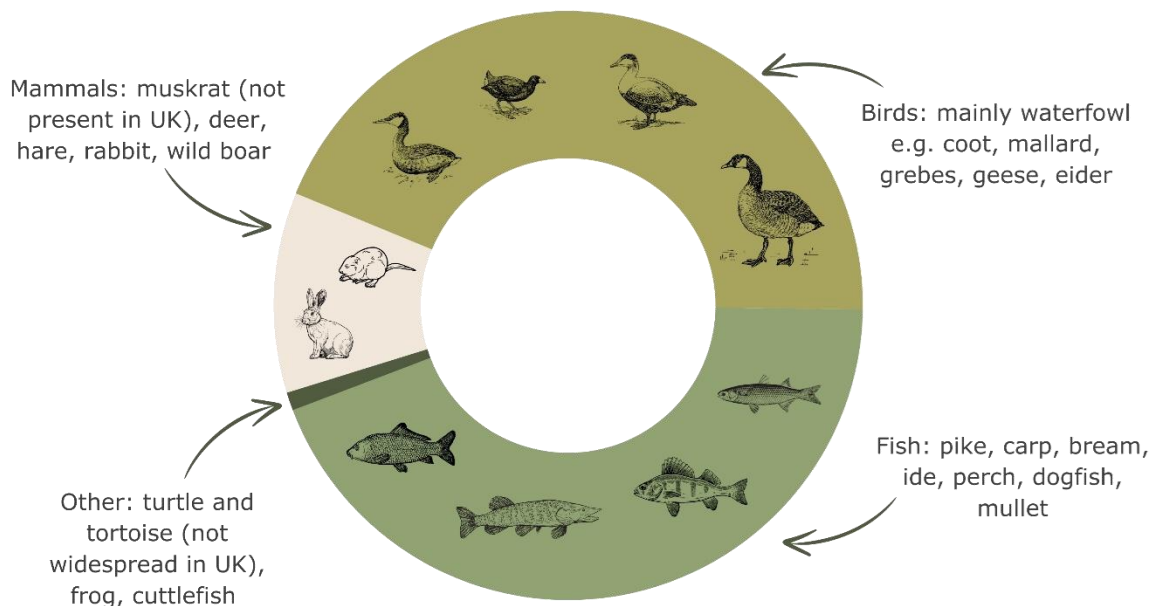


Figure 2. Species contribution to white-tailed eagle diet.

Is there enough food for white-tailed eagles in Cumbria?

The Cumbrian White-Tailed Eagle Project’s Steering Group compared findings from their diet review of white-tailed eagles to the species records for Cumbria. This work suggests that there is plenty of food for the birds to eat, with many of the key prey species present in the county.

Cumbria has approximately 180km of coastline with several large estuaries, as well as 16 lakes and many tarns, all of which provide great feeding opportunities for white-tailed eagles.

The coast and inland waterbodies attract large numbers of non-breeding and resident waterbirds. Tens of thousands of geese, ducks, waders, and gulls are recorded each year. Several key marine and freshwater fish species have also been recorded in the county. European rabbit and brown hare are both widespread across Cumbria and likely to be consumed as live prey, whereas deer would be consumed as carrion.