WILDLIFE INCIDENT UNIT

WILDLIFE INCIDENT REPORT

15/13
The Food & Environment Research Agency

INCIDENT NUMBER 15/13

PART OF STUDY FSGD-190

REGIONAL NUMBER W/13/04

OTHER REFERENCES 28-B0166-03-13

SENDER VLA Carmarthen

LOCATION Holywell
Flintshire

GRID REFERENCE [redacted]

INCIDENT DATE 3 February 2013

SUSPECTED CAUSE OF INCIDENT mixture of rodenticides unspecified

DATE OF REPORT 18 July 2013

REPORTING OFFICER [redacted]

SIGNED : [redacted]

NUMBERS AND SPECIES INVOLVED

2	common buzzard
1	honey buzzard

COPIED TO [redacted]

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Samples received			Date received	Sample identifier
96671	common buzzard		27/3/13	28-B0166-03-13 : 1
96671	common buzzard	tissues	27/3/13	28-B0166-03-13 : 1
96672	common buzzard		27/3/13	28-B0166-03-13 : 2
96672	common buzzard	tissues	27/3/13	28-B0166-03-13 : 2
96673	honey buzzard		27/3/13	28-B0166-03-13 : 3
96673	honey buzzard	tissues	27/3/13	28-B0166-03-13 : 3

Summary of field data

Three buzzards were found over a 10-day period and handed in to a wildlife rescue centre. The buzzards were all alive when they were handed in to the rescue centre but subsequently died. None of the buzzards appeared to have been shot. The buzzards were found in similar area but not very close together

Summary of post mortem report

Three buzzards in poor condition were submitted for post mortem. The buzzards weighed between 567g and 666g and all three had undergone a moderate degree of autolysis. The sex of the birds was not determined. Two of the birds were common buzzards; the third was a honey buzzard. All three birds were emaciated, in poor condition with no visible fat. In the alimentary system the stomachs of one bird were empty, a second bird had a small amount of fibrous material in the gizzard and the third bird had parts of a chick in the oesophagus and stomachs. No other abnormalities were seen.

Analysis : carbamate (LC) analysis suite

96673	gizzard contents	no carbamate (LC) detected	detection limit	0.06	mg/kg

Analysis : organophosphate analysis suite

96673	gizzard contents	no organophosphate detected	detection limit	0.5	mg/kg

Analysis : rodenticide analysis suite

96671	liver	difenacoum	confirmed	0.06	mg/kg
96671	liver	brodifacoum	confirmed	0.0077	mg/kg
96671	liver	bromadiolone	confirmed	0.00081	mg/kg
96672	liver	difenacoum	confirmed	0.086	mg/kg
96672	liver	brodifacoum	confirmed	0.24	mg/kg
96672	liver	bromadiolone	confirmed	0.029	mg/kg
96672	liver	difethialone	confirmed	0.032	mg/kg
96673	liver	difenacoum	confirmed	0.026	mg/kg
96673	liver	bromadiolone	confirmed	0.00056	mg/kg

Conclusion

It was suspected that these buzzards had been poisoned. Laboratory analysis for a range of likely pesticides has been undertaken on the submitted samples. These tests have detected and confirmed several anticoagulant rodenticide residues in the liver of these birds; in one buzzard there were residues of brodifacoum, difenacoum, bromadiolone and difethialone and the other two buzzards had residues of difenacoum and bromadiolone, with one of these buzzards there was also a brodifacoum residue confirmed. These buzzards were in poor to emaciated body condition, with no haemorrhages reported in them, so it is likely that in two of them the residues are consistent with exposure only. However, the death of buzzard (96672) may be attributed to poisoning, particularly given the presence and amount of brodifacoum in combination with the other anticoagulant rodenticides. Difethialone has only recently been approved for use in the UK (during 2011) and this is the first year that WIIS has reported liver residues with this anticoagulant rodenticide.