WILDLIFE INCIDENT UNIT

77/11

The Food and Environment Research Agency

WILDLIFE INCIDENT REPORT

INCIDENT NUMBER

77/11

RESTRICTED

PART OF STUDY

FSGD-130

REGIONAL NUMBER

W/11/14

OTHER REFERENCES 29/B0010/07/11

SENDER

VLA Aberystwyth

LOCATION

Coity Mountain, nr Blaina

Monmouthshire

GRID REFERENCE

INCIDENT DATE

4 July 2011

SUSPECTED CAUSE

OF INCIDENT

carbofuran

abuse

DATE OF REPORT

26 August 2011

REPORTING OFFICER

SIGNED :

NUMBERS AND SPECIES INVOLVED

1 buzzard

pigeon carcase (bait?) 1

2 raven

COPIED TO









Sald Miles

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WILDLIFE INCIDENT REPORT

77/11 RESTRICTED

Samples received			Date received	Sample identifier		
91476	raven		8/7/11	VLA ref 29-B0010-07-11, Raven 1		
91476	raven .	tissues	8/7/11	VLA ref 29-B0010-07-11, Raven 1		
91477	raven		8/7/11	VLA ref 29-B0010-07-11, Raven 2		
91477	raven	tissues	8/7/11	VLA ref 29-B0010-07-11, Raven 2		
91478	buzzard		8/7/11	VLA ref: 29-B0010-07-11		
91478	buzzard	tissues	8/7/11	VLA ref: 29-B0010-07-11		
91479	pigeon carcase (bait?)		8/7/11	VLA ref.: 29-B0010-07-11		

Summary of field data

Two dead ravens and a dead buzzard were found at a former peregrine site. The carcases were on an open hill. There were peregrines poisoned at this site following the abuse of carbofuran last year (99/10, W/10/17 refers). There were two half eaten racing pigeons also found in the area. All the carcases were collected and the incident was reported to the Welsh Assembly Government. There were no peregrines nesting at this site this year, although there is a successful nest not far away.

Summary of post mortem report

Two adult ravens, a male and female, both of weight 1.5kg and a buzzard, an adult female of 1.1kg were submitted for post-mortem. All were in good body condition, but with severe autolysis and they were not ringed. Adult maggots were present in the plumage of all three bird carcases. There was partial evisceration of the buzzard carcase. Feather and muscle was present in the proventriculus and crop of all three birds. There were no other lesions seen in organs examined, but the endocrine system was not examined in any of these three birds and all brain tissue was liquefying. One headless pigeon carcase and the head of another pigeon were not examined and were sent on for analysis.

Analysis: carbamate (LC) analysis suite

91476 91478 91479	gizzard contents gizzard contents	carbofuran carbofuran bendiocarb	confirmed confirmed confirmed	270 8.3 28	mg/kg mg/kg µg			
Analysis : organophosphate analysis suite								
91476 91476 91478 91478 91479	gizzard contents gizzard contents gizzard contents gizzard contents	diazinon chlorpyrifos diazinon chlorpyrifos no organophosphate detected	confirmed confirmed confirmed confirmed detection limit	0.57 1.3 0.026 0.1 3	mg/kg mg/kg mg/kg mg/kg µg			
Analysis : rodenticide analysis suite								
91476 91478 91478 91478	liver liver liver liver	difenacoum difenacoum brodifacoum bromadiolone	confirmed confirmed confirmed	0.13 0.014 0.00074 0.0062	mg/kg mg/kg mg/kg mg/kg			

Conclusion

It was suspected that these birds 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 carbofuran in the gizzard content of the birds examined and this is likely to be the cause of their death. In addition, there were also

77/11

small, confirmed, residues of diazinon and chlorpyrifos and these were again found in the gizzard content of both birds. There were also confirmed residues of difenacoum in the liver of one raven and the buzzard and bromadiolone and brodifacoum were also found in the liver of the buzzard. The pigeon carcase was very decomposed and was mainly feather and bone, with tags still present. A small bendiocarb residue only was confirmed from these pigeon remains. It appears that the abuse of carbofuran continues at this location, although the pigeon may not be the bait involved in this poisoning incident. These three birds have probably eaten the same material, given the similar additional small residues of diazinon and chlorpyrifos, but it is not certain where or when this occurred.