WILDLIFE INCIDENT UNIT

WILDLIFE INCIDENT REPORT

45/13

The Food & Environment Research Agency

RESTRICTED

INCIDENT NUMBER	45/13
PART OF STUDY	FSGD-190
REGIONAL NUMBER	W/13/12
OTHER REFERENCES	29/B0156/04/13
SENDER	VLA Aberystwyth
LOCATION	Llanddeusant Anglesey
GRID REFERENCE	SH3488
INCIDENT DATE	21 April 2013
SUSPECTED CAUSE OF INCIDENT	fenthion veterinary use
DATE OF REPORT	8 July 2013

REPORTING OFFICER [redacted]

SIGNED : ..... [redacted] **.....**

NUMBERS AND SPECIES INVOLVED

2 raven

COPIED TO

[redacted]

[redacted]

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Samples received			Date received	Sample identifier
96809	raven		2/5/13	WEL 1 : 29-B0156-04-13
96809	raven	tissues	2/5/13	WEL 1 : 29-B0156-04-13
96810	raven	tissues	2/5/13	WEL 2 : 29-B0156-04-13
96810	raven		2/5/13	WEL 2 : 29-B0156-04-13

Summary of field data

Two dead ravens have been found in a field and with no obvious signs of trauma. One bird was found in the middle of the field and the other was found a few days later at the bottom of a bank. There was a caution given for possession of alphachloralose to someone at a nearby farm, but this was back in 1996.

Summary of post mortem report

Two ravens were submitted for post-mortem and were identified as WEL 1 and WEL 2. WEL 1 was found on the 21st April and WEL 2 on the 28th April; they were both in good body condition, well fleshed, there were no signs of external parasites and feathering was complete and appeared in good condition. WEL 1, weighed 1.4kg and severe autolysis was noted. The liver was autolysed. The gizzard contained approximately 1cm long fragments of bone and other material. The remainder of the carcass was unremarkable apart from autolysis, the spinal cord, parathyroid, bone marrow, harderian gland, bone marrow and spinal column were not examined. WEL 2, weighed 1.5kg and moderate autolysis was noted. The gizzard and alimentary tract contained food material, there were no bones in the gizzard. The remainder of the carcass was unremarkable apart from autolysis, the spinal cord, parathyroid, bone marrow, harderian gland, bone marrow and spinal column were not examined. No cause of death has been found on gross pathology.

Analysis : carbamate (LC) analysis suite

96810	gizzard contents	no carbamate (LC) detected	detection limit	0.2	mg/kg

Analysis : chloralose

96810	kidney	no chloralose detected	detection limit	0.4	mg/kg

Analysis : organophosphate analysis suite

96810	gizzard contents	fenthion	confirmed	28	mg/kg

Analysis : rodenticide analysis suite

96810	liver	difenacoum	confirmed	0.001	mg/kg
96810	liver	brodifacoum	confirmed	0.0031	mg/kg
96810	liver	bromadiolone	confirmed	0.0007	mg/kg

Conclusion

It was suspected that these ravens had been poisoned. Laboratory analysis for a range of likely pesticides has been undertaken on the submitted samples. These tests have detected and confirmed a residue of fenthion in the gizzard content of the raven examined and poisoning with this pesticide is likely to be the cause of its death. There were also small residues of brodifacoum, bromadiolone and difenacoum confirmed in the liver, which are consistent with exposure only. Fenthion was approved for use as a sheep dip and so this incident has been assigned to veterinary use, but it is likely that an illegal use of it has occurred in the area.