WILDLIFE INCIDENT UNIT

47/22 **fera**Original thinking... applied

WILDLIFE INCIDENT REPORT

INCIDENT NUMBER 47/22

PART OF STUDY FSGD-213

REGIONAL NUMBER W/22/12

OTHER REFERENCES 28-B0001-04-22

SENDER APHA Carmarthen VIC

LOCATION Llanidloes

Powys

GRID REFERENCE SN9386

INCIDENT DATE 26 March 2022

SUSPECTED CAUSE

OF INCIDENT

brodifacoum unspecified

DATE OF REPORT 16 August 2022

REPORTING OFFICER

SIGNED :

NUMBERS AND SPECIES INVOLVED

goshawk

COPIED TO

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WILDLIFE INCIDENT REPORT

47/22



Samples received	Date received	Sample identifier

 100712
 goshawk
 10/5/22
 28-B0001-04-22

 100712
 goshawk
 tissues
 10/5/22
 28-B0001-04-22

Summary of field data

A goshawk was found dead. The Police were contacted by an Osprey warden with the report of a goshawk that was found dead, although it may have been shot. The Warden provided the location to the Police who visited the area and photographed the bird in-situ. When they collected the carcase they noted no obvious signs of trauma and so Welsh Government were contacted. The location is close to an Osprey breeding site. The Police are not aware of any poultry, or game farms in the vicinity. There were no signs of suspicious substances nearby and there were no other dead birds or animals seen. There were sheep present and lots of other birds flying around in the area. The nearby road is sign posted as a dead end, so there should not be much traffic. There are three farm properties surrounding the location and one is spilt into several residential units.

Summary of post mortem report

The frozen bird was sealed inside a clear plastic bag inside a brown evidence bag. Details on the brown evidence bag: W/22/12, DP 2022-0326-205, DPP/2416/26/03/2022/02. A female goshawk that was not weighed and was in an emaciated condition with severe autolysis was submitted for post-mortem. The head to tail length was 61cm. The skin over the dorsal right femur was grazed with a few scattered areas of reddening and the feathers in this area were matted with a small volume of dried blood. There were two large wounds in the skin and muscle covering the right wing: one an approximately 5cm long laceration over the dorsal humerus and one an approximately 10cm long laceration over the ventral radius and ulna. The edges of the wounds were scabbed with dried dark red-black blood. The feathers were missing from the mid-section of the ventral right wing. There was reddening of the subcutaneous tissues over the back of the skull. There was very poor pectoral muscling and the keel bone was prominent. The crop was empty. The proventriculus and gizzard were very full containing very dry, crumbly dark brown material with a large number of short fibres throughout, some yellow fibres consistent with dried grass and fragments of dark green vegetation resembling pine needles. Examination of all other organ systems was unremarkable. The endocrine system was not examined.

Analysis: rodenticide & chloralose analysis suite

100712	liver	bromadiolone	confirmed	0.045	mg/kg
100712	liver	brodifacoum	confirmed	0.2	mg/kg
100712	liver	difenacoum	confirmed	0.062	mg/kg

Conclusion

This goshawk was in an emaciated condition and an inappropriate diet was present in the gizzard, which was likely due to the chronic trauma injuries to the right wing that meant it was unable to hunt effectively. Therefore, laboratory analysis for chloralose and a range of anticoagulant rodenticides only has been undertaken on the submitted samples. These tests have detected and confirmed a residue of brodifacoum and some difenacoum and bromadiolone in the liver of this goshawk. There were some areas of reddening and dried blood noted on examination and clearly the bird was emaciated. However, the amount of brodifacoum present is usually associated with poisoning, although the difenacoum and bromadiolone residues are consistent with background exposure only. Therefore, although the emaciated condition contributed to the death of this goshawk, the brodifacoum exposure may also have been a contributory factor in the death of this goshawk and so the incident has been assigned to unspecified use. The source of the brodifacoum is uncertain at present, although it may be from a rodent control treatment.

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