<u>Document A</u> is an article from the online news and magazine website The Conversation https://theconversation.com/how-to-stop-the-humble-hedgehog-disappearing-from-british-gardens-and-countryside-forever-89432

How to stop the humble hedgehog disappearing from British gardens and countryside forever

May 18, 2020, Daniel Allen, Animal Geographer, Keele University



Where have all the hedgehogs gone? Shutterstock

When the humble hedgehog was crowned "Britain's national species" in a BBC Wildlife Magazine poll and "Britain's favourite mammal" in a Royal Society of Biology poll, no doubt, sentimentalised memories of Beatrix Potter's The Tale of Mrs Tiggy-Winkle, played a role in swaying public opinion.

- 5 Ecologist and author Hugh Warwick <u>explained how</u>: "Beatrix Potter managed to sprinkle some magic over the hedgehog, transforming it into the irresistible companion of our gardens."
 - But despite their popularity, hedgehogs are now something of a rare sight in British gardens and are in fact <u>disappearing at the same rate as tigers worldwide</u>. Rural hedgehogs in the
- 10 UK have halved in number since 2000, while urban hedgehogs have declined by a third. More widely, UK hedgehog numbers have dropped from an estimated 30m in the 1950s to under a million today.
 - So, what's to blame? We are. Well, the changing lifestyles and tastes of people, to be precise. Farming methods have changed dramatically over recent years becoming increasingly
- intensive. This has led to the removal of many hedges, an important habitat for the British hedgehog. It has also had negative implications on their main diet of worms, beetles, slugs, caterpillars, earwigs and millipedes.
 - It is also a fact that badgers eat hedgehogs and also compete with them for food.

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- The <u>estimated badger population</u> in England and Wales has risen from 250,000 in the 1980s to 485,000 in 2017 and various <u>studies</u> have shown the presence of <u>badgers</u> can have a negative impact on <u>hedgehog density</u>.
 - The authors of the study concluded: "future work must...focus on identifying the exact biological mechanism(s) by which badgers negatively impact hedgehogs, and how these impacts can be managed effectively to promote the co-existence of these species".
- 25 The country's roads are also busier. <u>Hedgehog road deaths</u> are estimated to exceed 100,000 a year in Britain. Road networks also cut through habitats leaving hedgehogs isolated, while our gardens are increasingly becoming more humanised. Lawns have been turned into tarmac for cars, foliage has been torn out, decking added, garden borders peppered with slug

pellets, and hedges replaced by impenetrable fences and walls. All of which mean that hedgehogs are not only losing their habitats, but also their chances of survival.

Hedgehog friendly gardens

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The plight is such that the <u>British Hedgehog Preservation Society</u> and <u>People's Trust for Endangered Species</u> launched <u>Hedgehog Street</u> in 2011 to encourage people to champion the species and its habitat.



Hedgehog feeding station. British Hedgehog Preservation Society Facebook



Hedgehog highways. <u>Hedgehog Street/www.hedgehogstreet.org</u>

- At the RHS Hampton Court Palace Flower Show in 2014, designer Tracy
 Foster made Hedgehog Street a reality, creating a summer garden to demonstrate "how neighbours can work together to help hedgehogs by providing routes through garden boundaries". Sharing slogans such as "no one garden is enough" and "make a hole, make a difference", the hedgehog haven won People's Choice for Best Small Garden and the coveted
 RHS Gold medal. The first permanent Hedgehog Street garden was unveiled at RHS Harlow Carr, in North Yorkshire in April 2017.
 - To make your garden a haven for hedgehogs doesn't take a lot. Log piles, compost heaps, leaf piles, overgrown corners, wildflower patches, all help. As do gently sloping ponds, feeding stations, and specially made hedgehog houses.
- But as "no single garden can offer everything they need", make "holes for hogs" a community thing. Connect with your neighbours and think of your garden as a hedgehog highway square holes in fences and walls 13cm wide to be exact allow for their safe passage. These changes can be made straight away, but be careful not to disturb hidden hedgehogs, as they hibernate until spring.
- As well as ensuring there is hedgehog access in your garden, there are a wide range of small steps you can take to help save hedgehog lives. Checking compost heaps before digging with a fork, and checking long grass before using strimmers or mowers will stop horrific injuries. Moving piles of rubbish to a new site before burning and checking bonfires before lighting, will prevent deaths by burning.
- Keeping netting at a safe height will avoid tangling and starvation. Stopping (or reducing) the use of pesticides and slug pellets will stop (or reduce) poisoning. Providing an easy route out of ponds and pools will prevent drowning. And, responsibly disposing of litter will reduce hedgehogs getting trapped in tins, rubber bands and McFlurry lids.
- All of this is important, because the humble hedgehog is more fragile than its prickly exterior suggests. And if we want to continue experiencing their rustling and shuffling in the undergrowth, snuffles and snorts in the hedgerows, and foraging on the lawn before sunset, it is our responsibility to save them.

Document B is an article from the Guardian newspaper, New Zealand https://www.theguardian.com/world/2021/may/08/killing-machines-humble-british-hedgehog-causes-havoc-in-new-zealand

Killing machines: humble British hedgehog causes havoc in New Zealand



It has been proposed to ship New Zealand's problem hedgehogs back to the UK Photograph: Jill Ferry/Getty Images

Brought over by British settlers to make themselves feel more at home, the diminutive mammals are thriving - which spells doom for native wildlife Tess McClure in Christchurch @tessairini 7 May 2021

Consider the hedgehog. Tiny, rotund, bright-eyed and snuffling, they are <u>shampooed for internet videos</u>, fed saucers of milk by children, and have been immortalised by Beatrix Potter's Mrs Tiggy Winkle. Of all the nocturnal mammals one may encounter poking through the backyard at night, they are surely the most beloved.

But in <u>New Zealand</u>, these small, trundling, spiky creatures are killing machines. New Zealand is a hedgehog paradise. In Europe they are hunted by pine martens, foxes and badgers. New Zealand's hedgehogs have few predators. They meander blissfully through forests and gardens, hoovering up an astonishing number of native creatures.

With the execution of a few local bats. New Zealand has no native land based mammals.

With the exception of a few local bats, New Zealand has no native land-based mammals. Its bird population adapted to this state of affairs – some, like the Kiwi, are flightless, or nest on the ground. When stoats, cats, possums and rats were introduced, they wreaked havoc:

crunching down rare insects, killing fresh-hatched chicks, and slurping the eggs of groundnesting birds.

Hedgehogs are also key culprits. "It's increasingly coming to light how much damage they can do," says Nick Foster, a PhD candidate at the University of Otago who is researching hedgehogs. A single, dedicated hedgehog will consume numerous native lizards, bird eggs, and wetā — a kind of large flightless cricket found only in New Zealand. One study found 283 wetā legs in a single hedgehog stomach. "That means in a 24-hour period this hedgehog has guzzled up 60 or so animals," Foster says. "It's a banquet."

To understand the movements of hedgehogs, Foster catches and GPS-tags them. His mission sees him out in the bush at night, equipped with military-grade thermal-imaging headsets.

"You're chasing these 600-gram animals," he says. "Walking around at night with these thermal eyepieces – it seems like overkill." The GPS collars revealed hedgehogs roaming further afield than most would imagine: one was found 2,000 metres up a mountain.

'The Beatrix Potter effect'

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The mission to try to drive hedgehogs from protected habitats is seen as critical in New Zealand. The country is <u>running an ambitious campaign to eradicate</u> introduced predators by

2050, using a mixture of trapping, hunting, and poison. Foster works on Te Manahuna Aoraki, a conservation project that hopes to render 310,000 hectares predator-free, taking advantage of surrounding mountains and natural barriers to create a kind of "island" inland. New Zealand succeeded at eradicating predators on some offshore islands – but doing so on the mainland is much harder.

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A young hedgehog plays possum after being disturbed in the garden. Photograph: Peter Righteous/Alamy Adding to the challenge is the PR difficulty of the task. Possums, rats and stoats, with their bared teeth and less-flattering visages, are broadly accepted by the public as nefarious invaders in need of eradication. But hedgehogs are – unfortunately – cute.

Foster says there is "a bit of a psychological barrier" when it comes to hedgehog eradication – a problem he says some researchers dubbed "the Beatrix Potter effect".

They have long held a special place in the hearts of Pākehā New Zealanders, the ethnic group descended from European immigrants and colonists. Hedgehogs were <u>introduced very deliberately</u>, to remind settlers of the gardens of home. As imports ramped up, people began to lose track of their spiky charges – several escaped from a pigeon loft in Christchurch in the 1890s. They went forth, and multiplied. By 1916, <u>historians write</u>, the population in the wild was "extraordinarily abundant".

Today, there aren't clear estimates of just how large hedgehog populations have grown, but there are more in New Zealand than in Britain. The best estimate is around two to four hedgehogs a hectare, eight in optimum conditions. "Think of a big number and it's probably bigger than that," says Prof Philip Seddon, director of the Wildlife Management program at University of Otago.

"It has been proposed to ship them all back to the UK," says Foster. "European hedgehogs aren't doing so well in Europe. Still in good numbers, but they are declining."

It's a nice thought, I tell him — a kind of floating metropolis of snuffling, spiked mammals, returning just as they came, on a British ship. More palatable than mass killing. But Foster quickly dampens this line of inquiry. It is "not a feasible idea in terms of biosecurity, logistics or cost," he says.

The scientists express some regret for the hapless hedgehog: it is, after all, not their fault that they ended up here, thrived, and now pose such a threat. They stress that eradication should be done by appropriate, humane traps, and in a targeted, strategic manner, rather than via haphazard attempts to squash them as roadkill.

"I don't hate hedgehogs" Foster says. "They're interesting, smart, charismatic creatures ... No one wants to see a hedgehog suffer."

"We're not just trying to kill things. We're trying to make things better for the species around us," Seddon says. "We have a duty of care to the things that *should* be in these places." Eradicating hedgehogs from an area is actually a more ethical proposition than constant population control, Foster says, which requires killing each generation over again. "You do it once and you do it right, is the best outcome we can hope for," he says. "If you remove all the hedgehogs from an area, the killing stops."