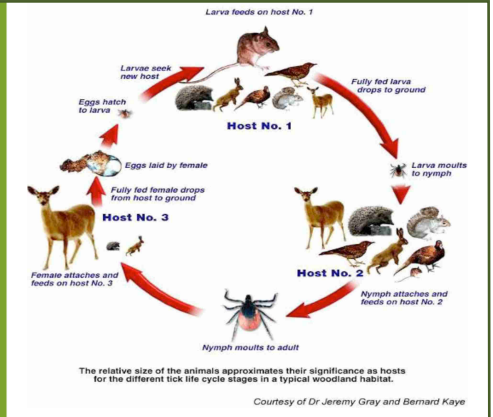


WHERE IN SCOTLAND ARE YOU MOST AT RISK FROM TICKS?: HINTS FROM RECENT RESEARCH FINDINGS...

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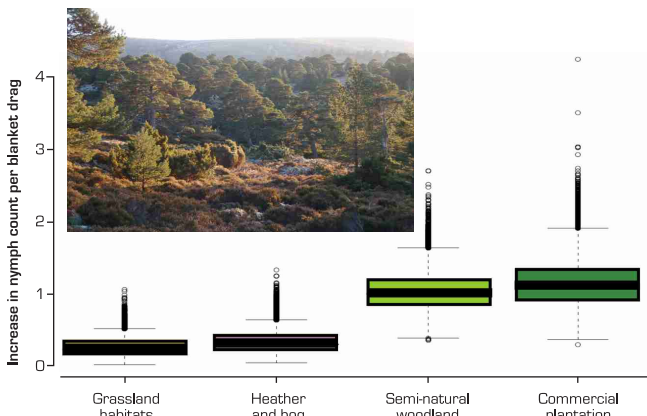
TICKS ARE AN INCREASING PROBLEM

- *Ixodes ricinus* ticks are increasing and spreading in the UK.
- Reported incidence of Lyme disease is increasing – reported cases in 2008 in Scotland.
- Other tick-borne diseases, such as louping ill, kill wildlife and livestock.
- Ticks impact on animal and human health and welfare, biodiversity, rural economics and threaten the sustainability of affected industries.



WHICH HABITATS ARE WORST FOR TICKS?

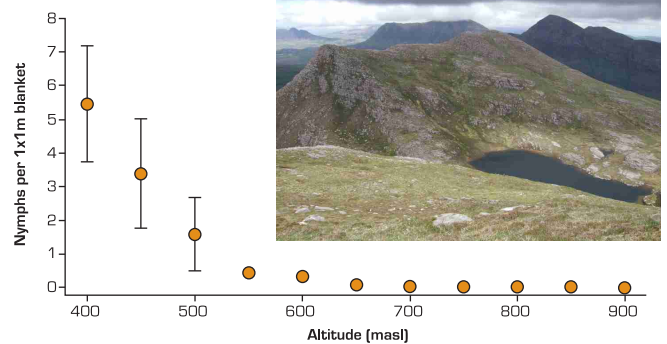
We surveyed ticks using blanket drags in different habitats at 77 sites across Scotland. All other factors being equal, ticks are more abundant in wood/forest habitats than open habitats.



THERE ARE FEWER TICKS WHERE IT IS COLDER

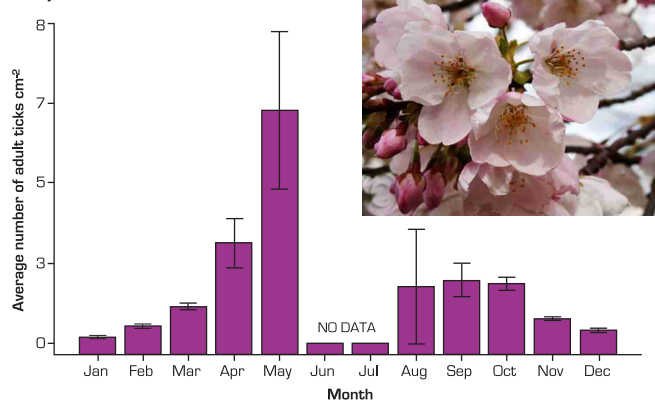
We conducted altitudinal transects to count ticks up 9 hills in the Cairngorms.

Ticks increase rapidly as altitude decreases from 550 to 400m. We statistically took into account differences in vegetation and hosts, so we conclude this is a climate effect, equivalent to the climate warming by just 1°C.



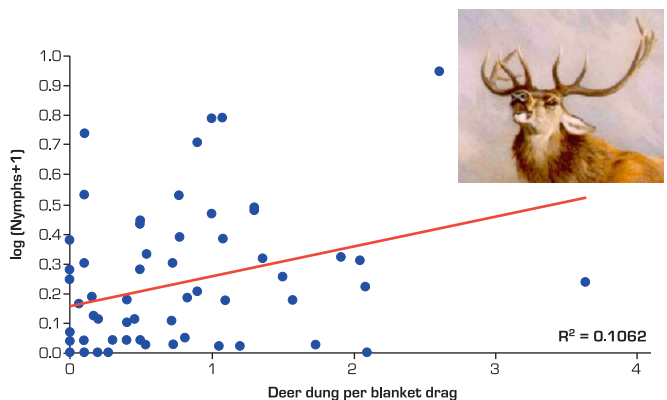
WHAT TIME OF YEAR IS WORST FOR TICKS?

We counted adult ticks attached to culled deer carcasses from around Scotland. Most ticks were found in May, although we had no data from June and July because no deer were culled at that time during our study from the sites.



MORE DEER GENERALLY MEANS MORE TICKS

We surveyed ticks using blanket drags and estimated deer abundance from dung counts at 77 sites. There was a strong positive correlation between deer and tick abundance. However, there is a lot of noise in this relationship, depending on habitat, altitude, region etc.



CONCLUSIONS

- There are more ticks in warmer areas such as low altitudes and the west coast.
- There are more ticks where there are more hosts especially deer.
- There are more ticks in forests and woodlands than open habitats.
- The worst place possible? Probably an unfenced woodland in an area with lots of deer at sea level on the west coast in May!