Seasonal Canine Illness: Preliminary Epidemiological and Spatial Investigation

Robin, CA*[1], Cruz-Lopez[1], F, Ireland[1], J, Newton, JR[1]
[1]Centre for Preventive Medicine, Animal Health Trust, UK, *Corresponding author: charlotte.robin@aht.org.uk

BACKGROUND & AIM

- Seasonal Canine Illness (SCI) is an emerging disorder of unknown aetiology.
- It manifests as gastrointestinal signs, within 24 hours of the dog being walked in woodland areas, predominantly in late summer and autumn.
- This preliminary investigation aims to better describe the disorder and identify any potential risk factors.

METHOD

- A questionnaire based case control study was developed to cover five study areas.
- Questions were based on routine health and management of the dog, and management and behaviour of the dog whilst visiting the study area.
- Cases were dogs that had walked in the area and developed two or more clinical signs of vomiting, diarrhoea, abdominal pain, fever, lethargy, anorexia and muscular tremors.
- Controls were dogs that walked in the study area and did not become ill.
- Subsequent multivariable analysis was based on one site where the majority of questionnaires were returned for; Sandringham Estate.

RESULTS

RISK FACTORS

- Dogs travelling to the study area from more than 100km away were 3 times more likely to be a case compared to those travelling from less than 10km away (OR=3.24, P=0.013).
- Dogs were at a decreased risk if walked on more than one route whilst at the site (OR=0.51, P=0.042).

SPATIAL VARIATION

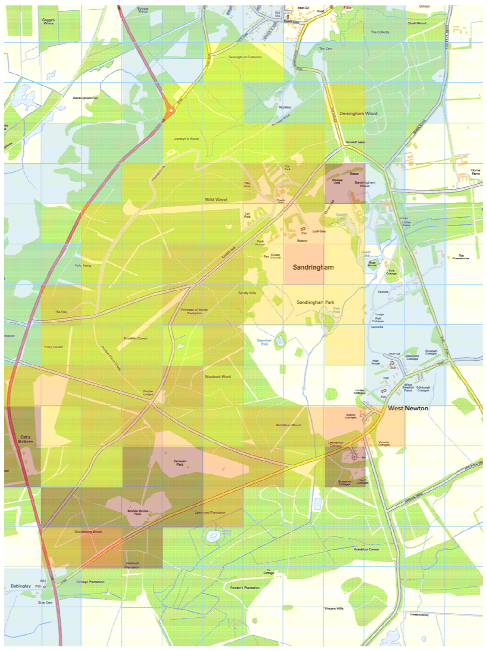

Figure 1: Preliminary spatial analysis on ratio of cases vs controls revealed areas surrounding the campsites to be at higher risk. These areas were inspected during a site visit in September 2011.

SITE VISIT 2011

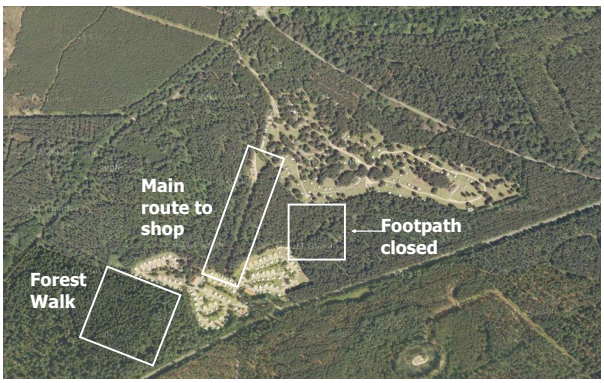

Figure 2: Areas investigated during the site visit in September 2011 revealed no evidence of toxic plants, fungi, bracken spores or blue-green algae.

TEMPORAL VARIATION

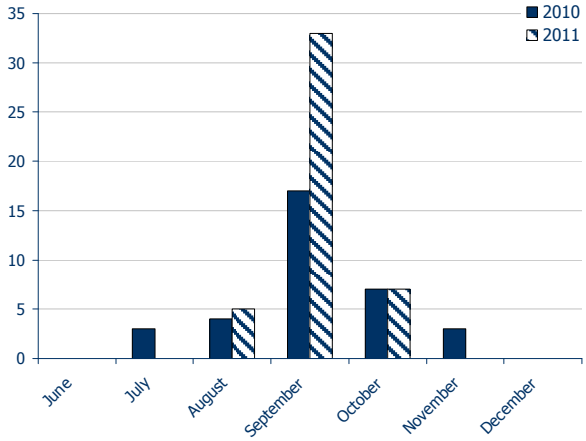

Figure 3: Temporal variation in the number of case questionnaires returned to the AHT from 2010 and 2011.

CONCLUSIONS

- **There was no evidence of poisonous plants, fungi, bracken spores or blue-green algae at Sandringham Estate during the site visit, therefore it was concluded these were unlikely causes.**
- **Investigations into alternative theories and pathogenic mechanisms for the disease are continuing.**

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