

The M11 Badger Project

A Mitigation Case Study

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NPWS



The background

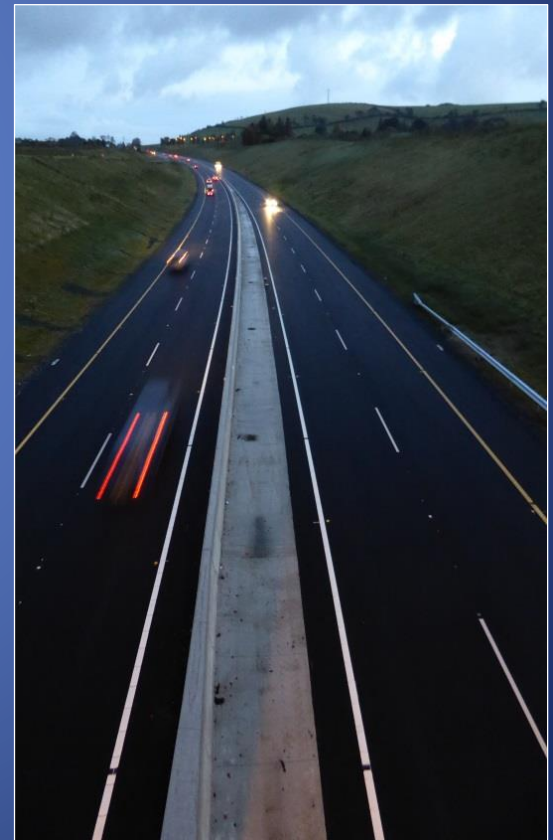
Before



During



After



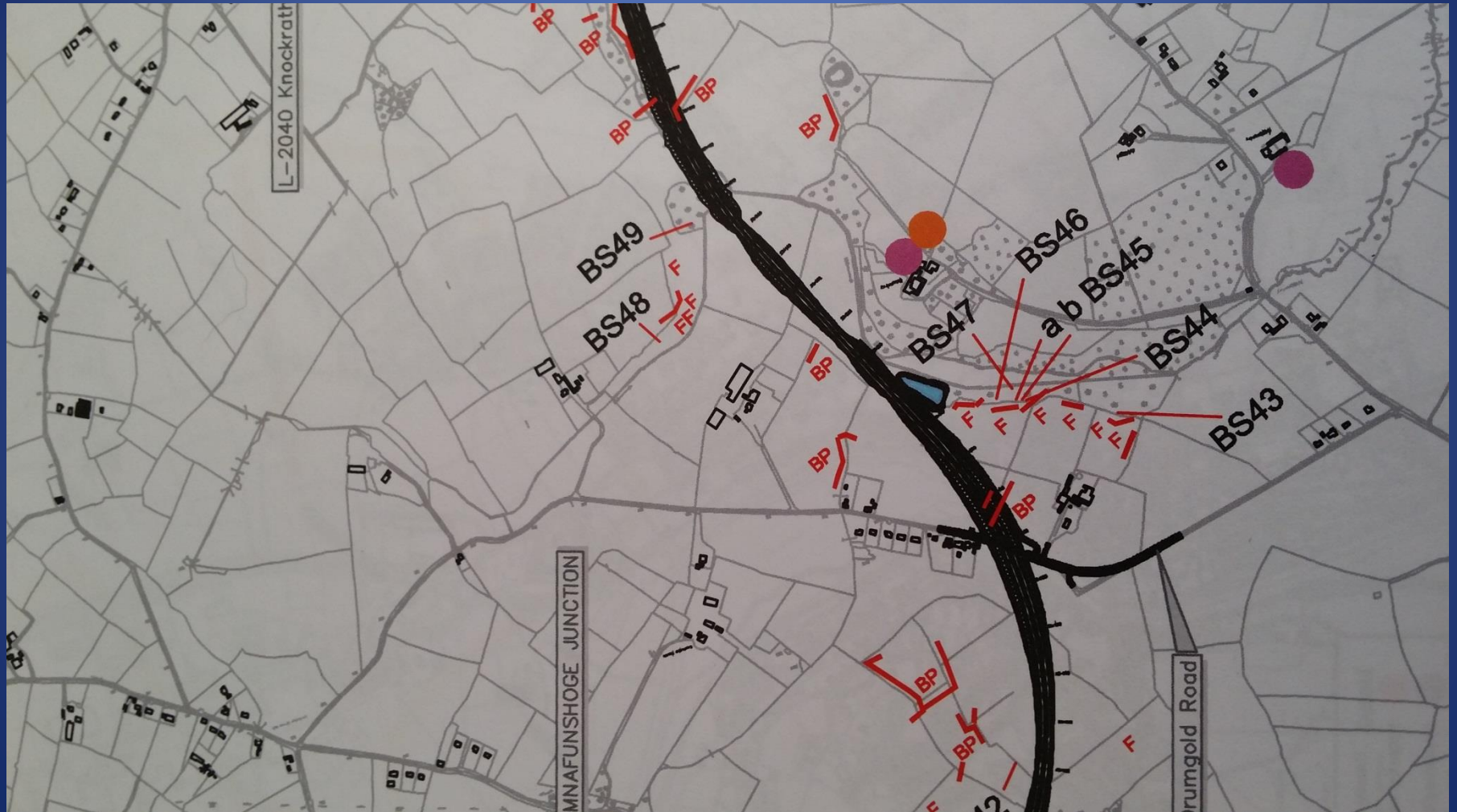
“Yvonne”



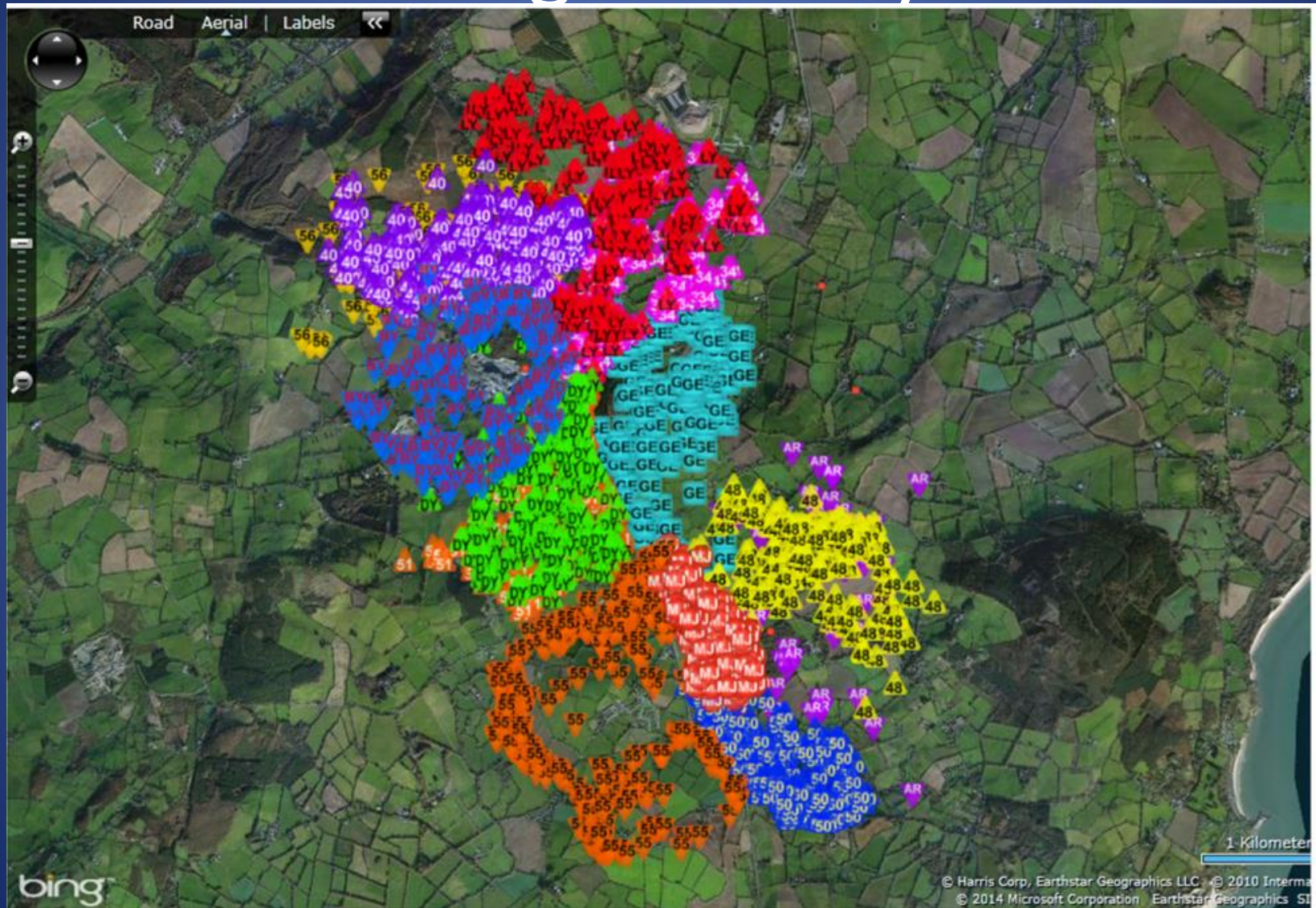
**Released
Badger with
collar
jumping while
running**



Badger Surveys



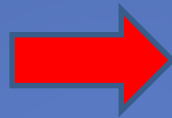
Badger Surveys



Issues

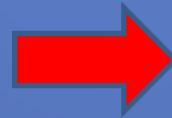
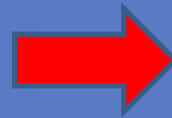
“Ecological Problem”

- Setts (breeding, social engagement)
- Traditional Paths (movement, feeding)
- Safety (people and badgers)
- Loss of habitat (home range)



“Engineering Answer”

- Artificial Setts
- Underpasses
- Fencing
- Ignore!



Sett Destruction



Seismic Activity



2017-04-15 9:50:39 PM M 2/3

48°F



EW Delaney

WWW.RECONYX.COM

Summary of Findings - Setts

- Multiple breeding setts (and breeders) in many groups
- Huge effort to get back to excluded setts
- Artificial setts not always necessary BUT should be evidence based
- Seismic shocks may be significant in breeding season

Movement – Underpasses & Fencing

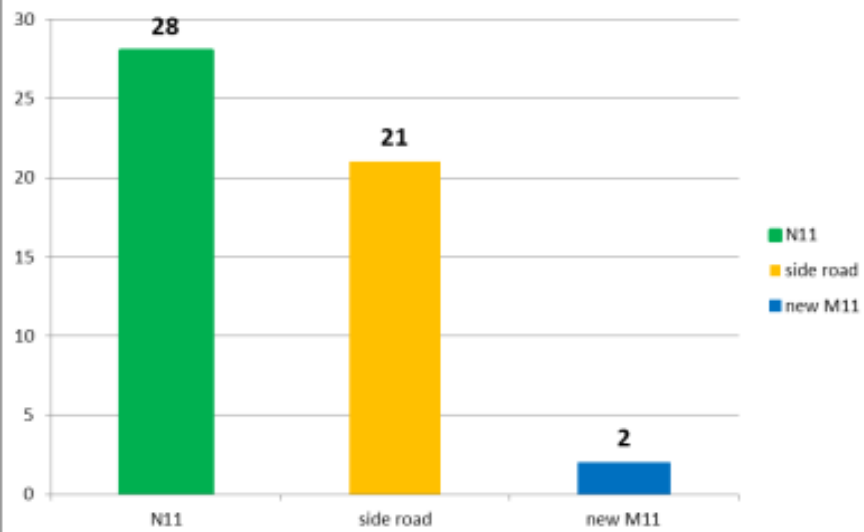


Emergency gates

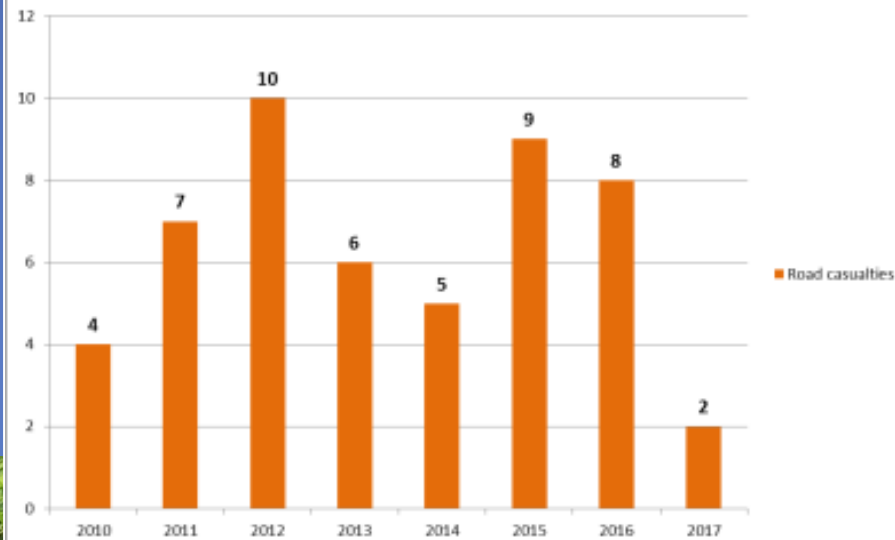


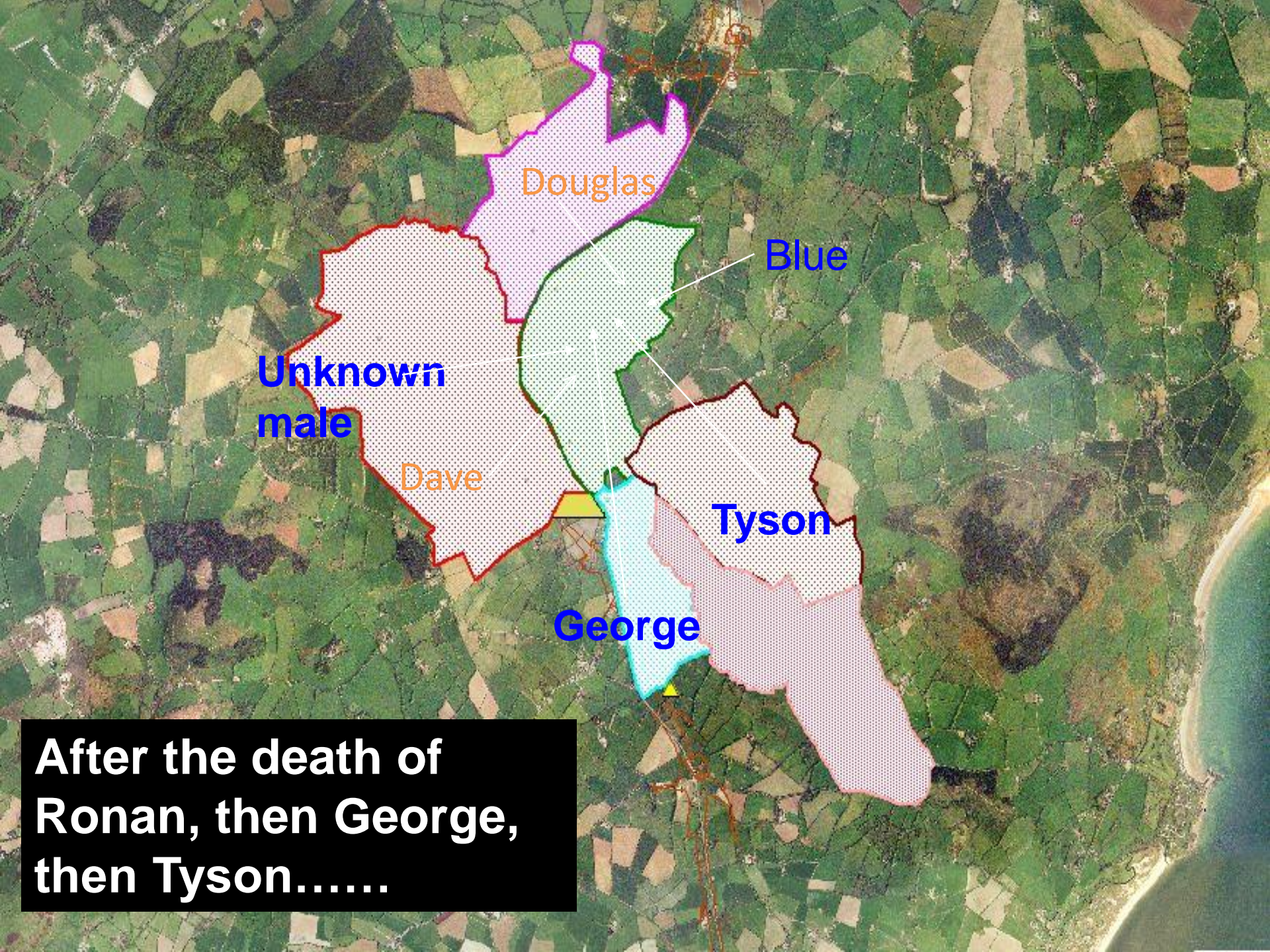
Road Traffic Accidents

Location of casualties



Recorded road casualties per annum





**After the death of
Ronan, then George,
then Tyson.....**

Findings - movement

- Underpasses used immediately
- Small but significant increase in nightly movement DURING works
- RTAs may be 10% mortality generally
- RTAs cause huge social upheaval in badger groups

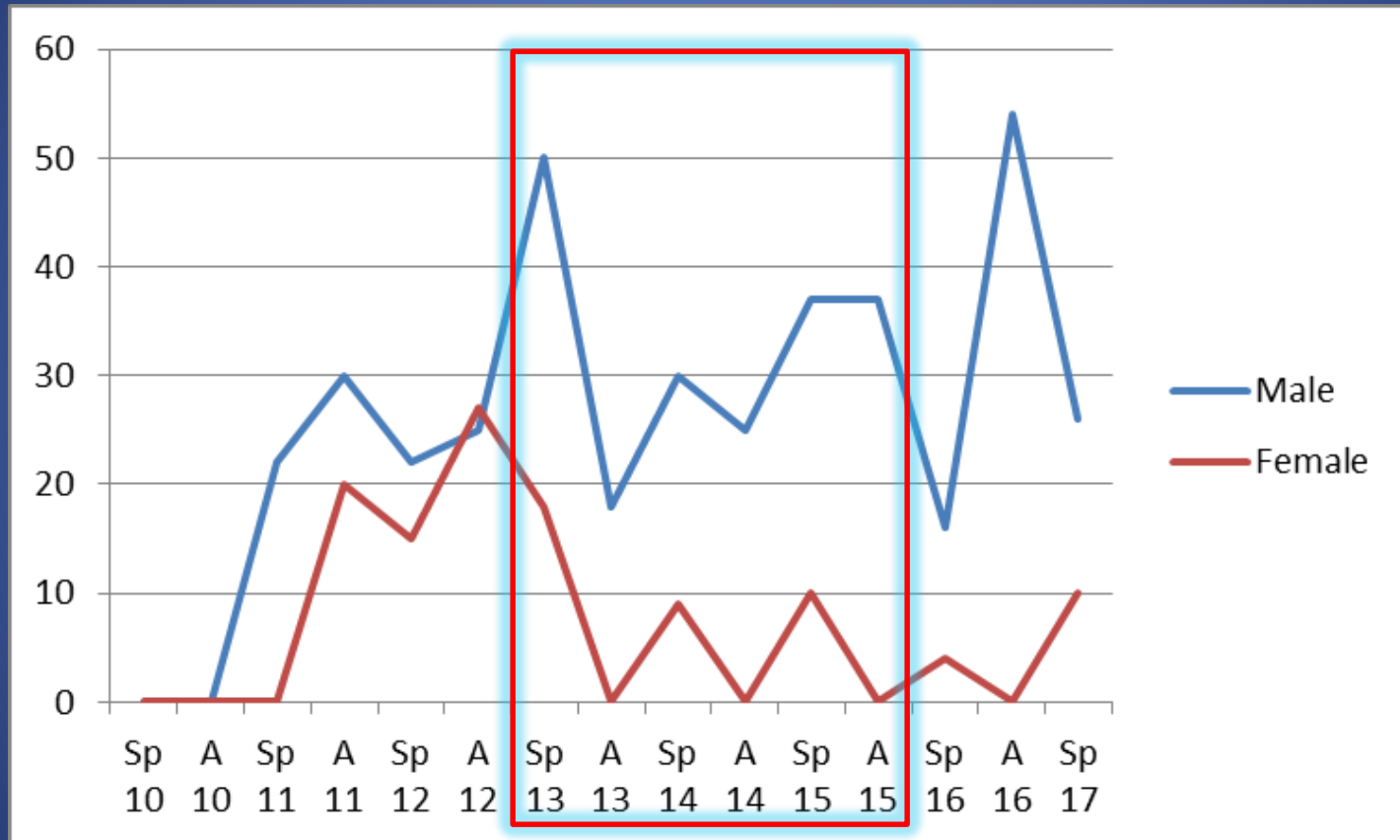
Loss of habitat



Bite wounds – a measure of disturbance



Bite Wounds – Stress?

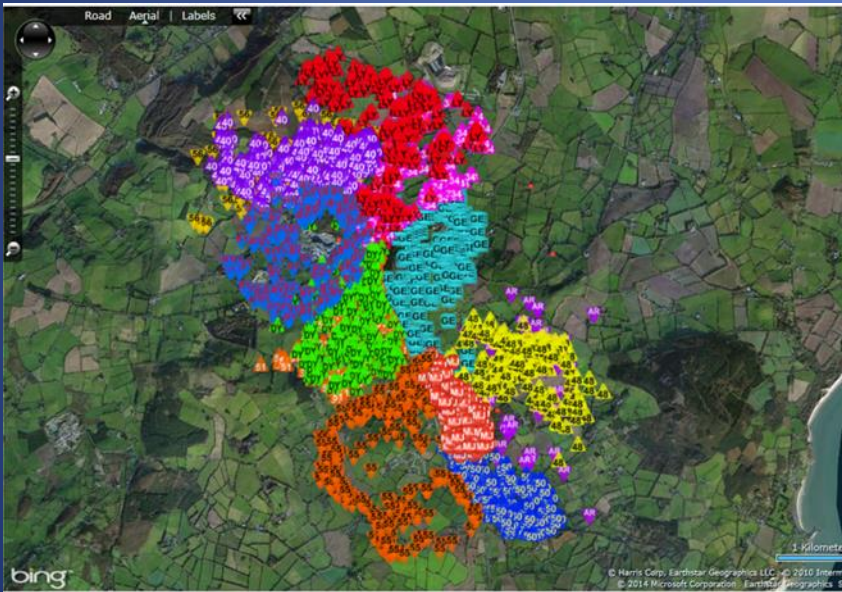


Male Average 26%; Female Average 7%

Note Severity of wound not taken into account

Recommendations - Survey

- Need longer and deeper studies prior to road
- Need to find setts
- Need to find social group boundaries
- Use technology



Recommendations - Fencing



- Mammal proof fencing for entire length, not just near underpasses
- Fencing checked for damage into the future
- Gates, bridges
- Deer

Recommendations - Underpasses



- Must be where badgers need them (CUTS)
- Thought required re where badgers pop out!
- Internal social group links crucial
- Avoid streams in front of entrance

Recommendations - Setts



- Artificial setts not always needed
- Proper protection during construction vital
- Timing of rock breaking

Thanks from Team Badger



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Teresa MacWhite DAFM
Peter Maher DAFM
Mark Foley DAFM
Denis Foley FRS
Aoibheann Gaughran TCD
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TRINITY
COLLEGE
DUBLIN



An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine

Badger Road Traffic Accidents 2010 - 2017

