

# NATURE MATTERS

## Owl service



Picture by Dave Carre (31924074)

With its distinctive, white, heart-shaped face, the barn owl is an easily recognisable and much-loved bird, but Guernsey's population is in decline. **Andy Brown** speaks to Julie Davis, of La Societe Guernesaise's ornithology section, to find out more about these beautiful birds

**B**ARN OWLS are one of the most beloved birds in the British Isles, but their nocturnal nature and declining numbers mean that many people have never seen one in the wild.

'They are an iconic bird – the silent hunters of the night,' said Julie Davis, who led the team that conducted La Societe Guernesaise's recent study. 'Barn owls have long been in our folklore. They are beautiful and mysterious.'

The barn owl study was seen as vital as they are what is known as an 'indicator species'.

'They are a predator at the top of the food chain. If they are thriving, the chain below is thriving. They are an indication of the true health of a habitat,' explained Julie.

'Unfortunately, our study indicates that the population is in decline.'

In the wild, barn owls normally live between three or four years, although approximately 70% of owlets die in their first year.

'Only one in three survives the winter. Fledglings just don't have the skills to survive. Once they disperse from the nest they will stay in an area and learn their environment, but that takes time.' Their main prey on the island is the Guernsey vole, a subspecies of vole that is 10% bigger than its UK counterpart, and which bizarrely is only found here and on the island of Orkney off Scotland.

Estimates put Guernsey's vole population at 150,000, which should easily be enough to support the island's barn owl population, which is thought to fluctuate at around 100.



Julie Davis

**B**arn owls were once considered to be the most widely-distributed land bird in the world, being present on every continent except Antarctica. However, studies into their DNA have split into several distinct species and subspecies.

Our barn owl, *Tyto alba*, is restricted to western and southern Europe and north Africa.

Other birds of prey, such as eagles and buzzards, may have territories covering tens of square miles.

The territories are defended, in most cases, by the male birds singing to show their ownership of the territory and their willingness to defend it.

Owls by contrast are not territorial. They can have wide ranges of up to five miles but these overlap.

Locally, barn owls have been recorded pairing and inspecting nest boxes as early as January.

In a good year they can raise three or four chicks, but in bad years this will only be one or two.

Chicks hatch out in sequence, but if food is in short supply the youngest will be vulnerable and may even be eaten by an older sibling.

'Barn owls are very susceptible to bad weather,' said Julie.

'This means they can decline quickly if conditions are poor but also recover their numbers quite rapidly in good years.'

'When it comes to hunting, they don't like wet weather, and they don't like it

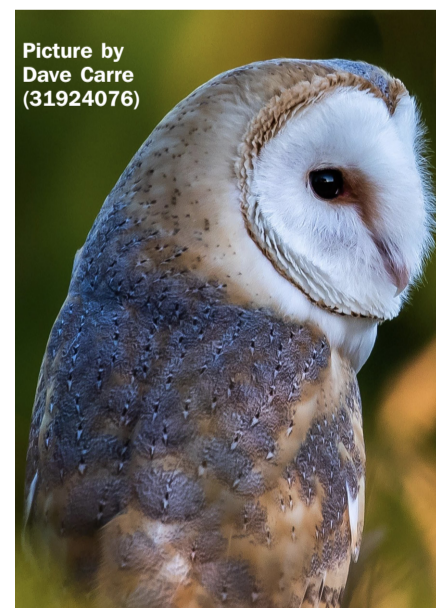
**'They are a predator at the top of the food chain. If they are thriving, the chain below is thriving. They are an indication of the true health of a habitat. Unfortunately, our study indicates that the population is in decline'**

windy, which can affect their hearing.'

Stealth hunters, barn owls' feathers are fringed to be silent in flight, but this adaptation means they are not waterproof.

They rely on their incredible hearing to catch prey, with one of their ears placed slightly higher than the other.

This asymmetry means that the sound arrives at the ear inclined towards the noise first, enabling the owl to pinpoint sounds from all directions.



Picture by Dave Carre (31924076)

The owls' other secret is the heart-shaped disk of feathers surrounding its face.

This acts like a parabolic antenna, capturing even the slightest rustling of the owl's prey, with the stiff feathers at the edge of the disk amplifying the sound, so they can hear sounds 10 times softer than those audible to humans. The effects of climate change on the island's weather patterns could affect our barn owls' chances of sustaining a viable population.

'In Guernsey we are towards the northern part of the barn owls' range, and the most common cause of death is starvation.'

'Global warming isn't just about temperature, it's about unpredictability of the climate. Without habitat protection, they could eventually become extinct in Guernsey.'

Barn owl numbers can recover and the evidence from the UK is that with support and funding, this can happen quite quickly.

In 1987, there were thought to be only 4,500 breeding pairs in the UK, a decline of 70% since 1932.

Now numbers have recovered to an estimated 12,000 breeding pairs in the UK, with up to 80% of them now nesting in man-made boxes.

Julie points to some of the legal protection the birds enjoy in the UK that they lack in Guernsey as reason for their recovery.

'For example, in the UK if barn owls are using a barn where planning permission is sought to convert it to a dwelling, a suitable nesting place has to be provided such as an owl box or a purpose-built section under the roof with an entrance,' she said.

'We're not seeking artificially to increase the barn owl population – in nature, it's a balance between predator and prey – but want to secure its future in the island.'

'The decline in numbers is a warning.'

◆ **Anyone with an interest in the island's bird life and who would like to learn more can join La Societe Guernesaise and its ornithology section. La Societe is dedicated to Guernsey's natural world and heritage. Annual membership ranges from £5 for a student to £34 for a family. La Societe has nine different sections and individuals can join as many as they like, some for free and some with a small additional charge. Membership can also be purchased as a gift. For further details, visit [www.societe.org.gg](http://www.societe.org.gg).**

