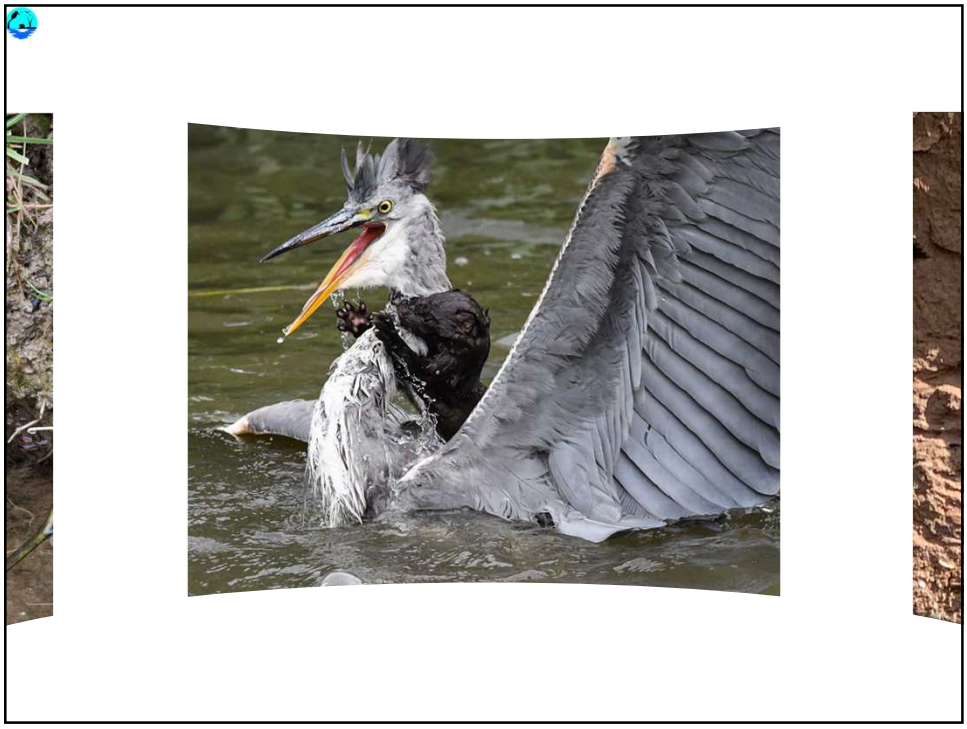
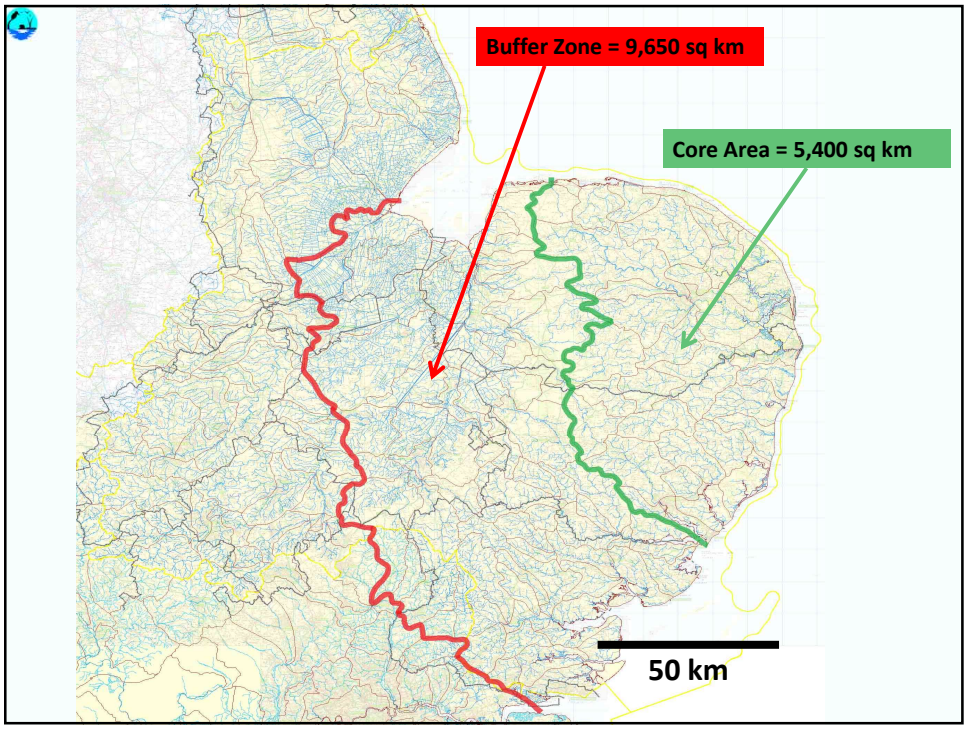
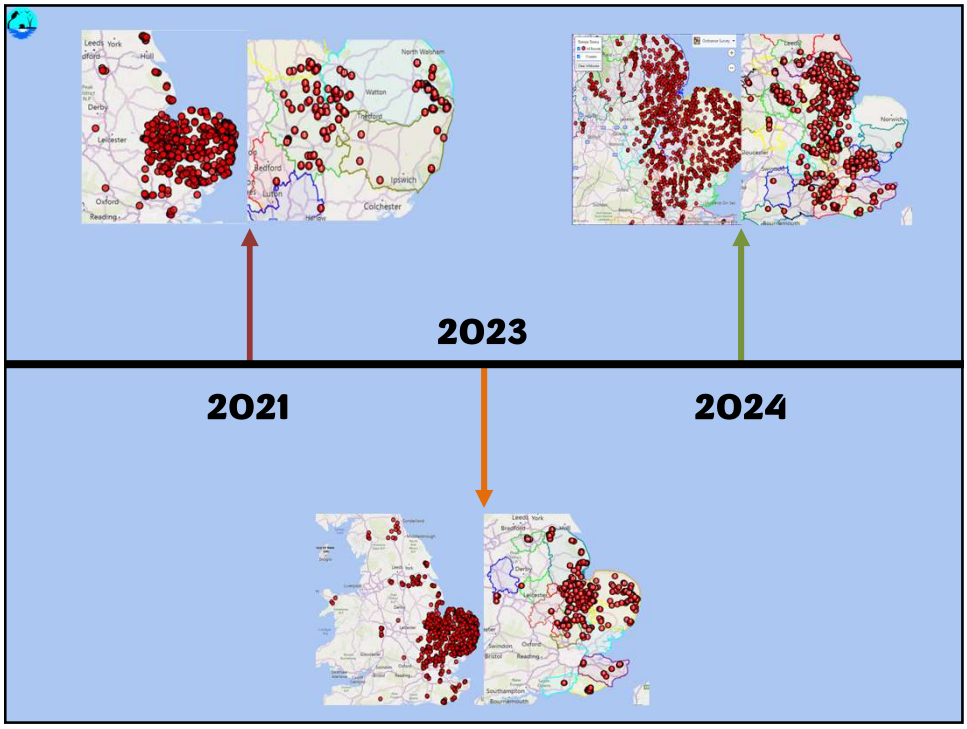
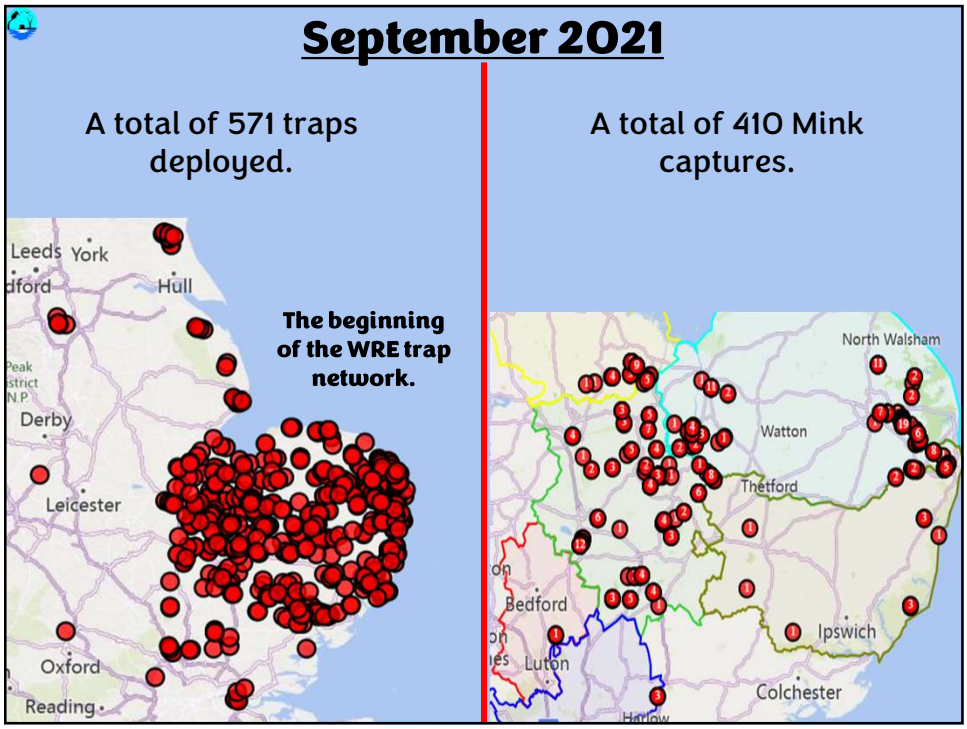

MINK

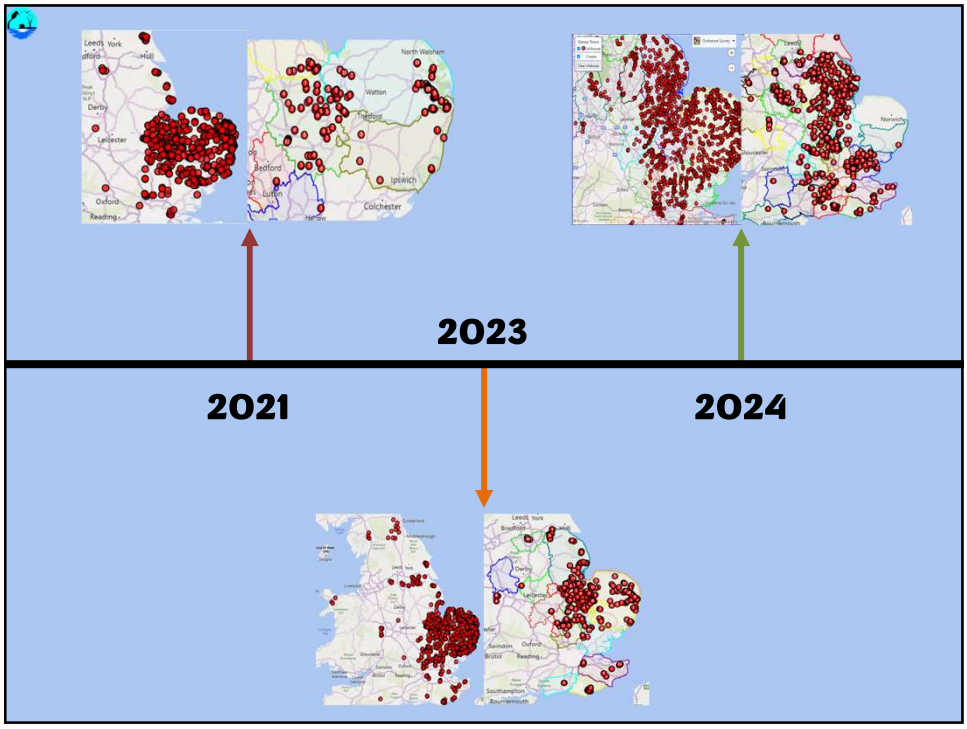

Mink: Our Part in their downfall
By Malc Smith

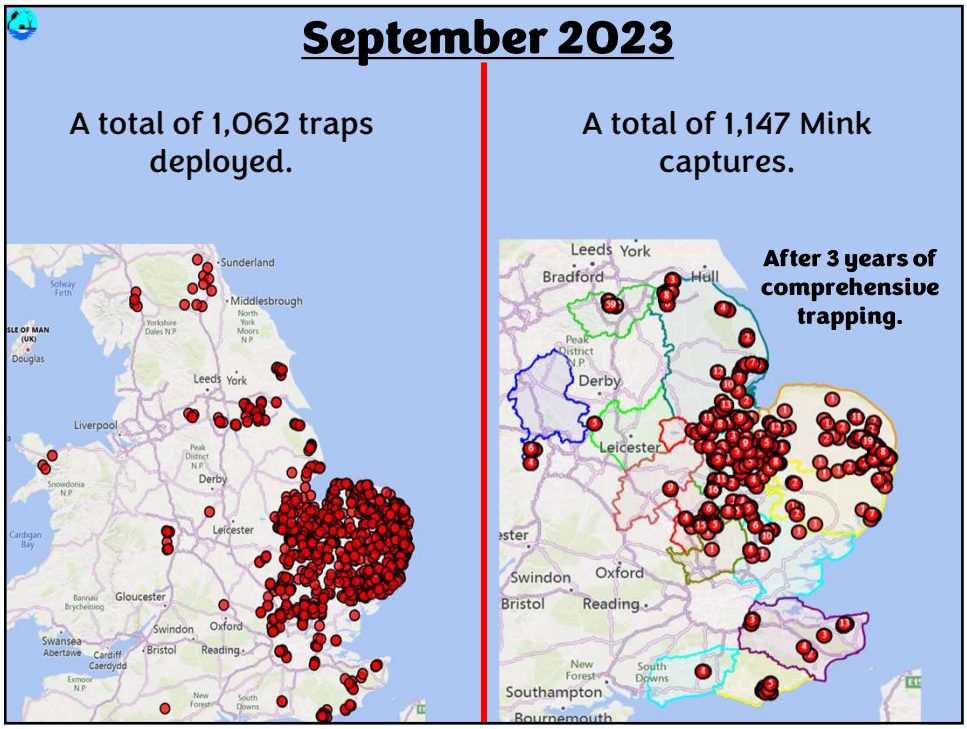


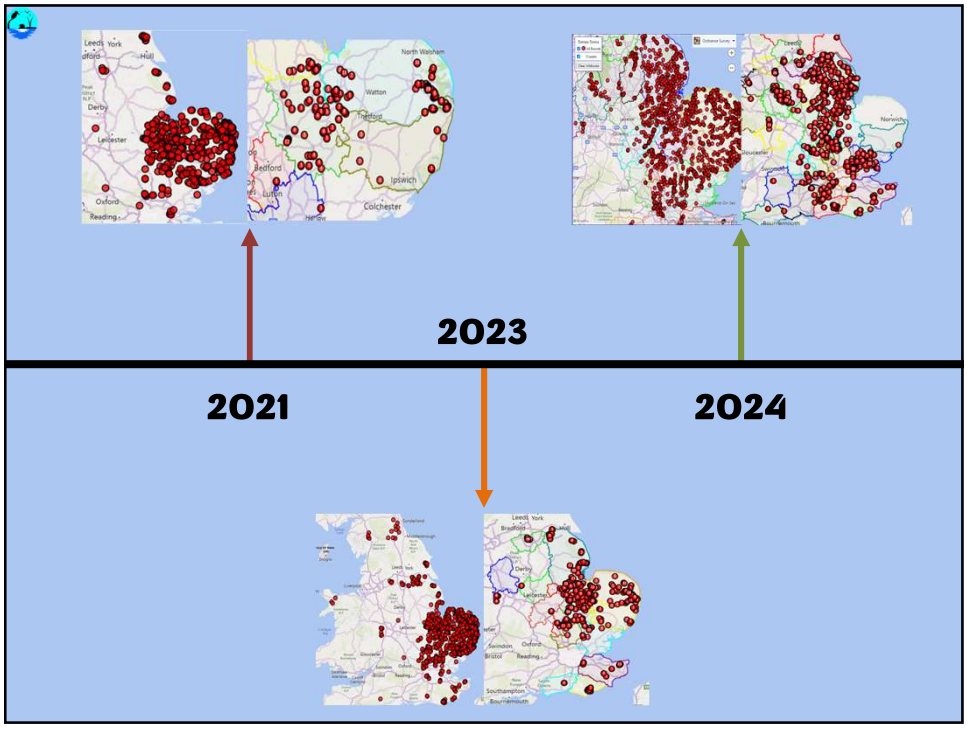

Buffer Zone = 9,650 sq km
Core Area = 5,400 sq km
50 km


2023
2021
2024


September 2021
A total of 571 traps deployed.
A total of 410 Mink captures.
The beginning of the WRE trap network.
Leeds
York
Hull
Derby
Leicester
Oxford
Reading
North Walsham
Watton
Thetford
Bedford
Luton
Ipswich
Colchester

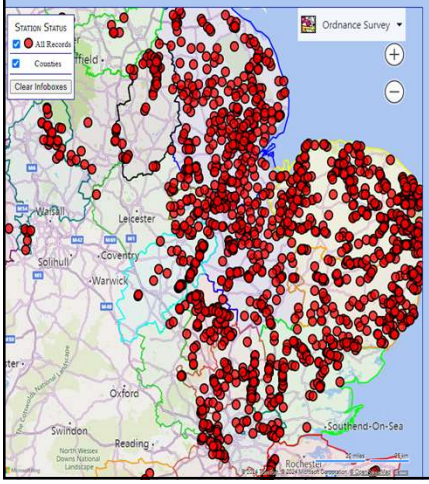

2023
2021
2024


September 2023
A total of 1,062 traps deployed.
A total of 1,147 Mink captures.
After 3 years of comprehensive trapping.
Sunderland
Middlesbrough
Leeds
York
Liverpool
Derby
Leicester
Gloucester
Swindon
Oxford
Bristol
Reading
Swansea
Cardiff
Douglas
Bradford
Hull
Peak District N.P.
Swindon
Oxford
Bristol
Reading
New Forest
South Downs
Southampton
Bournemouth

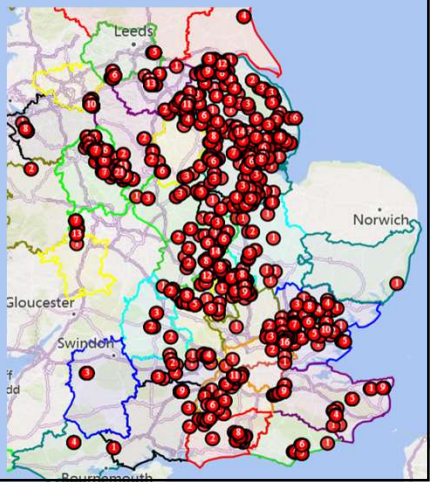

2023
2021
2024

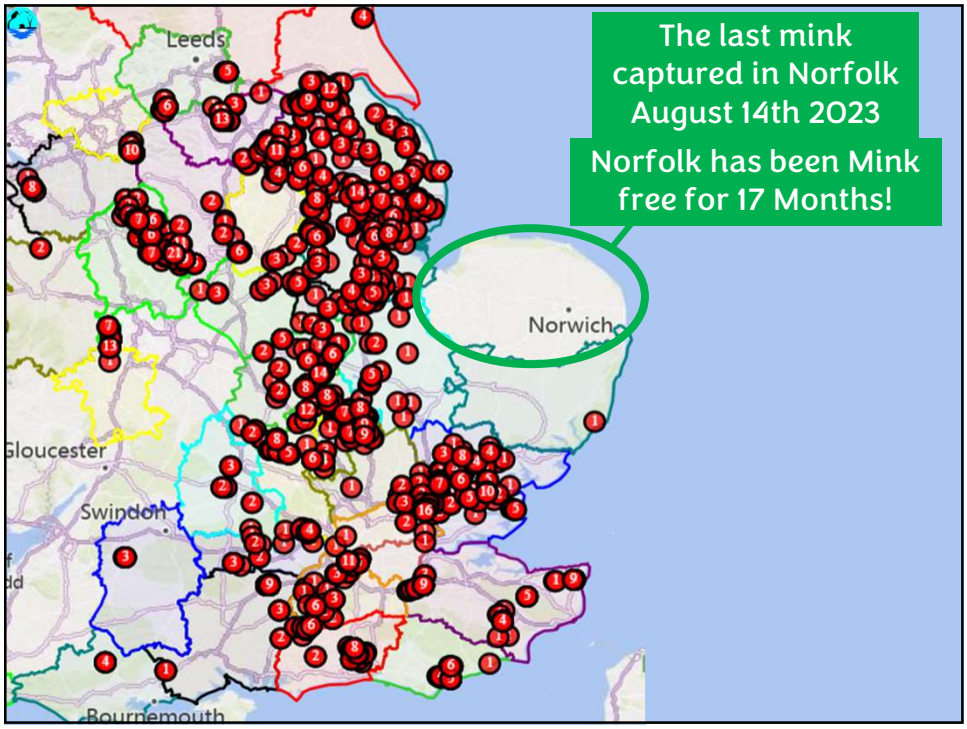
September 2024

Over 2,000 traps deployed.



Over 3,000 Mink captures.






What do we do with the Mink once we have them?
Weighed
Measured
Any Distinctive Features?
DNA Sample
Remove Muzzle
Female Fertility
Anal Gland Extraction
Feed the local Raptors


Mitochondrial DNA
Haplotypes
Multiplex's

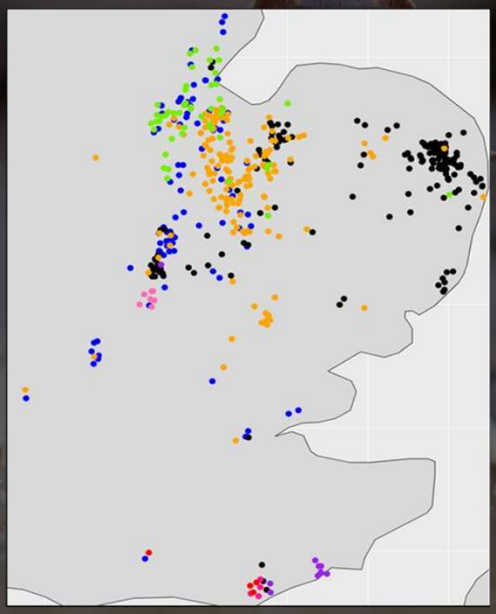
Mitochondrial DNA haplotypes

A haplotype is a set of DNA variants along a single chromosome that tend to be inherited together.

Multiplex's give mother/father sibling DNA

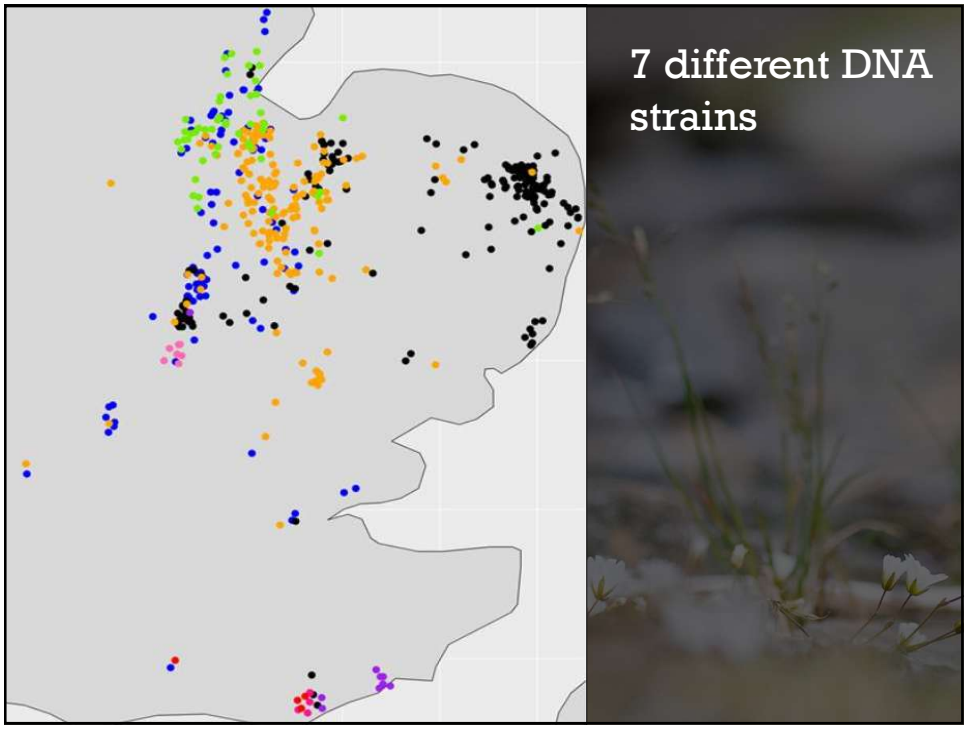
By gathering this data we can see which located Mink are related and where the 'family' has travelled.

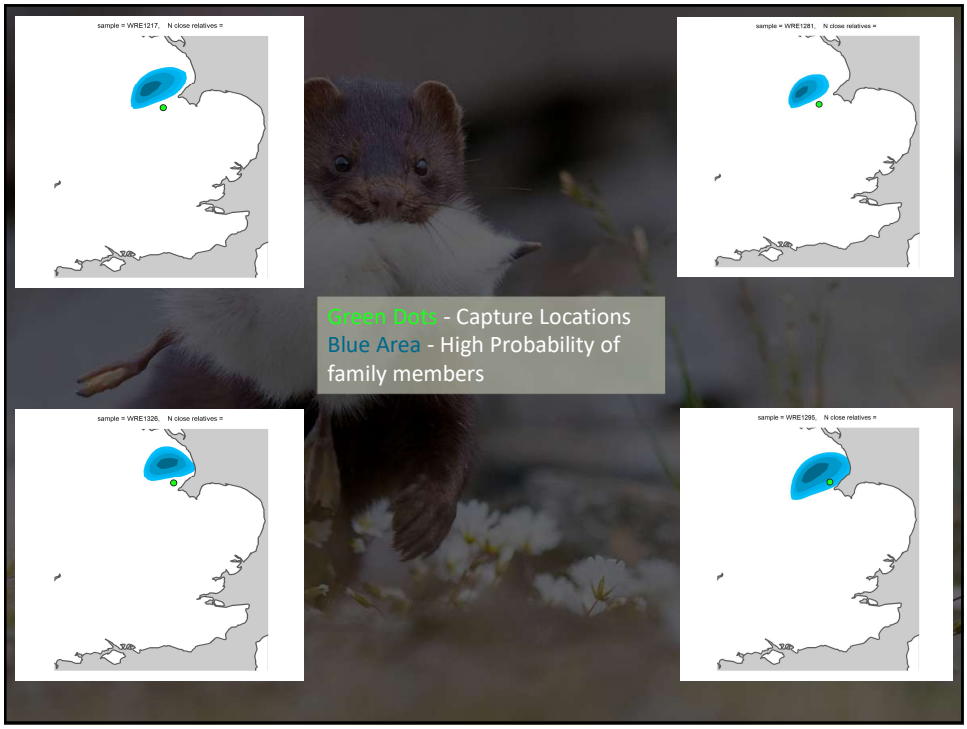
Mitochondrial DNA haplotypes



A haplotype is a set of DNA variants along a single chromosome that tend to be inherited together.

By gathering this data we can see which Mink are related and how far the 'family' has travelled.


7 different DNA strains

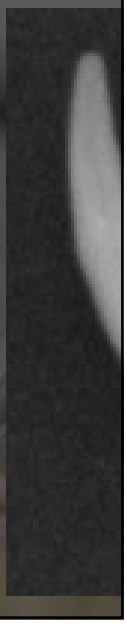

Green Dots - Capture Locations
Blue Area - High Probability of family members

Mink Teeth Differentiation

Mink Teeth Differentiation

Juvenile Tooth

The Cavity (Dark Centre) is large.

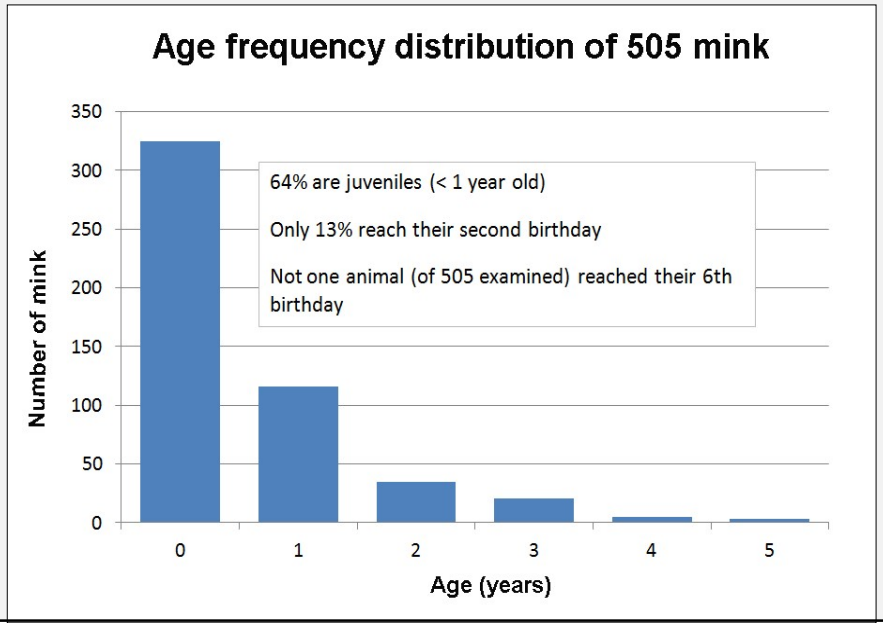


Mink Teeth Differentiation

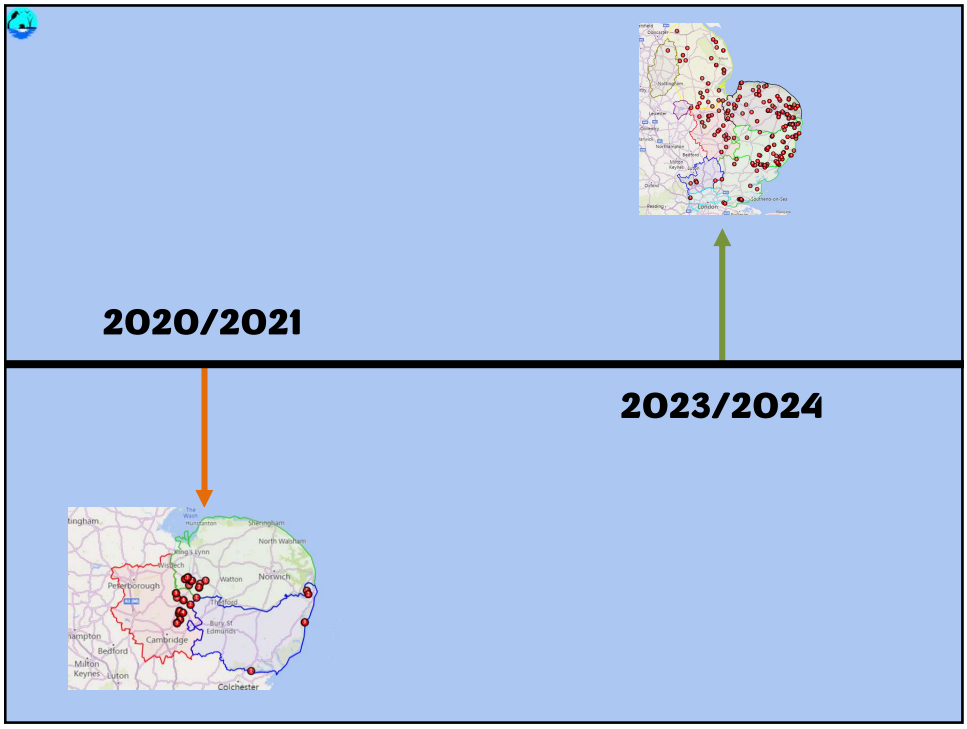
Adult Teeth

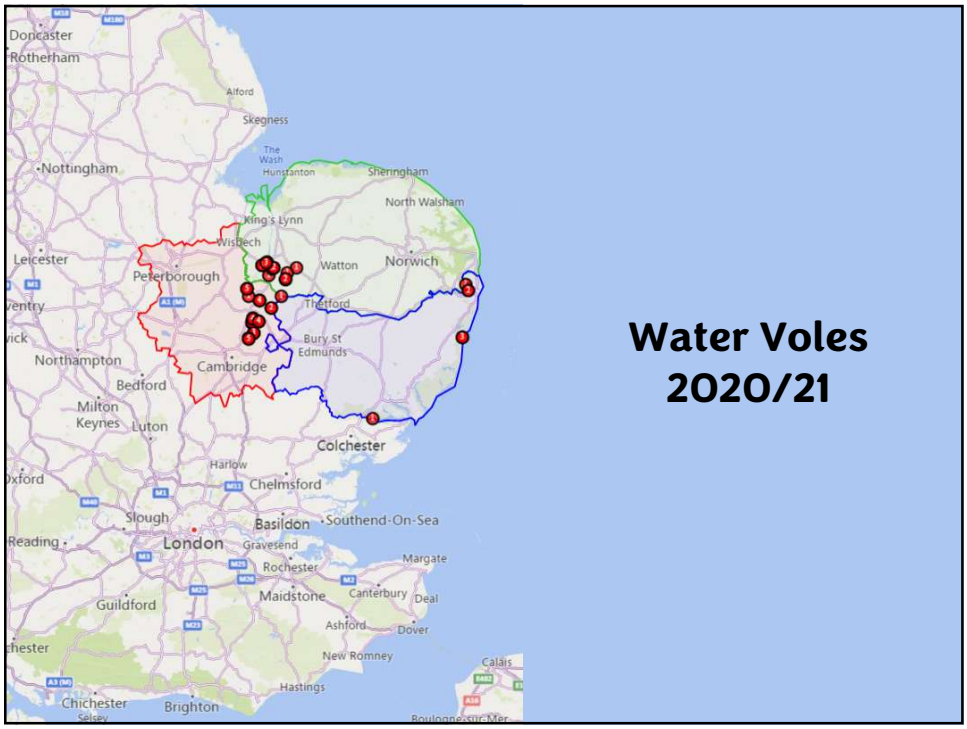
The Cavity (Dark Centre) has closed indicating the Mink's maturity.

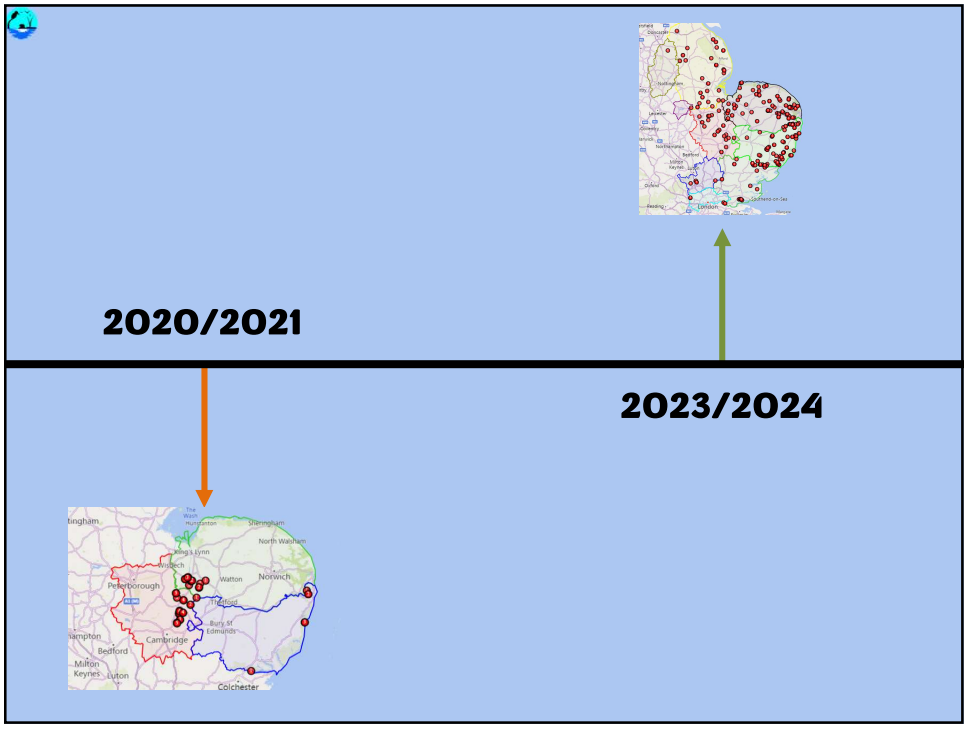
What does this tell us?

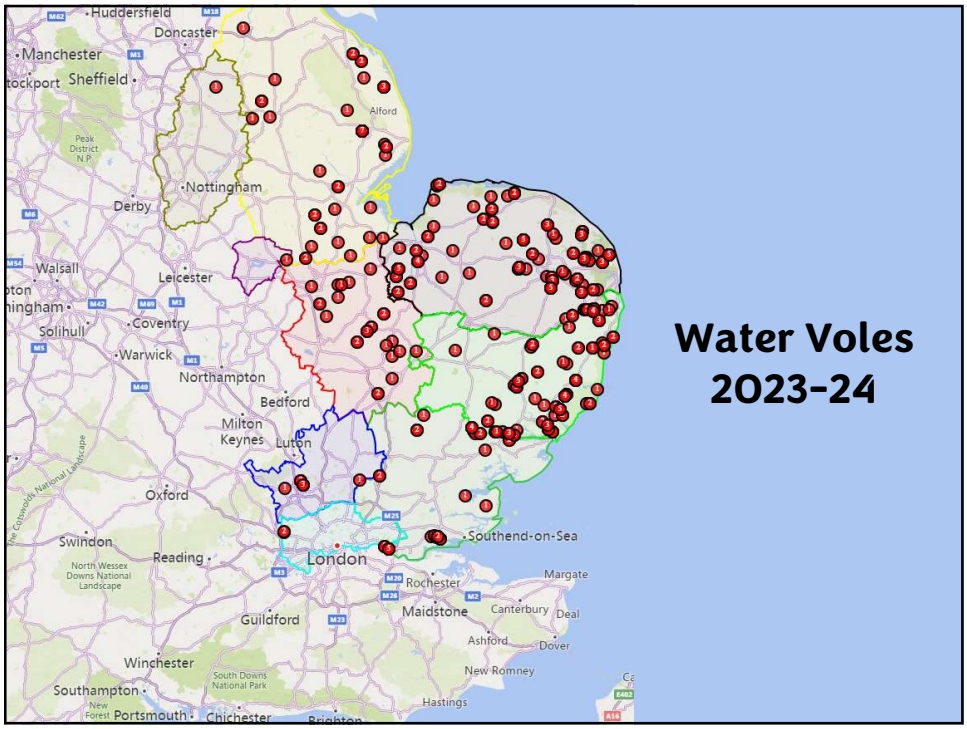


How have we helped the endangered Water Vole population?




Doncaster
Rotherham
Alford
Skegness
Nottingham
The Wash
Hunstanton
Sheringham
North Walsham
King's Lynn
Wisbech
Leicester
Peterborough
Watton
Norwich
Thetford
Bury St Edmunds
Northampton
Cambridge
Bedford
Milton Keynes
Luton
Colchester
Harlow
Chelmsford
Slough
Basildon
Southend-On-Sea
Reading
London
Gravesend
Rochester
Margate
Maidstone
Canterbury
Deal
Guildford
Ashford
Dover
New Romney
Calais
Hastings
Chichester
Brighton
Water Voles
2020/21

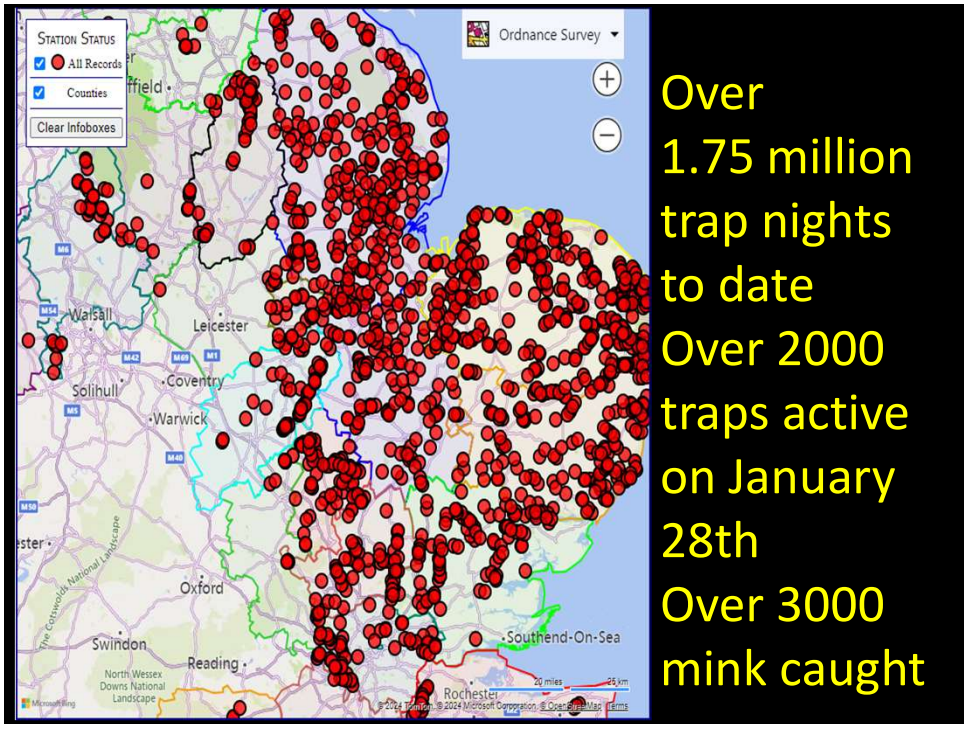

2020/2021
2023/2024



Key take home messages

- Mink eradication is achievable, more rapidly, more easily than anyone imagined.
- Reproduction stops within 4 years of comprehensive trap coverage.
- Most mink don't move far. This is why catches always drop within a year.
- Re-invasion will occur unless trapping covers a very large area.
- By working collaboratively we have a better chance of proper funding and achieving success.
- Water voles and moorhens come bounding back with no further intervention. Introducing farmed WVs reduces genetic diversity of British population and can only damage long-term viability.


Thank you


Station Status
All Records
Counties
Clear Infoboxes
Ordnance Survey
Walsall
Leicester
Coventry
Solihull
Warwick
Oxford
Swindon
Reading
Southend-On-Sea
Rochester
Over
1.75 million
trap nights
to date
Over 2000
traps active
on January
28th
Over 3000
mink caught