

# WILDLIFE INCIDENT UNIT

22/24



Original thinking... applied

## WILDLIFE INCIDENT REPORT

INCIDENT NUMBER 22/24  
PART OF STUDY WIIS23  
REGIONAL NUMBER W/24/02  
OTHER REFERENCES 28-M0161-02-24  
SENDER APHA Carmarthen VIC  
LOCATION Aberaeron  
Cardiganshire  
GRID REFERENCE SN4762  
INCIDENT DATE 18 February 2024  
SUSPECTED CAUSE OF INCIDENT background residue  
DATE OF REPORT 17 May 2024

REPORTING OFFICER

SIGNED

### NUMBERS AND SPECIES INVOLVED

1 fox

COPIED TO

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## Samples received

| Samples received |             | Date received | Sample identifier |
|------------------|-------------|---------------|-------------------|
| 101285           | fox         | 5/3/24        | 28-M161-02-24     |
| 101285           | fox tissues | 5/3/24        | 28-M161-02-24     |

## Summary of field data

A fox was found dead near a footpath. In 2021 a fox was found at the same spot but was very autolysed. There is a badger sett nearby and concerns of baits laid for poisoning badgers. The carcase was collected by a wildlife adviser and stored in a freezer then transported to the APHA for post-mortem. Maggots were noted on the skin and holes were seen at the front of the throat so there was uncertainty over whether the fox had been shot and dumped or if this was due to maggot damage. This is a rural area surrounded by arable and cattle farmland.

## Summary of post mortem report

One female fox of unknown weight in fair body condition with severe autolysis was submitted dead for post-mortem examination. The skin was peeling away from the face and lower limbs (severe autolysis). There was a large deficit in skin over the left side of the ventral neck / cranio-ventral thorax, approximately circular and ~10cm diameter, with a few maggots inside the deficit. There was a dark red subcutaneous oedema over left side of distal body. There was a fracture of the left scapula, complete fracture of the proximal end of the left humerus with multiple fragments, and complete fracture of the distal end of the left humerus with one fragment. Ribs 1 and 2 on left side of the thorax were fractured and there was a fracture of the cranial end of the sternum. There was a large deficit in left thoracic body wall. The soft tissues surrounding the proximal left forelimb and over left side of thorax were disintegrating and dark red, with a few maggots present. In the alimentary system, maggots were present inside the oral cavity, the distal end of oesophagus missing, the stomach had a moderate fill of thick black-grey soft content with fibrous material and unidentifiable strands of soft tissue consistency. The small and large intestinal content was thick and black. In the respiratory system, the distal end of the trachea was missing with one maggot inside trachea. The right lung was soft and dark red, the left lung an unidentifiable mass of disintegrated dark red soft tissue and dark red liquid with possible blood clots present in left side of thoracic cavity. Examination of all other organ systems was unremarkable. The endocrine and nervous systems were not examined. This adult non-pregnant female fox had significant trauma to the left side of the thorax and upper left forelimb. Unfortunately, due to the very severe degree of autolysis it is difficult to say whether these injuries occurred pre- or post-mortem.

## Analysis : metaldehyde & carb (LC) analysis suite

|        |                  |                                     |                 |      |       |
|--------|------------------|-------------------------------------|-----------------|------|-------|
| 101285 | stomach contents | no metaldehyde & carb (LC) detected | detection limit | 0.04 | mg/kg |
|--------|------------------|-------------------------------------|-----------------|------|-------|

## Analysis : rodenticide & chloralose analysis suite

|        |       |              |           |         |       |
|--------|-------|--------------|-----------|---------|-------|
| 101285 | liver | difenacoum   | confirmed | 0.018   | mg/kg |
| 101285 | liver | brodifacoum  | confirmed | 0.042   | mg/kg |
| 101285 | liver | bromadiolone | confirmed | 0.041   | mg/kg |
| 101285 | liver | flocoumafen  | confirmed | 0.00013 | mg/kg |

## Conclusion

Given that this fox was found dead near to a badger sett and in the same location a dead fox had been seen in 2021, it was suspected that this fox had been poisoned. Laboratory analysis for some likely pesticides has been undertaken on the submitted samples. These tests have detected and confirmed small residues of bromadiolone, brodifacoum, difenacoum and flocoumafen in the liver of this fox. These residues have all been measured at levels considered to be background exposure. Therefore, given these results and the findings from the post-mortem examination, the cause of death of the fox is likely to be due to trauma.