

# A prickly problem

The hedgehog is the gardener's friend, an icon of the British countryside and regularly voted one of our best-loved animals, so why is it disappearing? **HUGH WARWICK** investigates the secret lives of our spiny neighbours to find out what's happening.

## THE EXPERT

**HUGH WARWICK** has counted hedgehogs in Orkney, radio-tracked them around Devon and helped to rescue them from the cull in the Outer Hebrides. They have become an obsession for him.



Hedgehogs have poor eyesight but an excellent sense of smell for tracking prey – this garden snail is about to get a very nasty surprise.

A NIGHT IN THE LIFE OF...  
**AN URBAN HEDGEHOG**



Paul Hobson/FLPA

**STEPPING OUT**

After spending the day sleeping in the base of a dense shrub in a herbaceous border, a hedgehog sets out across the lawn at dusk, sniffing for worms.



Joe Blossom/NHPA

**UNDER SIEGE**

Its activities soon attract the attentions of the family dog. The hedgehog curls into a ball and waits until the dog gets bored and leaves.



Niall Beavrie/naturepl.com

**MODERN PERILS**

In town, the hedgehog has to brave several roads on its nightly forays. This one narrowly escapes the wheels of a passing car.



Dave Bevan

**EASY PICKINGS**

Beyond the road is a garden whose owners have left out a bowl of dogfood. After eating its fill, the hog looks for somewhere to rest up.



Wim Weenink/Foto Natura/FLPA

Born in a specially constructed nest, young hedgehogs are ready to explore the wider world at three to four weeks old. The mother leads her offspring in a procession as they learn what to eat and what to avoid. A week or two later, the youngsters set off on their own.

A NIGHT IN THE LIFE OF...  
**A RURAL HEDGEHOG**



David T Greweck/FLPA

**HOG FROM THE HEDGE**

Emerging from a hole beneath a tree stump, a hedgehog begins a nightly patrol along the edge of nearby fields in search of morsels.



Elizabeth Bomford/ardea.com

**OUTFOXING THE FOX**

With fewer hedgerows these days, there is less cover for all animals, so encounters are common. Luckily, this fox is only a cub.



Christer Andreassen/Alamy

**A PRICKLY MOMENT**

The next encounter is more favourable. Our male discovers a female ready to mate. He relies on an extra-long penis to navigate beneath her spiny coat.



Dave Bevan

**TUG OF WORM**

Beyond the road is a pasture where our hedgehog surprises a large earthworm. But it's a real battle to drag the worm from its burrow.

**IS SOMETHING STIRRING** in your herbaceous border? Or snuffling through last year's desiccated leaves? Though the March evenings are still long and dark, spring is flowing north across Britain, teasing creatures out from hibernation.

If you are lucky enough to have a large garden, or find yourself walking down a country lane one evening, perhaps past the edge of a wood, take a few moments to stand in silence and listen. You might be able to hear the telltale snuffling of a hedgehog, freshly emerged from its winter sleep, foraging hungrily after its long winter fast. You may even glimpse its moist nose being propelled past your begonias by its amusingly short legs, and scuttling gait. If you feel thrilled by the sight of this charming visitor, you won't be alone.

The hedgehog has become something of an icon. When the Environment Agency desired a new image last year, it called for votes on a range of species and habitats. The humble hedgehog, our only spiny mammal, beat off competition from the far more charismatic otter and stalwart badger to take the top spot.

Given our obvious affection for the hog, it seems inconceivable that the species could be under threat. After all, its iconic status comes, in part, from the fact that it is a very everyday sort of creature. It is an integral part of our culture (think Mrs Tiggywinkle) and instantly recognisable, even though it's not frequently seen. In fact, the hedgehog is so familiar that we often

fail to recognise that it shares many of our own characteristics – a bit clumsy, occasionally grumpy and always keen on a good supper.

But the results of the Mammals on Roads survey, published in 2005, were shocking. The study, by the People's Trust for Endangered Species (PTES), examined annual roadkill statistics and compared them over time. The figures revealed that, between 2001 and 2005, hedgehog deaths had fallen nationally by 20 per

**Take a few moments to stop and listen. You might hear the telltale snuffles of a hedgehog.**

cent. In rural areas, roadkill had decreased yearly by 7.5 per cent, and in some regions, deaths by car had dropped by a terrifying 50 per cent in 10 years. Though this may sound like good news, it's not. Hedgehogs haven't got better at dodging speeding traffic – less roadkill means less hedgehogs generally.

These declines are deeply worrying. Is this the mammalian equivalent of *Silent Spring*, noted by Rachel Carson, which alerted the world to the danger pesticides posed to bird populations? Could our most cherished animal be facing extinction?

To answer these questions and discover more about the secret life of the hedgehog, the PTES and the British Hedgehog Preservation Society launched HogWatch in 2007 – a survey that recorded sightings by members of the public – capitalising on the fact that, for most of us, seeing a hedgehog is a memorable event. Many of us help hedgehogs to cross the road, and we might even wake up the kids if we spotted one trundling across the lawn.

**OUR SURVEY SAID...**

The HogWatch results were fascinating. Nearly 20,000 people took part, including readers of *BBC Wildlife* and large numbers of farmers, allowing scientists to build a detailed distribution map and begin to unravel the mystery of the disappearing hedgehog.

One of the biggest surprises was a distinct split down the spine of the country, with hedgehogs most likely to be seen in the east. This was not only unexpected but also rather disturbing, as the rate of hedgehog loss has been most pronounced in this half of the UK. Perhaps the only reason more hedgehogs have been spotted in the east is that these populations have yet to undergo the severe decline suffered by their western brethren.

Even worse, over half of the HogWatch participants had seen fewer hedgehogs recently.

This correlates with anecdotal evidence from hedgehog carers across the country, nearly all of whom have noted a decrease in the number of hedgehogs brought to them.

In Britain, there are two sorts of hedgehog: the rural and the urban/suburban. HogWatch revealed that both populations are declining, and experts are now attempting to assess the causes.

When it comes to rural hedgehogs, researchers believe the problem may lie in the size and type of fields, since it appears that the larger the fields, the smaller the hedgehog population. This makes perfect sense when you consider hedgehog behaviour: these creatures are not called 'hedgehogs' for nothing – few animals are as keen on hogging hedges as they are. Though their spines offer good protective armour, hedgehogs are slow moving and therefore still vulnerable to predators such as badgers and the occasional tawny owl, so they tend to stay close to the cover of field boundaries.

This behaviour is especially true for females with young. In spring, they build nests on the margins of fields before giving birth to four or five young, which they need to visit regularly. When foraging, she will never stray far from the nest.

**DID YOU KNOW?**

Hedgehogs will sometimes anoint their back and flanks with frothy saliva so that it looks as if it is covered in bubblebath. Experts are not sure why they do this.

A study in the Netherlands showed that hedgehogs spend nearly 60 per cent of their time either in or within five metres of hedges and woodland edges. And 80 per cent of their all-important day-nests, where they curl up to sleep, hidden from beady eyes and inquisitive noses, were located in hedges and woodlands.

Hedges are particularly important as they mimic the woodland edge habitat that is the hog's natural home. So it is tragic that half of the UK's remaining hedges have been destroyed since 1950. Though many farms now have environmental stewardship schemes in place to encourage care and replacement, hedges are still disappearing through neglect and poor management, leaving the depressing view of lines of straggly trees strung together with lengths of wire fencing. Useless for hedgehogs.

Loss of hedges fragments hedgehog habitat in the same way as developments and roads, creating islands of isolated biodiverse habitat. Such islands are very vulnerable. It's hogs may find it difficult or impossible to cross the barriers between them, so if a resident hedgehog population becomes denuded through predation or disease, there is no way for immigrants to top it up.

Additionally, it is worth remembering that the UK has seen a decline in farmland birds, in particular species that feed on the macro-invertebrates decimated by pesticides. It would not be surprising if rural hedgehogs were also suffering from the same loss of prey.

#### WHAT ABOUT BADGERS?

But could badgers also be to blame? Many people believe there is a direct link between the presence of badgers and the disappearance of hedgehogs. Independently, the British Hedgehog Preservation Society has received a number of letters from the farming lobby, trying to muster support for a resumption of badger culling in an attempt to stop the spread of bovine tuberculosis (bTB).

I know painfully well that badgers eat hedgehogs. The very first article I wrote for *BBC Wildlife* in the early 1990s covered some individuals I was radio-tracking in Devon. All was going well until disaster struck – a badger ate three of my hogs. I even came across Little Willy in the process of being consumed. It was a sad time for me (and a reminder of why naming your study subjects is not a good idea).

Yet badgers and hedgehogs have been living side to side for millions of years – indeed, some of the areas that have experienced the most dramatic decreases in hedgehog populations are those with the fewest badgers. Moreover, in some parts of the country, the two species are cohabiting without any decline in numbers, so whether there is a direct link between badgers and the hedgehog's demise remains unclear.

One explanation for the badger theory is that the way we have altered our environment has made it harder for hedgehogs to avoid these mustelids. Both species use hedges as rural highways, and fewer hedges means a greater chance of a stand-off. And, bearing in

#### DID YOU KNOW?

A hedgehog defends itself by rolling up into a ball. It does this by contracting special muscles under the spiny skin. The head, legs and tail are forced inside the contracting ball.

mind that the badger and hedgehog tend to compete for the same prey (worms, beetles and other invertebrates), any pressure on the food supply may cause their relationship to change from competitors to the more sinister predator and prey.

There is also an interesting link between the geographical spread of bTB and hedgehog distribution. The transmission of TB between cattle and badgers appears to be reduced in eco-friendly farms with smaller fields and more hedges – the same habitats that favour hedgehogs.

#### TROUBLE IN THE TOWNS

But what is diminishing the urban hog? The answer is, predictably, linked to loss of habitat to development and an increase in barriers to movement. Every garden that is built on, every allotment and playing field that is destroyed removes hedgehog habitat. The recent house-price boom has encouraged people to develop their land, and with our ever-busier lives,

### We all need a little bit of wild in our lives, and the hedgehog is the perfect creature to give it to us.

many of us have been tempted to opt for low-maintenance decking and patios instead of grass and shrubs – a disaster for wildlife. With all these changes, urban hedgehogs are left with fewer places to forage and their regular routes blocked by unclimbable fences, new and busier roads and denser housing.

So does the future spell doom and gloom for the hedgehog? By no means. This is actually a great opportunity. We have an iconic species that we simply must do our best to save. It is a creature for which we have near unanimity of affection. But to help the hog, we have to do more than rely on experts to 'conserve' it, like some sort of spiky jam. We all need to protect and encourage the habitat that the hedgehog requires to thrive, and anyone with a garden can help (*see box, left*).

We all need a little bit of wild in our lives, and the hedgehog is the perfect creature to give it to us. By actively helping this much-loved animal, we can also help ourselves.

#### FIND OUT MORE

For more details of the HogWatch survey, visit [www.hogwatch.org.uk](http://www.hogwatch.org.uk)

#### ON THE FORUM

If you have any hedgehog stories, observations or encounters to share, visit our forum at [www.bbcwildlifemagazine.com](http://www.bbcwildlifemagazine.com)

## HOW TO HELP HEDGEHOGS

Here are some tips for making your garden more hedgehog-friendly

- » **DON'T BE TOO TIDY** Leave undisturbed areas where hedgehogs can forage and shelter.
- » **CREATE A COMPOST HEAP** Hedgehogs love the warmth and security – and food.
- » **PROVIDE SHELTER** Simply lean a piece of wood against a wall or build a hibernation box.
- » **AVOID PESTICIDES AND CHEMICALS** These eliminate key prey species for hedgehogs.
- » **TAKE CARE** Watch out for nesting hedgehogs when using lawnmowers and strimmers.

- » **HOW TO SEE A HEDGEHOG** You don't need a garden to see a hedgehog – just a bit of patience and the ability to sit quietly and listen.
- » **LOCATE SUITABLE HABITAT** Once you've made your garden suitably hedgehog-friendly, sit out on a warm evening, with a glass of something nice, and wait. Otherwise, find a junction of hedges on a small farm or a field on the edge of a deciduous woodland. Sit quietly and wait.
- » **SHUT YOUR EYES AND LISTEN** Hedgehogs rely mainly on smell to locate prey, and make a highly distinctive snuffling noise when active.
- » **OBSERVE BEHAVIOUR** If you are out in May and June, you might get to see or hear one of the wonders of British wildlife – hedgehog courtship. The male and female shuffle around in circles, snorting explosively, until the female finally relents and allows the male to mate with her.

#### FIND OUT MORE

British Hedgehog Preservation Society: [www.britishhedgehogs.org.uk](http://www.britishhedgehogs.org.uk)

A hedgehog box, snugly hidden in a log pile.

Every garden that is built on, every allotment or playing field that is lost removes hedgehog habitat.

During the day, a hedgehog will find a temporary nest – perhaps deep in the leaf litter in a neglected flowerbed.

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