

# WILDLIFE INCIDENT UNIT

139/20



Original thinking... applied

## WILDLIFE INCIDENT REPORT

**RESTRICTED**

INCIDENT NUMBER 139/20  
PART OF STUDY FSGD-211  
REGIONAL NUMBER W/20/22  
OTHER REFERENCES B006464  
SENDER SAC Ltd  
LOCATION Welshpool  
Montgomeryshire  
GRID REFERENCE SJ2608  
INCIDENT DATE 3 September 2020  
SUSPECTED CAUSE OF INCIDENT carbofuran  
abuse  
DATE OF REPORT 17 December 2020

REPORTING OFFICER [REDACTED]  
SIGNED : ..... [REDACTED]

**NUMBERS AND SPECIES INVOLVED**  
1 raven

**COPIED TO**  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]

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Samples received		Date received	Sample identifier
100068	raven	7/10/20	B006464
100068	raven tissues	7/10/20	B006464

### Summary of field data

A raven was found face down and very fresh beside a woodland track. The bird had a displaced secondary feather and was found about 200m away from a crow cage trap that had pheasant remains within it and the door open. This is in an area of intensive pheasant rearing and shooting. Arrangements were made to collect the carcass and store it in a freezer and x-rays were carried out at a private veterinary practice. The x-ray confirmed that there were five pieces of shot within the body of the bird so the Police were notified and the carcass was sent to SAC for an examination. Given the findings from this examination, where shot was found and no evidence of haemorrhage, the case was referred to Welsh Government and WIIS. This is an area of intensive pheasant rearing and shooting.

### Summary of post mortem report

A raven of weight 1290g, fresh condition (frozen, 1 out of 5) and very good bodily condition was submitted for examination. On the left wing the 13th flight feather from the leading edge was displaced out from the wing. There was a line of damage to feathers 4 to 7 from the leading edge with sections missing and a linear score across feathers 4 to 6. There was trauma to the shaft of feather 12. No significant damage was seen in the feathers of the right wing. The gizzard was full of recently ingested grain and grain was also present in the gastric end of the oesophagus. A single small round metallic object consistent with a shot gun pellet was present on the ventral surface of the left liver lobe. There was no associated trauma or haemorrhage and no evidence of trauma or haemorrhage found on skinning and detailed examination of the body. No other pellets found. There were no other significant gross abnormalities detected.

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

100068	gizzard contents	carbofuran	confirmed	350	mg/kg
100068	gizzard contents	isofenphos	confirmed	0.026	mg/kg
100068	gizzard contents	propoxur	confirmed	0.034	mg/kg

### Analysis : organophosphate analysis suite

100068	gizzard contents	no organophosphate detected	detection limit	1.0	mg/kg
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### Analysis : rodenticide & chloralose analysis suite

100068	liver	brodifacoum	confirmed	0.0066	mg/kg
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### Conclusion

It was suspected that this raven had been poisoned, although it appeared that the bird had also been shot and survived at some time in the past. Laboratory analysis for some likely pesticides has been undertaken on the submitted samples. These tests have detected and confirmed a large residue of carbofuran in the gizzard content, which consisted of a medium-brown fibrous paste with several pieces of whole grain noted. The amount of carbofuran found is significant and is likely to be the cause of death of the raven. There was a very small residue of brodifacoum detected and confirmed in the liver, which is consistent with background exposure only. There were also very small residues of isofenphos and propoxur found, which might indicate that the carbofuran used had been contaminated with these pesticides during storage or during preparation of a suspected bait item. The abuse of carbofuran has occurred and has caused the death of at least one raven, but the bait material used is uncertain at present.

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