

WILDLIFE INCIDENT UNIT

82/22



Original thinking... applied

WILDLIFE INCIDENT REPORT

INCIDENT NUMBER 82/22
PART OF STUDY FSGD-213
REGIONAL NUMBER W/22/26
OTHER REFERENCES 28-M0139-08-22
SENDER APHA Carmarthen VIC
LOCATION Newport
Pembrokeshire
GRID REFERENCE SN0539
INCIDENT DATE 24 August 2022
SUSPECTED CAUSE OF INCIDENT mixture of rodenticides
unspecified
DATE OF REPORT 16 December 2022

REPORTING OFFICER [REDACTED]

SIGNED : [REDACTED]

NUMBERS AND SPECIES INVOLVED

1 fox

COPIED TO



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Samples received		Date received	Sample identifier
100808	fox	8/9/22	APHA: 28-M0139-08-22
100808	fox tissues	8/9/22	APHA: 28-M0139-08-22

Summary of field data

A fox was found dead in a garden with no sign of injuries, although there was a small spot of blood found on the edge of the mouth. The fox wasn't there an hour before being found and it appeared to be healthy with no other signs of obvious trauma. The finder reported that foxes usually breed in the overgrown garden next door and five have been seen regularly this year. The carcass was bagged and stored in a freezer until arrangements could be made to transport it to APHA for an examination. This is the garden of a residential property.

Summary of post mortem report

A fox was submitted frozen for post-mortem examination. The sex was identified as male, weighing 4.9 kg in fair body condition with mild autolysis. The stomach content was green pasty material containing small bones, some fibre and the neck of a white balloon. There were pockets of content throughout the intestines containing dry pasty material and small bones. There were a small number of round worms and multiple tapeworms. There was increased red pleural fluid and the lungs appeared congested. They were mottled dark red with pale areas. The spleen was slightly congested. All other organ systems examined were unremarkable. The endocrine system was not examined. Parasite identification found *Toxocara canis*.

Analysis : metaldehyde & carb (LC) analysis suite

100808	stomach contents	no metaldehyde & carb (LC) detected	detection limit	0.006	mg/kg
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Analysis : organophosphate analysis suite

100808	stomach contents	no organophosphate detected	detection limit	2	mg/kg
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Analysis : rodenticide & chloralose analysis suite

100808	liver	difenacoum	confirmed	0.0029	mg/kg
100808	liver	bromadiolone	confirmed	0.61	mg/kg
100808	liver	brodifacoum	confirmed	0.14	mg/kg

Conclusion

It was suspected that this fox had been poisoned. Laboratory analysis for a range of likely pesticides has been undertaken on the submitted samples. These tests have detected and confirmed a residue of bromadiolone, brodifacoum and difenacoum in the liver of the fox. The post-mortem noted that the animal had been eating well and there were no obvious signs of haemorrhage within the carcass. Therefore, the amount of difenacoum found is consistent with background exposure levels only, but the bromadiolone and possibly the brodifacoum are at a level that may have contributed to the death of this fox. The incident has been assigned to unspecified use as the source of the anticoagulant rodenticides is uncertain at present, but they are likely to be from rodent control treatments in the area.

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