

PRESS RELEASE

For immediate release

New study reveals the importance of habitat connectivity in securing hedgehog survival

A study commissioned by the People's Trust for Endangered Species (PTES), and the British Hedgehog Preservation Society (BHPS) investigating the minimal viable population figures of hedgehogs in rural and urban habitats has revealed the importance of habitat connectivity as a key factor in stabilising the decrease in numbers.

Dr. Tom Moorhouse from Oxford University's Wildlife Conservation Research Unit (WildCRU) led the research. He explains, "A minimal viable population or MVP is the number of individual animals required to make a self-sustaining population. Numbers are dependent on a range of variables including mortality rate, litter sizes, predation, food abundance, weather conditions, type and quality of habitats. In essence, hedgehog populations in habitats that vary a lot in these factors need to be larger than in habitats that provide more favourable, stable, conditions."

Hedgehogs in rural habitats are likely to experience relatively high predation risk, and substantial fluctuations in temperature, breeding rates and food supply. In such habitats the MVP may be an estimated 120-250 individuals, which at typical hedgehog densities would require 3.8 - 57km² of connected habitat.

By contrast urban areas (e.g. playing fields or gardens) often provide habitats where temperatures and food supply are relatively high and constant, and where predation risk is low. In such stable habitats the estimated hedgehog MVP was between 32-60 individuals, requiring a minimum of 0.9 - 2.4km² of connected habitat.

The study confirms the importance of habitat connectivity (continuous, connected habitat) in urban landscapes in ensuring the survival of localised populations of hedgehogs. Habitat fragmentation for hedgehogs occurs from obstacles such as garden fencing, buildings and highways which can severely damage accessibility to areas of vegetation, food, potential nest sites and mates - all of which harm their ability to form a self-sustaining stable population. Dr Tom Moorhouse confirms, "The recommendations made from the study are useful in highlighting that hedgehogs are likely to need larger areas of habitat than we suspected, and underlines the importance of connecting gardens in urban areas." In other words, 0.9 - 2.4km² of gardens can only support a viable population if the hedgehogs can get into them!

Hedgehog numbers have been in rapid decline for more than a decade in Britain and studies such as this are vital in planning conservation efforts. Henry Johnson, Hedgehog Officer of PTES says, "We know that hedgehogs can roam an average of 2km each night looking for food, temporary shelter and mates. With this new information on the requirements for viable populations of hedgehogs it is clearly more important than ever that we try and avoid fragmentation in their habitats."

Professor David Macdonald, Director of the WildCRU emphasised “This is a trail-blazing example of how detailed research provides evidence that could change the way we live with nature. In the WildCRU we often say it’s much easier to be interesting than to be useful, but with our hedgehog project we’ve scored the double: from prickles to practicality!” He added, “NIMBYISM famously leads to double standards in people’s dealings with nature, but in this case, we really do want hedgehogs in our back yard!”

To help counteract the decline in hedgehog numbers PTES and BHPS launched Hedgehog Street, an online hub of information, advice and ways for people to get involved in preserving the species. Hedgehog Street now boasts almost 29,000 Hedgehog Champions supporting hedgehogs across the UK. Central to the campaign is the importance of linking up urban gardens to provide larger areas for hedgehogs to roam in. Fay Vass, CEO of BHPS explains, “A gap of just 13cm² will be sufficient to allow hedgehogs passage. This can easily be achieved by removing a brick from a garden wall, digging a channel under the fence or cutting a small hole. This will allow hedgehogs to make the most of the gardens in your street and cause minimal disruption to you and your neighbours.”

Information on how to make your garden hedgehog-friendly is available at the Hedgehog Street website, with details of how to become a Hedgehog Champion and a helpful A-Z guide of tips for helping hedgehogs at this time of year. Visit www.hedgehogstreet.org

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MEDIA CONTACTS

For further information, images to arrange interviews contact: Jane Bevan or Susannah Penn at Firebird PR on 01235 835297 / 07977 459547 or via email to sp@firebirdpr.co.uk

NOTES TO EDITORS

- Visit www.hedgehogstreet.org for more information on making your garden hedgehog-friendly.
- Hedgehog sightings are recorded through several annual wildlife surveys and an independent study - *The State of Britain’s Hedgehogs* - was commissioned by PTES and BHPS from the British Trust for Ornithology (BTO) to compare the results of data gathered from these surveys over the last 15 years. This review, published in 2011, established clear scientific evidence of the dramatic decline in hedgehog populations across the UK.
- The reasons for the decline in UK hedgehog numbers are complex, but are thought to be associated with the loss of hedgerows and permanent grasslands; the intensification of agriculture and larger field sizes; and the use of pesticides which reduce the amount of prey available. While urban and suburban areas have become increasingly important for hedgehog survival, with gardens in particular recording the highest average number of wild mammals among typically urban sites, the move towards tidy, sterile gardens has also contributed to their demise.
- PTES joined with the British Hedgehog Preservation Society to launch Hedgehog Street in 2011, an initiative encouraging members of the public to create and link hedgehog-friendly gardens. Since then, more than 28,000 volunteers have registered to become Hedgehog Champions.
- PTES and BHPS are also funding several research projects looking into the causes of hedgehog decline and trialling more accurate monitoring methods.
- In January 2012, PTES and BHPS launched a hibernation survey, with members of the public reporting sightings of active hedgehogs over a seven month period. The survey is being repeated again this year to see whether regional differences, first detected through research undertaken 40 years ago still hold true, and if changing weather patterns are playing a significant role in behavioural change.
- PTES is a UK conservation charity created in 1977 to ensure a future for endangered species throughout the world. Working to protect some of our most threatened wildlife species and habitats, it provides practical conservation support through funding research and internships; providing grant-aid for world-wide and native mammals species’ conservation; supporting

education, training and outreach programmes; and driving public participation via wildlife monitoring surveys, publications, campaigns and events. Priority species and habitats include the hazel dormouse, hedgehogs, beavers, noble chafer and stag beetles and traditional orchards and native woodlands. www.ptes.org

- BHPS is a UK charity founded in 1982 dedicated to helping & protecting hedgehogs native to the UK. They run a helpline offering advice on caring for & encouraging hedgehogs in the wild and in gardens. They aim to educate the public on how best to help hedgehogs and fund research into the behavioural habits of hedgehogs to ascertain the best methods of assisting their survival. www.britishhedgehogs.org.uk