



Raptor health as an indicator of ecosystem health:

Part 1



A tool for conservation

Gabriela Peniche



Sample collection challenges

Part 2



Gabriela Peniche

Environmental Pressures

Pollution



Agricultural practices



Glen Cousquer



Communications, transport and energy



Assessing Raptor Health

**Post mortem examinations:
15 raptor species**

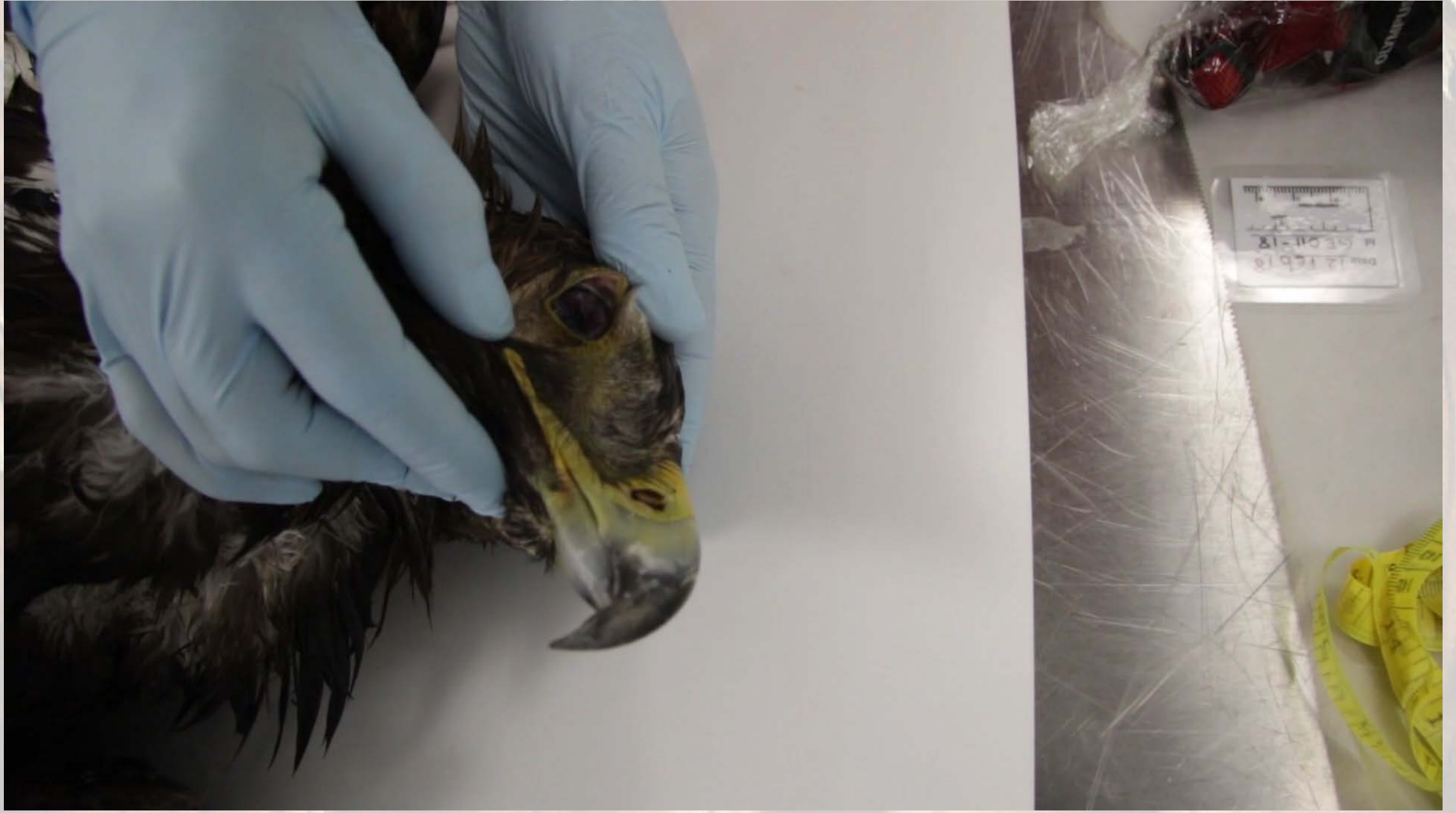


**Live golden eagle chick
examinations**



Assessing Environmental Health

Post mortem Examinations



Live Golden Eagle Chick Examinations

Study Area



Live Golden Eagle Chick Examinations



Results



S. Dures

Results: Post Mortem Examinations

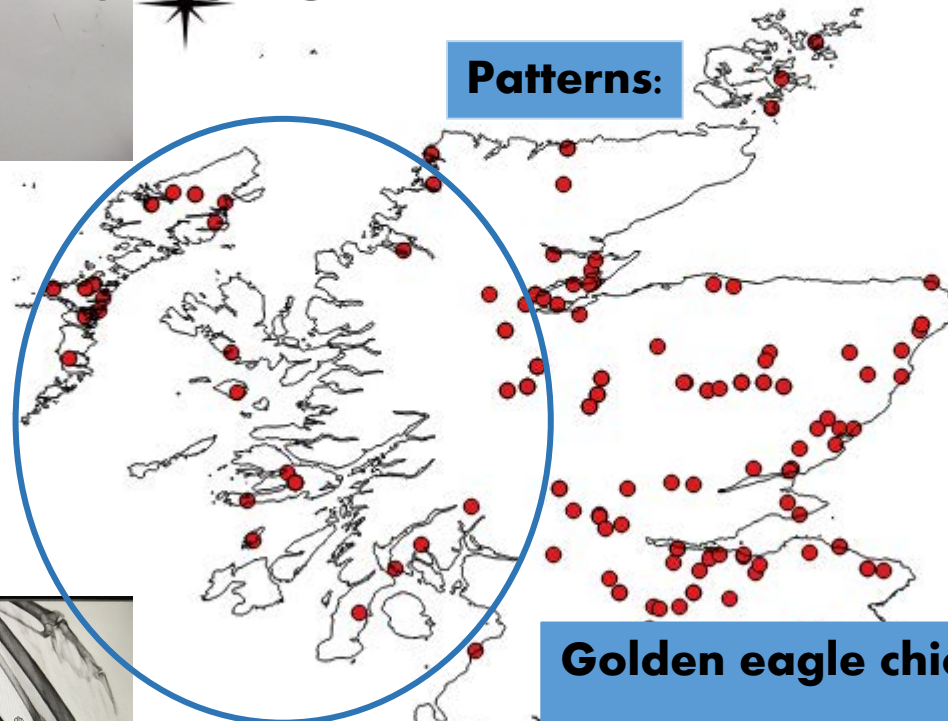
N = 173 examinations



15 raptor species



Patterns:

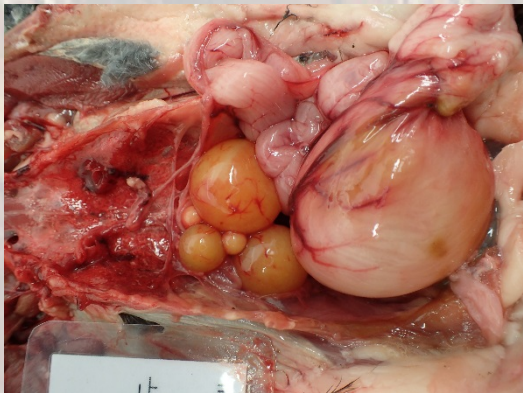


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Golden eagle chicks:

Respiratory problems

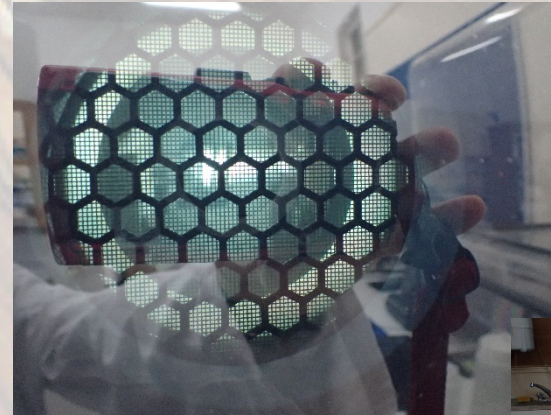
300 km



Toxicology Analysis

~ 160 Chemicals

Heavy metals	11
Pesticides	136
Rodenticides	10
Acaricides	
Insecticides	
Molluscicides	
Herbicides	
Fungicides	
Veterinary pharmaceuticals	24
Antibiotics	
Anthelmintics	
Poisons	7



Results: Live golden eagle examinations



**1/4 of chicks examined in the West
→ sick**

N = 51 chicks examined

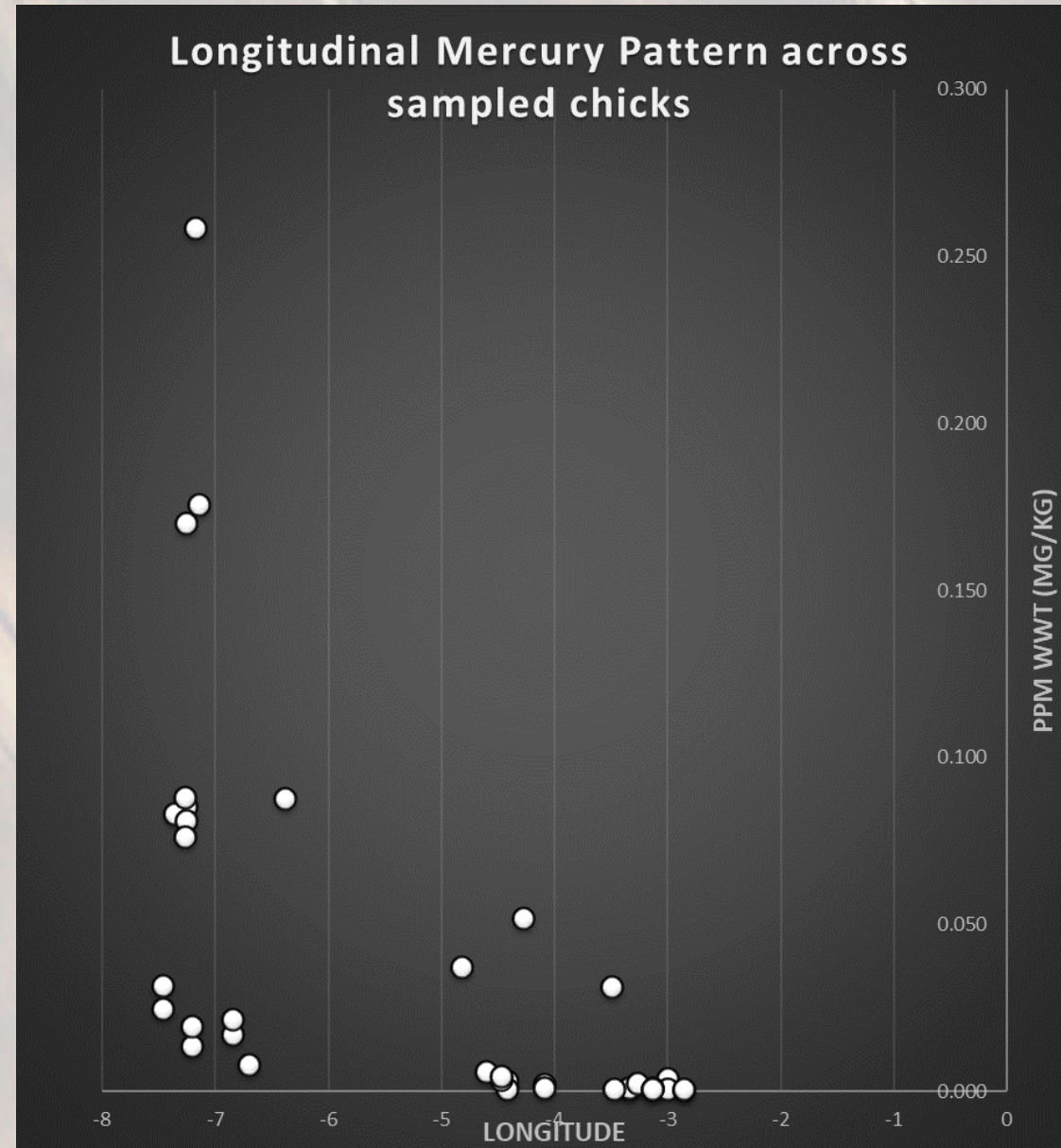


Results: Toxicology

Mercury

N = 37

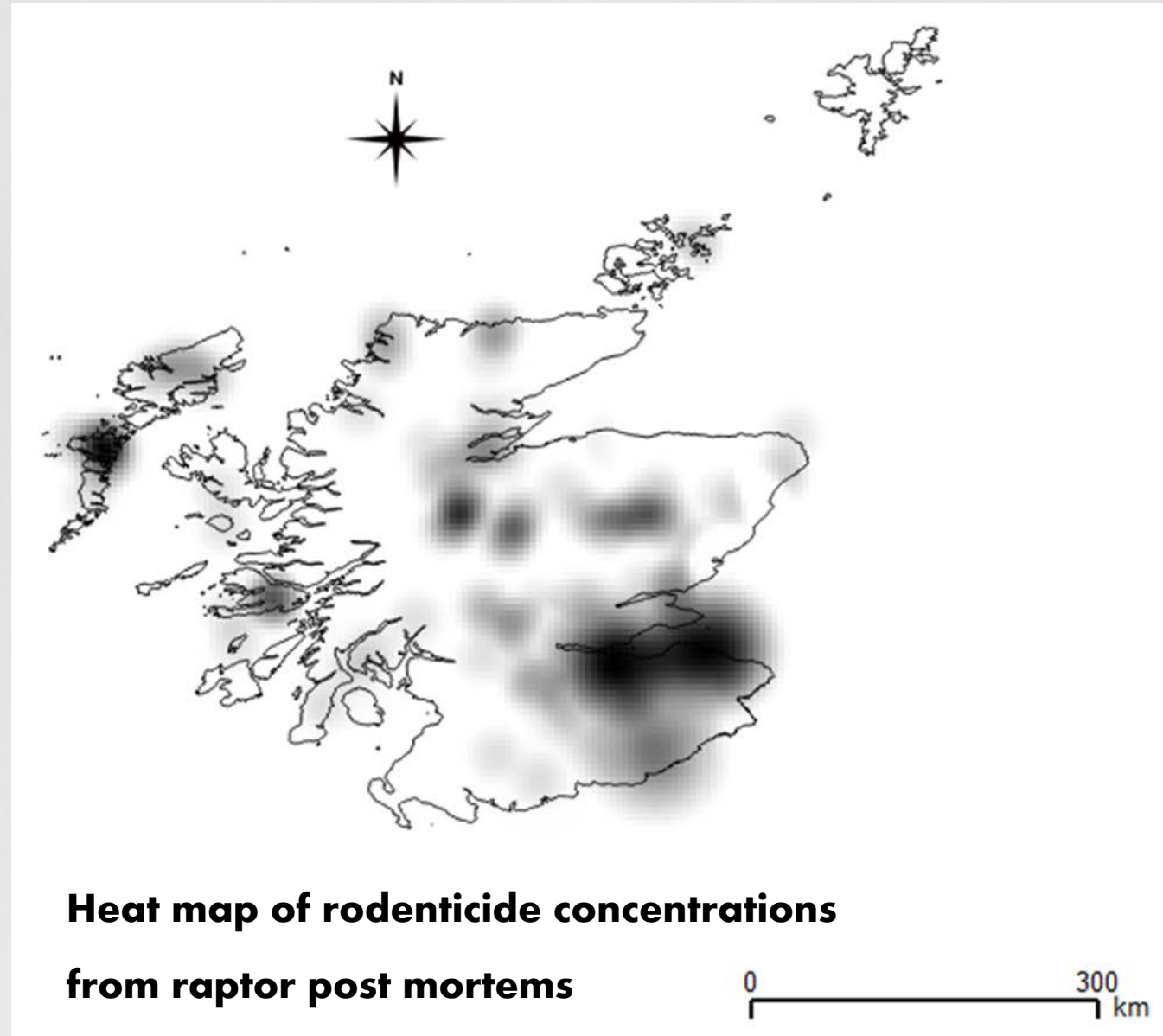
Live Golden Eagle Chick
Examinations - Bloods



WEST

EAST

Results: Raptor's Eye View



Sample collection challenges



Live and Dead



Logistics



Communication

Economics

Communication

Live

- Respect / knowledge field experts

- Contacts

-Timing



September 2017

Scottish Raptor

Bringing you the latest news from the Scottish Raptor Monitoring Scheme

Firstly an apology as it is nearly a year since our last issue of Scottish Raptor. To those of you who have been out there putting in the hardworking hours this breeding season, thank you so much for your efforts. I was please successful this year. And keep them coming and g...

It has been a busy year before capturing you full Scottish Government, B Commission, BTO and I working hard to secure it...

If you would be keen to see what you can sign up to receive www.wildlife.org.uk

Wildlife Disease & Contaminant Monitoring & Surveillance Network

WILDCOMS newsletter number 22: Winter 2016 www.wildlife.org.uk

The WILDCOMS newsletter is produced 3 or 4 times a year and reports recent newsworthy items and publications from member partners.

WILDCOMS scheme news

Raptor event in S...

Scottish Raptor Health Study

The number of golden eagle chicks return that will be large group of the doing this with a return between 1000-1500. eliminate blood values such as white blood cells for Scottish golden eagle chick reflect the letter for Gaby Perseche. Computer breaks are taken up by post message wild golden eagles can reach. We report wild golden eagle in the world by national.sandh-5122222.

Watch our fallsewen-post-mortem wouldn't exist without you!

Predatory Bird Monitoring Scheme (PBMS)

Monitoring of anticoagulant rodenticide recent monitoring data at the annual meeting Anticoagulant Rodenticides. This included which has recently been reported (Lizzy Blair-Lane). New report from WILDCOMS were recently presented at the annual meeting LIFE APEX project. The PBMS team have demonstrate how measurement of chemical management. Various WILDCOMS PBMS team will lead on demonstrating a risk mitigation measures at national and f...

RAPTOR SCIENCE SUPPORTS CONSERVATION

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BTO



Science SCOTLAND

Issue 21 Autumn 2017

Biodiversity: Spotlight on Scotland

www.sciencescotland.org

The Royal Society of Edinburgh KNOWLEDGE MADE USEFUL

A collage of nature photographs including a cat, a butterfly, a lake, and various plants and flowers.

Communication

Dead

- Submitters

- Legal and H & S

- Feedback



Logistics

- Transport

Dead

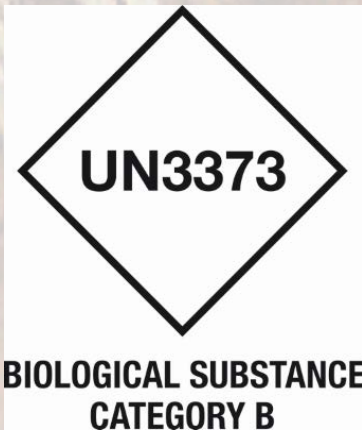
- Tissue choice

- Absence



- Freezer Space

- Time



Unbelievable! It looks like they've both been killed by the same stone...

Logistics

Live

- Permits & Licenses

- Readiness

- Sampling

- Efficiency



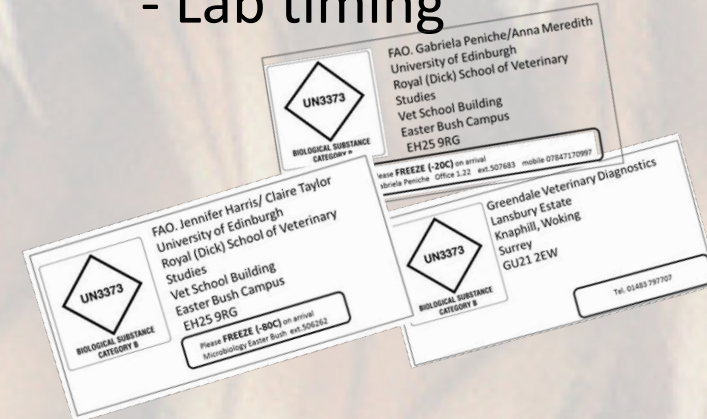
- Storage



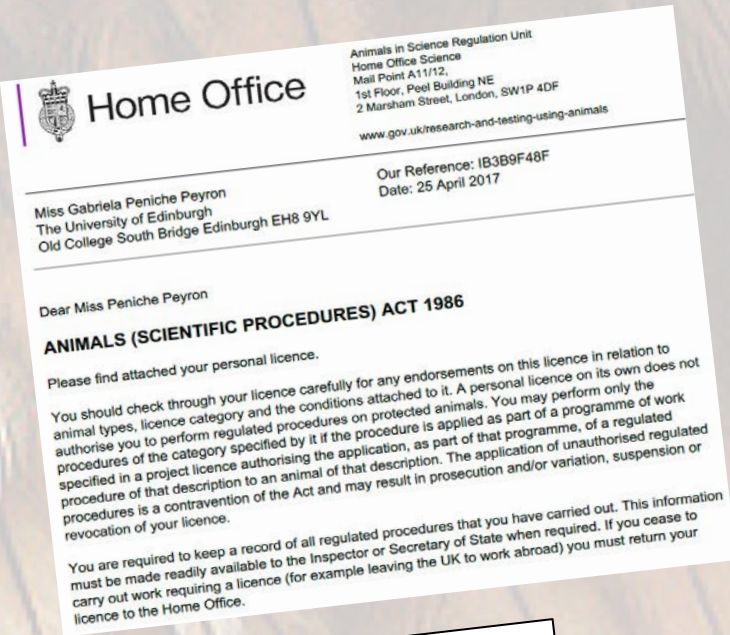
- Postage

- Packaging

- Lab timing



- Fitness



Disturbance and Ringing licenses

Egg collection license

Economics

Live and dead

- Fuel

- Postage

- Freezer

- Lab tests

- Collaborators

Summary

Whilst on the face of it gathering samples from live and dead birds seems simple, the organization required at each stage is complex and without care and continual oversight can result in failure.

Thanks for listening



Email: gabriela.peniche@roslin.ed.ac.uk

Website: <https://www.ed.ac.uk/vet/raptor-health-scotland>

Twitter: @Raptorscotland

Videos of my work: Simon Dures (You Tube)