

WILDLIFE INCIDENT UNIT

74/23



Original thinking... applied

WILDLIFE INCIDENT REPORT

INCIDENT NUMBER 74/23
PART OF STUDY WIIS23
REGIONAL NUMBER W/23/18
OTHER REFERENCES 28-B0054-08-23
SENDER APHA Carmarthen VIC
LOCATION Port Talbot
Glamorgan
GRID REFERENCE SS8086
INCIDENT DATE 4 August 2023
SUSPECTED CAUSE OF INCIDENT trauma
DATE OF REPORT 17 November 2023

REPORTING OFFICER

SIGNED

NUMBERS AND SPECIES INVOLVED

2 barn owl

COPIED TO

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Samples received			Date received	Sample identifier
101104	barn owl		25/8/23	APHA ref: 28-B0054-08-23
101104	barn owl	tissues	25/8/23	APHA ref: 28-B0054-08-23
101105	barn owl		25/8/23	APHA ref: 28-B0054-08-23
101105	barn owl	tissues	25/8/23	APHA ref: 28-B0054-08-23

Summary of field data

Two barn owls were found dead within 10m of each other in a park by a member of the public. One of the owls had been ringed locally, in 2018. The owls were collected by the informant and stored in a freezer at the park, before being sent to the APHA for post-mortem. One of the owls was reported to have a slight head injury and the other had a small puncture wound on the neck but the informant did not think they had been shot. Rodenticides were not being used at the park at the time of the incident. The barn owls were found alongside the park road, but there had reportedly been no collisions with owls. This is a rural area surround by several fields and several pockets of woodland.

Summary of post mortem report

Two barn owls were submitted dead for post-mortem examination. Oro-pharyngeal and cloacal swabs were taken for AI testing, no Influenza A viral RNA was detected. Owl 1 was a male in fair body condition with moderate autolysis. There was feather loss and some dried blood on the left side of the neck. There was a puncture wound approximately 2mm in size in the skin on the left side of the neck. There was damage to the muscle around the cervical vertebrae on the left side of the neck. The left and right ribs were fractured along the left side of the sternum. In the alimentary system, the remains of a small mammal were found in the gizzard and there was pale brown thick liquid intestinal contents. In the respiratory system, there were small blood clots in the trachea and marked haemorrhage in the thoracic cavity and there were small haemorrhages throughout the lungs. Examination of all other organ systems was unremarkable. The endocrine system was not examined. Owl 2 was of unknown sex in fair body condition with moderate autolysis. Owl 2 had a leg ring on the right leg tag no. GC87418. The dorsal body feathers were soaked in blood, there were skin wounds above the left eye and over the skull more cranially with blood. There was a puncture wound approximately 4mm in diameter into the left cranio-caudal skull and reddening of the surrounding skull bone. There was dried blood over the right dorsal body with an associated 2mm puncture wound into the abdominal cavity. In the alimentary system, the remains of a small mammal were found in the gizzard and there was pale brown thick liquid intestinal contents. Examination of all other organ systems was unremarkable. The endocrine system was not examined. Both owls had evidence of trauma. Owl 1 had a puncture wound on the left neck and damage to the muscle and cervical vertebrae in the same area. The ribs were fractured on both sides and there were blood clots in the trachea indicating this likely occurred around the time of death. Similarly, owl 2 had a puncture wound in the left skull and the right dorsal body with associated haemorrhage. The significant trauma noted would have resulted in the deaths of both owls. Both birds were in fair body condition with the remains of small mammals in their stomachs indicating that they had both recently eaten.

Analysis : rodenticide & chloralose analysis suite

101104	liver	difenacoum	confirmed	0.0022	mg/kg
101104	liver	brodifacoum	confirmed	0.029	mg/kg
101104	liver	bromadiolone	confirmed	0.069	mg/kg
101105	liver	difenacoum	confirmed	0.0024	mg/kg
101105	liver	brodifacoum	confirmed	0.0015	mg/kg

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Conclusion

It was suspected that these barn owls had been poisoned, as they appeared to be in fair body condition, and there was initially no suspicion of trauma as cause of death. The informant thought the owls did not appear to have been shot, and there were no reports of traffic collisions with owls within the park where they were found. Laboratory analysis for chloralose and a range of anticoagulant rodenticides only was undertaken on the submitted samples. These tests have detected and confirmed residues of brodifacoum, and difenacoum in the livers of both barn owls, and an additional residue of bromadiolone in the liver of owl 1. The amounts found are consistent with background exposure levels only. However, post-mortem findings indicated that these barn owls had suffered significant trauma, and that this trauma was the likely cause of death of these birds. Therefore, the cause of death of these barn owls appears to be trauma related, rather than poisoning.

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