

WILDLIFE INCIDENT REVISED REPORT**INCIDENT NUMBER** 33/19 **RESTRICTED****PART OF STUDY** FSGD-211**REGIONAL NUMBER** W/19/05**OTHER REFERENCES** 28/B68 & S67/04/19**SENDER** VLA Carmarthen**LOCATION** Tregeriog, Llangedwyn
Denbighshire**GRID REFERENCE** SJ1923**INCIDENT DATE** 14 April 2019**SUSPECTED CAUSE
OF INCIDENT** diazinon
veterinary use**DATE OF REPORT** 22 May 2019**REPORTING OFFICER** [REDACTED]**SIGNED :** [REDACTED]**NUMBERS AND SPECIES INVOLVED**1 lamb carcase (bait?)
7 raven**COPIED TO**

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
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Samples received			Date received	Sample identifier
99452	lamb carcase (bait?)		18/4/19	28/S0067/04/19
99464	raven		9/5/19	28/B0068/04/19 : Raven 1 DJA1
99464	raven	tissues	9/5/19	28/B0068/04/19 : Raven 1 DJA1
99465	raven		9/5/19	28/B0068/04/19 : Raven 1 DJA2
99465	raven	tissues	9/5/19	28/B0068/04/19 : Raven 1 DJA2
99466	raven		9/5/19	28/B0068/04/19 : Raven 3 DJA3
99466	raven	tissues	9/5/19	28/B0068/04/19 : Raven 3 DJA3

Summary of field data

Whilst walking their dog, a member of the public found a freshly dead raven with no obvious signs of injury. They then found a further seven ravens around the corner and another carcase a bit further on. There was also a carcase of a dead lamb with intestines hanging out nearby. The finder collected one bird and placed it in a freezer and the Police visited the area and collected six dead ravens and the lamb carcase; the raven retained frozen by the finder was also collected. Another dead lamb carcase was noted, but this had not been scavenged and so it was not collected. There is reported to be one landowner in the area who grazes the moor. This area is moorland and there has not been a history of poisoning incidents in the area.

Summary of post mortem report

Seven ravens were submitted for post-mortem and three of them were selected for examination. DJA 1: single bird in one Natural Resources Wales evidence bag NRW0051020; DJA 2: single bird in one Natural Resources Wales evidence bag NRW0051021; DJA 3: single bird in one Natural Resources Wales evidence bag NRW0051022. A small lamb was also submitted as a suspected bait under reference 28-S0067-04-19 and was forwarded to FERA without examination. An external examination of DJA 4, 6 & 7 was carried out and the animals were in good body condition. No signs of external injuries were observed. All animals examined appeared to be adults and presented with good feather coverage. DJA1 was a female, weight 1.191kg, fair body condition and moderate autolysis. There was a small amount of peritoneal adhesions between liver and apex of heart and peritoneal wall and caudal part of sternum. There was a 1.0cm by 0.5cm lesion, dark grey to brown coloured on the surface of the cranial aspect of the liver, close to the apex of the heart. This lesion had a hard consistency on palpation and a granular texture on cutting. There was dark yellow grass at the commissures of the beak. The gizzard contained small amounts of wool, grain, maize and soil debris; its submucosal folds had multiple red lesions resembling haemorrhages. DJA2 was a male, weight 1kg, good body condition and moderate autolysis. Both eyes had a moderate amount of pale brown ocular discharge. The oral mucosa was reddened and mildly oedematous. There were live maggots present on skin and into peritoneal cavity on ventral cranial abdomen. There was a 0.6cm diameter hole, approx. 1 cm left of midline and just caudal to sternum. There were blood clots in the right hand-side of the thoracic cavity and subcutaneous haemorrhages and a 0.7cm diameter hole underneath right wing. The gizzard contents were very scant and consisting of a pasty dark brown to red content (whole gizzard was sampled for toxicology). There were extensive haemorrhages on surface of the skull. DJA3 was a female, weight 0.953kg, poor body condition and moderate autolysis. There were live maggots present on skin and into peritoneal cavity on ventral cranial abdomen. There was a 1cm diameter hole, approx. 1 cm right of midline and just caudal to sternum. The gizzard contents consisted of a small amount of grey to black gritty debris. All remaining body systems were unremarkable.

Analysis : organophosphate analysis suite

99452		diazinon	confirmed	430	mg
99464	gizzard contents	diazinon	confirmed	110	mg/kg
99465		no organophosphate detected	detection limit	6	mg/kg
99466		no organophosphate detected	detection limit	4	mg/kg

Conclusion

It was suspected that this lamb carcase was a poisoned bait. Laboratory analysis for a range of organophosphate pesticides has been undertaken on the submitted carcase, which consisted of a whole lamb with the ribs broken and soft tissue exposed. The ravens were retained at the APHA pending analytical results. These tests have detected and confirmed a residue of diazinon from a surface wash of the lamb carcase. Therefore, it appears that the illegal use of diazinon has occurred as a lamb has been intentionally laced with diazinon, but as this is a veterinary use pesticide the incident has been assigned to veterinary use.

The ravens were submitted for testing and have also been analysed for a range of organophosphate pesticides, including diazinon. These tests have detected and confirmed a residue of diazinon in the gizzard content of one raven only and this is likely to account for the death of the bird. The gizzard content sample appeared to consist of balls of fur, meat and vegetation, but the other two ravens had very little content and the sample appeared to be the whole gizzard. Therefore, the illegal use of diazinon has also poisoned at least one raven and as this is a veterinary use pesticide the incident has been assigned to veterinary use.

This replaces the earlier report issued on the 7th May 2019.