

WILDLIFE INCIDENT UNIT

16/11



The Food and Environment
Research Agency

WILDLIFE INCIDENT REPORT

RESTRICTED

INCIDENT NUMBER 16/11
PART OF STUDY FSGD-130
REGIONAL NUMBER W/11/04
OTHER REFERENCES 28/B0159/03/11
SENDER VLA Carmarthen
LOCATION Clarbston
Pembrokeshire
GRID REFERENCE SN0422
INCIDENT DATE 10 March 2011
SUSPECTED CAUSE OF INCIDENT fenthion
veterinary use
DATE OF REPORT 2 June 2011

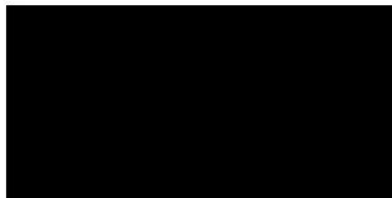
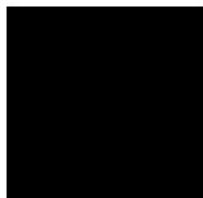
REPORTING OFFICER [REDACTED]

SIGNED : ... [REDACTED]

NUMBERS AND SPECIES INVOLVED

1 red kite

COPIED TO



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| Samples received | | Date received | Sample identifier |
|------------------|----------|---------------|-------------------|
| 89840 | red kite | 16/3/11 | 28/B0158/03/11 |
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| | tissues | | |

Summary of field data

A dead red kite was found in a field. The red kite trust was contacted and they carried out a field visit, collected the carcass and delivered it to the VLA. The field is near a known red kite nest site. There were power cables over the field, but the bird was not found beneath them. There were also no obvious injuries or burns on the bird and it appeared to be an adult female in good body condition.

Summary of post mortem report

An adult, female red kite in fair to good condition and weight 1kg was submitted for post-mortem. There were moderate amounts of fat present. The liver appeared dark in colour. The crop was empty. The proventriculus contained a large amount of white/black wool or hair, which resembled lamb tails. The gastro-intestinal tract was empty beyond the proventriculus. The kidneys appeared dark in colour. Gross examination of the rest of the carcass did not reveal any significant abnormalities, but the endocrine system was not examined.

Analysis : carbamate (LC) analysis suite

| | | | | | |
|-------|------------------|----------------------------|-----------------|------|-------|
| 89840 | gizzard contents | no carbamate (LC) detected | detection limit | 0.03 | mg/kg |
|-------|------------------|----------------------------|-----------------|------|-------|

Analysis : chloralose-alpha

| | | | | | |
|-------|--------|------------------------------|-----------------|-----|-------|
| 89840 | kidney | no chloralose-alpha detected | detection limit | 0.9 | mg/kg |
|-------|--------|------------------------------|-----------------|-----|-------|

Analysis : organophosphate analysis suite

| | | | | | |
|-------|------------------|----------|-----------|-----|-------|
| 89840 | gizzard contents | fenthion | confirmed | 120 | mg/kg |
|-------|------------------|----------|-----------|-----|-------|

Analysis : rodenticide analysis suite

| | | | | | |
|-------|-------|--------------|-----------|-------|-------|
| 89840 | liver | difenacoum | confirmed | 0.014 | mg/kg |
| 89840 | liver | brodifacoum | confirmed | 0.07 | mg/kg |
| 89840 | liver | bromadiolone | confirmed | 0.008 | mg/kg |

Conclusion

It was suspected that this red kite 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 contents and the amount found is significant and likely to be the cause of death of this red kite. There were also residues of brodifacoum, difenacoum and bromadiolone confirmed in liver, consistent with exposure to several anticoagulant rodenticides. This incident has been attributed to veterinary use as fenthion was approved as a veterinary pesticide. However, there are no current approvals for this active substance and so an illegal use is suspected.