# WILDLIFE INCIDENT UNIT



## WILDLIFE INCIDENT REPORT

Original thinking... applied

RESTRICTED

INCIDENT NUMBER 88/22

PART OF STUDY FSGD-213

**REGIONAL NUMBER** W/22/28

OTHER REFERENCES 28-B0109-09-22

SENDER APHA Carmarthen VIC

Ammanford LOCATION

Carmarthenshire

**GRID REFERENCE** SN6512

INCIDENT DATE 18 September 2022

SUSPECTED CAUSE

OF INCIDENT

bendiocarb abuse

DATE OF REPORT 16 December 2022

REPORTING OFFICER

SIGNED : .....

NUMBERS AND SPECIES INVOLVED

buzzard

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Samples received			Date received	Sample identifier	
100818	buzzard		7/10/22	28/B0109/09/22 : KH/1	
100818	buzzard	tissues	7/10/22	28/B0109/09/22 : KH/1	
100819	buzzard		7/10/22	28/B0109/09/22: KH/2	
100819	buzzard	tissues	7/10/22	28/B0109/09/22 : KH/2	

#### Summary of field data

A member of the public reported three dead buzzards in a ditch. Two of them were found dead in the ditch within three metres of each other and with no sign of injury. Initially the finder thought there were three dead buzzards, but on closer inspection they realised that one was still alive as the eye lids were moving. The live buzzard was taken home by the finder before being transferred to an animal hospital. One of the dead buzzards was found with the remains of a pheasant in its talons. An RSPCA officer collected the buzzard carcasses, contacted Welsh Government and arranged for transportation to the APHA. This is a rural area close to a local shoot.

#### Summary of post mortem report

Two dead buzzards (KH/1 and KH/2) were submitted for post-mortem examination and their subcutaneous tissues were green (likely autolysis). Buzzard KH/1 was received in a clear plastic bag (RSCPA branded) sealed with a blue RSPCA tag, number 000088546. There was a card tag which read "Description of Exhibit: Buzzard KH/1 00960847. found dead on 18th September 2022". It was a male of unknown weight in fair condition with moderate autolysis. There was a fair amount of pectoral muscling. The crop was very full, with dark brown digesta present in the large intestine and caecae. Both kidneys were enlarged and rounded with mottled dark vellow to dark red surfaces. Buzzard KH/2 was received in a clear plastic bag (RSCPA branded) sealed with a blue RSPCA tag, number 000088545. There was a card tag which read "Description of Exhibit: Buzzard KH/2 00960847, found dead on 18th September 2022". It was a male of unknown weight in poor condition with moderate autolysis. Dried crusty material was present on the ventral skin surface above the cloaca. Beetles in the wing feathers were also found. The keel was prominent, and the pectoral muscles were concave. The liver surface was covered in white 1-2 mm spots; on the cut surface the parenchyma was uniformly dark in red colour. The crop was moderately full and the large intestine and caecae were empty. The third right rib was fractured mid shaft and pointing internally. There was an approximately 2cm zone of black discoloration on the pleural membrane and right lung tissue adjacent to the fracture site. Both kidneys were enlarged, but not rounded with a dark yellow surface. The cortex was dark red on cross section. Both birds had fresh, moist, pale pink meat, feathers, and bones of a small bird in the beak, oropharynx, oesophagus, crop, proventriculus and gizzard. The small intestine contained pasty liquid material, which was dark cream proximally changing to dark yellow distally. They had sunken and collapsed eyes and examination of all other organ systems was unremarkable. The endocrine system was not examined.

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

100818	crop contents	bendiocarb	confirmed	18	mg/kg				
100818	gizzard contents	bendiocarb	confirmed	6.4	mg/kg				
100819	gizzard contents	bendiocarb	confirmed	8.8	mg/kg				
Analysis : organophosphate analysis suite									
100818	crop contents	no organophosphate detected no organophosphate detected no organophosphate detected	detection limit	1	mg/kg				
100818	gizzard contents		detection limit	1	mg/kg				
100819	gizzard contents		detection limit	1	mg/kg				
Analysis : rodenticide & chloralose analysis suite									
100818	liver	difethialone	confirmed	0.0086	mg/kg				
100818	liver	difenacoum	confirmed	0.0039	mg/kg				
100818	liver	brodifacoum	confirmed	0.016	mg/kg				
100819	liver	no rodenticide & chloralose detected	detection limit	0.007	mg/kg				

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#### Conclusion

Finding multiple birds and possible pheasant remains was a typical pesticide poisoning scenario. Laboratory analysis for a range of likely pesticides has been undertaken on both of the buzzards submitted. These tests have detected and confirmed a residue of bendiocarb from the crop content and gizzard content samples from these birds. The crop content of buzzard 100818, consisted of fresh lumps of pink meat and possible blue/grey feathers and the gizzard content was a mass of feathers, fur, some meat and bones. The gizzard content of the buzzard 100819, was finely chopped meat and feathers. There were also small residues of brodifacoum and difethialone and difenacoum detected and confirmed in the liver of one buzzard, but these residues were consistent with background exposure only. It is likely that exposure to bendiocarb caused the death of these two buzzards and the source of this may be from a pheasant carcase, or other animal bait that had been intentionally laced with this pesticide. Therefore, this incident has been assigned to the abuse of bendiocarb, although the possible bait used was not available for testing.

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