

LETTERS & NOTICES



Rachel Tripps

Fig 1: Max, the detection dog

However, with the current 2020 Covid-19 restrictions in place, volunteer participation in any subsequent systematic ground search for additional sick or dead red squirrels was limited. Because of this, a dog was used to locate the bodies.

Conservation dogs can be trained to locate wildlife carcasses and assist with local surveys.³ On 18 October 2020, a handler with a male Belgian shepherd dog known as 'Max' (Fig 1) – trained to detect red squirrel bodies – surveyed around 2 km of coastal woodland in search of red squirrel carcasses. The dog signalled a detection at one location and red squirrel hair clumps and a tail were recovered from within an approximately 1 m² area of ground. The distribution of the remains suggested a predation or scavenging event had occurred as no other body material was present.

A hair sample was sent to the APHA laboratory at Weybridge, Surrey, for analysis. A newly developed analytical platform using PCR assays was used,⁴ which specifically makes use of non-invasively collected samples, typically hair, from carcasses where no internal organs are available for analysis. The hair sample was analysed. No adenovirus DNA (a previously detected viral agent in the area⁵) was amplified, but squirrelpox virus (SQPV) DNA was detected.

It is possible that this finding reflects a second SQPV case

associated with the current disease outbreak within the Gwynedd coastal woodlands. The use of a conservation dog during an SQPV outbreak among red squirrels has been effective and is recommended in the current Covid-19 situation.

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SURVEILLANCE

Using dogs in wildlife surveillance

POSTMORTEM and histological tests recently confirmed pathogenic squirrelpox in a Gwynedd red squirrel (*Sciurus vulgaris*).¹ The animal was found dead at a coastal location close to woodland where an earlier outbreak had been reported in 2017.²