RECENT LYME DISEASE RESEARCH IN SCOTLAND

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WHAT IS LYME DISEASE?
More strictly termed Lyme borreliosis, it is caused by bites from ticks infected by a spirochaete bacteria, Borrelia burgdorferi

Nymph stage of Ixodes ricinus tick. Remove tick with a tick tool as soon as possible

Symptoms can include a bullseye “erythema migrans” rash, followed by a highly variable flu-like illness. See a doctor! Most cases can be cured with antibiotics if diagnosed early.

WHAT IS THE RISK?
Cases are increasing in Scotland (data from Health Protection Scotland website)

Animals that carry/transmit Borrelia include birds (e.g. pheasants, blackbirds), voles, mice, sheep. Deer do not transmit Borrelia but are important hosts for ticks.

Therefore, we may be at most risk in woodland due to more transmission hosts – voles, mice, birds.

OUR RESEARCH ...

1. What proportion of ticks carry Borrelia in Scotland?
We collected ticks from a range of woodland sites around Scotland and analysed them for Borrelia:

We found, on average, 5% (range 1-14%) nymphs carry Borrelia.
Low and high Borrelia areas can be adjacent – it is very patchy, so it is difficult to predict which areas are “hotspots”.

2. Which people are most at risk?
Questionnaires from patients reveal that most people acquire Lyme borreliosis when doing recreation, and from ticks from woodlands.

CONCLUSION
• Lyme disease cases are increasing so it is important to be tick-aware.
• See a doctor for treatment if bitten by a nymph/adult and symptoms develop.
• Only 5% nymphs on average carry Borrelia, and many people never develop symptoms.
• So be aware, but do not be scare-mongered – keep the risk in perspective – enjoy the outdoors!
• Be particularly careful in woodlands, and constantly check for ticks.