

UK wild newt species free from flesh-eating fungus for now

March 12 2019



One of the UK wild newt species that could be impacted by the spread of Bsal into wild populations. Credit: Andy Harmer

The UK's wild newt populations seem to be free from a flesh-eating

lethal fungus known to be prevalent in privately-owned amphibians across Western Europe, a nationwide investigation has found.

Scientists from international conservation charity ZSL and its research partners, are now urging private [amphibian](#) owners to enforce strict biosecurity measures to protect the UK's wild [newt](#) population from the catastrophic devastation that *Batrachochytrium salamandrivorans* (or Bsal) could cause.

The research, conducted by ZSL (Zoological Society of London), The University of Exeter and the Amphibian and Reptile Groups of the UK, published in *Scientific Reports* today (12 March 2019) combined data gathered from skin swabbing more than 2,400 wild newts in ponds across the UK, along with data from newt deaths reported to ZSL's Garden Wildlife Health project. The results of the investigations revealed Bsal was not present in the samples collected.

In 2010, the deadly fungus was responsible for a 99% decline in a monitored population of fire salamanders (*Salamandra salamandra*) in the Netherlands, with population declines expanding into Belgium and Germany, and led to the extinction of local populations within months of being introduced.



A UK wild newt species which could be affected by the spread of Bsal into wild populations. Credit: Angelia Julian

Professor Andrew Cunningham, Deputy Director of Science at ZSL and lead author on the paper said: "Identifying potential wildlife health risks before they develop is crucial to protecting species from the potentially devastating impacts of disease. Having identified that Bsal appears to be absent from wild newts in the UK, we now need to ensure effective biosecurity policies governing the trade of amphibians into the UK are in place, including adequate quarantine and testing of imported amphibians."

Dr. Becki Lawson, Senior Research Fellow at ZSL's Institute of Zoology said: "We know that infection with Bsal fungus is widespread in captive amphibians in the UK, therefore amphibian owners must take steps to avoid any direct or indirect contact between wild and pet newts, by keeping animals indoors and disinfecting equipment and tanks thoroughly. These actions will help to safeguard the health of both wild and captive amphibians".

"ZSL's Garden Wildlife Health Project monitors the health of the wildlife found in British gardens, through collating public reports of ill or deceased animals and undertaking subsequent post-mortem examinations. Reports from the public provided crucial information for this study."



Scientists swab the underside of newts as a noninvasive method to test whether amphibians are infected with the deadly Bsal fungus. Credit: Liam Fitzpatrick

The UK has three native species of newt—the great crested newt (*Triturus cristatus*), the smooth newt (*Lissotriton vulgaris*) and the palmate newt (*Lissotriton helveticus*). The great crested newt is a fully protected species in which Bsal infection is known to be fatal. Newts play an important role in healthy freshwater ecosystems in the UK.

More information: A. A. Cunningham, F. Smith, T J. McKinley, M. Perkins, L. Fitzpatrick, O. N. Wright and B. Lawson (2019) Apparent absence of *Batrachochytrium salamandrivorans* in wild urodeles in the

United Kingdom. *Scientific Reports*.

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