Letters

SURVEILLANCE

Emerging disease in UK amphibians

THE recently discovered fungal pathogen *Batrachochytrium salamandrivorans* is causing the rapid loss of infected fire salamander (*Salamandra salamandra*) populations in continental Europe (Martel and others 2013). The fungus is thought to be endemic to Asia, with introduction to Europe via the pet trade. Many species of salamander and newt (urodeles) have been shown experimentally to be susceptible to fatal infection, including the UK protected species, the great crested newt (*Triturus cristatus*) (Martel and others 2014). Frogs and toads appear to be resistant to infection.

Routine testing of quarantined amphibians, newly acquired from a UK amphibian breeder by a zoological collection, demonstrated infection in three imported species of urodele using pathogen-specific qPCR (Blooi and others 2013). Infected animals either died while in quarantine or were euthanased. Epidemiological investigations so far have detected the infection in an additional urodele species at the breeder's premises, with associated morbidity and mortality. Studies to locate the source of the infection and to determine if there has been further dissemination among the UK amphibian trade are ongoing through the use of contact-tracing and molecular epidemiology.

All efforts must be made to prevent this pathogen entering the wild amphibian population (eg, via release of infected animals or the discarding of contaminated water or fomites in amphibian habitats such as garden settings). It would be most helpful if veterinary surgeons, amphibian breeders, retailers and hobbyists advised their clients and colleagues to use appropriate disinfection and biosecurity measures. Such measures for preventing the spread of the amphibian fungus, *Batrachochytrium dendrobatidis* (see http://static.zsl.org/files/biosecurity-arguk4-511.PDF), are suitable for the control of *B salamandrivorans*. Additionally, measures to minimise the likelihood of further imports of this pathogen into the UK should be put in place.

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doi: 10.1136/vr.h2264

Veterinary Record

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Veterinary Record 2015 176: 468
doi: 10.1136/vr.h2264

Notes