

WILDLIFE INCIDENT REPORT

INCIDENT NUMBER 22/18
PART OF STUDY FSGD-209
REGIONAL NUMBER W/18/08
OTHER REFERENCES 28/B0199/03/18
SENDER VLA Carmarthen

RESTRICTED

LOCATION St Mary Hill
Glamorgan

GRID REFERENCE [REDACTED]

INCIDENT DATE 26 March 2018

SUSPECTED CAUSE OF INCIDENT carbofuran
abuse

DATE OF REPORT 27 June 2018

REPORTING OFFICER [REDACTED]

SIGNED : [REDACTED]

NUMBERS AND SPECIES INVOLVED

2 buzzard
1 peregrine

COPIED TO

| | |
|------------|------------|
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |

| Samples received | | | Date received | Sample identifier |
|------------------|-----------|---------|---------------|----------------------------|
| 98986 | buzzard | | 6/4/18 | 28/B0199/03/18 : 1 ONE (1) |
| 98986 | buzzard | tissues | 6/4/18 | 28/B0199/03/18 : 1 ONE (1) |
| 98987 | buzzard | | 6/4/18 | 28/B0199/03/18 : 1 ONE (2) |
| 98987 | buzzard | tissues | 6/4/18 | 28/B0199/03/18 : 1 ONE (2) |
| 98988 | peregrine | | 6/4/18 | 28/B0199/03/18 : 1 ONE (3) |
| 98988 | peregrine | tissues | 6/4/18 | 28/B0199/03/18 : 1 ONE (3) |

Summary of field data

Two buzzards and a peregrine falcon were found dead with feathers of a pigeon nearby. Initially, two dog walkers found a buzzard and peregrine falcon on a quarry road and reported it to an engineering contractor. Another buzzard was found an hour later in a similar location. On a mound adjacent to the road there were feathers from a pigeon in two locations, a few metres apart. The route is walked daily by the dog walkers who reported the incident. The contractor stated that peregrines are thought to nest on the quarry wall nearest to the entrance. A field enquiry occurred the following day and a PCSO collected the birds and bagged them. The PCSO and wildlife adviser then searched the quarry road and quarry void, but nothing was found other than a large nest on the lower quarry wall that was thought to be the remains of a nest from previous years. A photograph was taken of the nest remains. The birds were then taken to the APHA. The birds had not been frozen. The incident occurred on a quarry site.

Summary of post mortem report

Two buzzards and a peregrine falcon were submitted for post-mortem. All birds were adult and had a fair body condition. Bird 1 (buzzard) was female and weighed 1.1 kg. Bird 2 (buzzard) was male and weighed 0.8 kg. Bird 3 (peregrine falcon) was female and weighed 0.9 kg. In bird 1 the lungs were autolysed. In birds 2 & 3 the respiratory systems were unremarkable. In bird 1 & 2 the crop contained a large number of feathers, red material and earthworms which extended down the oesophagus and into the gizzard. In bird 3 the crop contained feathers and indistinguishable material also extending into the gizzard. The endocrine systems were not examined in all birds. The external, skin and sub cutis and musculo-skeletal systems in all the birds were unremarkable, as were all other body systems.

Analysis : chloralose

| | | | | | |
|-------|--------|------------------------|-----------------|-------|-------|
| 98986 | kidney | no chloralose detected | detection limit | 0.004 | mg/kg |
| 98987 | kidney | no chloralose detected | detection limit | 0.004 | mg/kg |
| 98988 | kidney | no chloralose detected | detection limit | 0.003 | mg/kg |

Analysis : metaldehyde & carb (LC) analysis suite

| | | | | | |
|-------|------------------|------------|-----------|--------|-------|
| 98986 | crop contents | carbofuran | confirmed | 36 | mg/kg |
| 98986 | gizzard contents | carbofuran | confirmed | 37 | mg/kg |
| 98987 | crop contents | carbofuran | confirmed | 71 | mg/kg |
| 98987 | gizzard contents | carbofuran | confirmed | 0.45 | mg/kg |
| 98988 | gizzard contents | carbofuran | confirmed | 270 | mg/kg |
| 98988 | gizzard contents | carbaryl | confirmed | 0.0091 | mg/kg |

Analysis : organophosphate analysis suite

| | | | | | |
|-------|------------------|-----------------------------|-----------------|-----|-------|
| 98986 | crop contents | no organophosphate detected | detection limit | 0.7 | mg/kg |
| 98986 | gizzard contents | no organophosphate detected | detection limit | 0.4 | mg/kg |
| 98987 | crop contents | no organophosphate detected | detection limit | 0.8 | mg/kg |
| 98987 | gizzard contents | no organophosphate detected | detection limit | 0.4 | mg/kg |
| 98988 | gizzard contents | no organophosphate detected | detection limit | 0.4 | mg/kg |

Analysis : rodenticide analysis suite

| | | | | | |
|-------|-------|--------------|-----------|---------|-------|
| 98986 | liver | difenacoum | confirmed | 0.0028 | mg/kg |
| 98986 | liver | brodifacoum | confirmed | 0.00039 | mg/kg |
| 98986 | liver | bromadiolone | confirmed | 0.00029 | mg/kg |
| 98987 | liver | difenacoum | confirmed | 0.0018 | mg/kg |
| 98988 | liver | brodifacoum | confirmed | 0.0018 | 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 all the gizzard and crop content samples tested. The peregrine had the largest carbofuran residue and there was also a very small residue of carbaryl confirmed in this bird only. Therefore, the bait or the carbofuran used, might be contaminated with carbaryl. The raptors also had confirmed residues of anticoagulant rodenticides in their liver that are consistent with exposure only; there was brodifacoum found in the peregrine, difenacoum found in one buzzard and difenacoum, brodifacoum and bromadiolone in the other buzzard. Two buzzards and a peregrine have died following exposure to carbofuran that was likely intentionally applied to a pigeon, so from these results and the information reported an abuse of the pesticide is suspected.