



giving
nature
a home

The developing outcomes of rat eradication programmes on south-west Islands

Paul St Pierre
Conservation Officer



Island Restoration – A Global Perspective

- Islands support 20% flora & fauna less than 5% land mass
- 64% ICUN extinct & 45% critically endangered live or have lived on islands
- Non-native invasive species are the single most important reason for biodiversity loss worldwide after habitat loss
- Globally recognised. Up to 2011 – 664 island restoration projects in 33 countries, 10 successful rat removal projects in the UK



SOUTH WEST PERSPECTIVE

- A special place for breeding sea birds with over 80,000 birds of 17 species
- 3 SPAs and 13 SSSIs with seabirds
- The only English colonies of Storm Petrel and Manx Shearwater (two UK priority seabirds threatened by non-native invasive species)
- The focus of two major island restoration projects, one on Lundy and one on the Isles of Scilly





giving
nature
a home

LUNDY

- **Lundy is designated as an SSSI for its seabirds**
- **It is one of only two colonies of Manx Shearwater in England**





LUNDY SEABIRD RECOVERY PROJECT



giving
nature
a home



ISLAND RESTORATION STATUS

- Removal phase completed in 2002
- Rat free status confirmed in 2004
- Bio-security measures in place and no rat sign since then



OUTCOMES

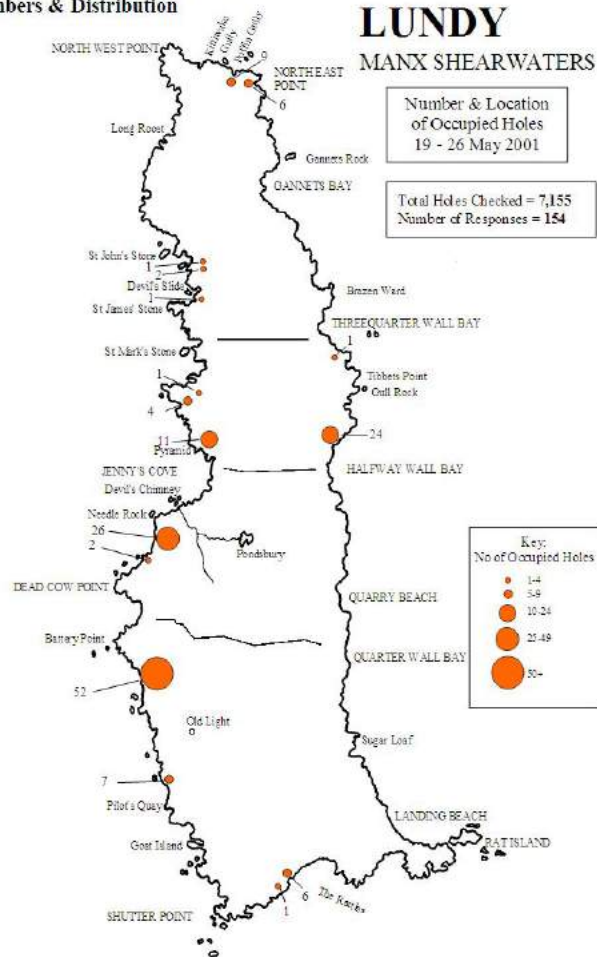
- **1st Manx shearwater chick**
- **Manx shearwaters have increased tenfold from c300 to 3,451 pairs**
- **Puffins from 6 to 80 pairs**
- **Overall seabird population doubled 7,351 to 14, 776 pairs**
- **1st storm petrel chick in 2014**





giving
nature
a home

2001 – Manx Shearwaters Numbers & Distribution



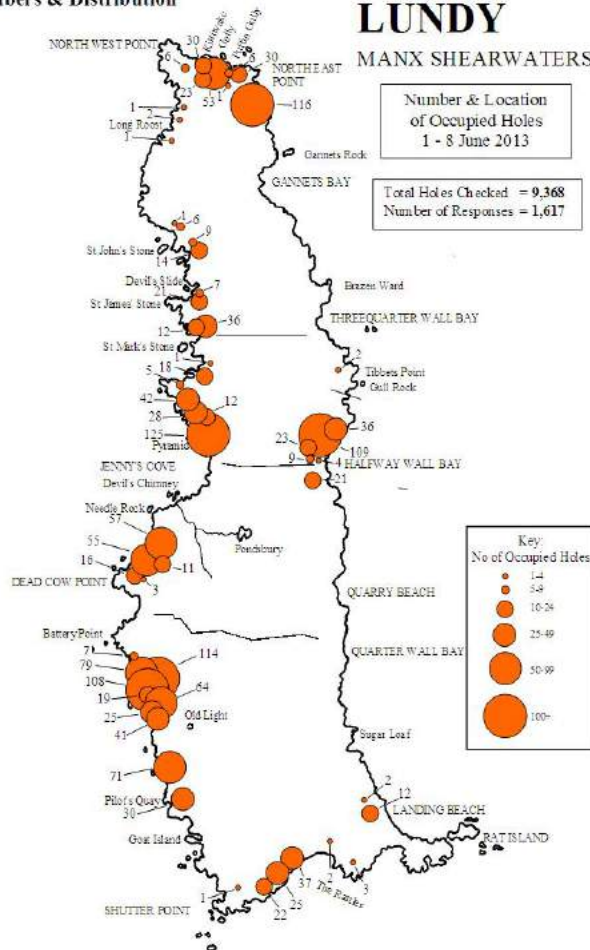


giving
nature
a home

2013 – Manx Shearwaters Numbers & Distribution

LUNDY

MANX SHEARWATERS



ISLES OF SCILLY

- **Greatest diversity of breeding seabirds in England: 20,000 seabirds of 14 species**
- **Internationally important for European storm petrel and lesser black-backed gull**
- **Other unique wildlife**
- **Seabird populations have declined by over 25% in the last 25 years**





ISLES OF SCILLY SEABIRD RECOVERY PROJECT

Aims:

- Reverse recent declines in seabird populations through removal of the non-native brown rat from the islands of St Agnes and Gugh
- Enable people to learn about, take pride in, and play an active role in celebrating and conserving their seabird heritage.
- Train and support island communities to embrace the benefits of seabird recovery, and continue to protect their heritage once the project has ended.



Working with the local community and visitors on the Isles of Scilly to enhance their important seabird heritage

ISLAND RESTORATION STATUS

- 2010-2013 Feasibility and funding
- 2013 Preparation
- 2013/2014 Removal phase and intensive monitoring
- 2014/16 Long term monitoring
- **2016 Final check**
- **2016 - Biosecurity**

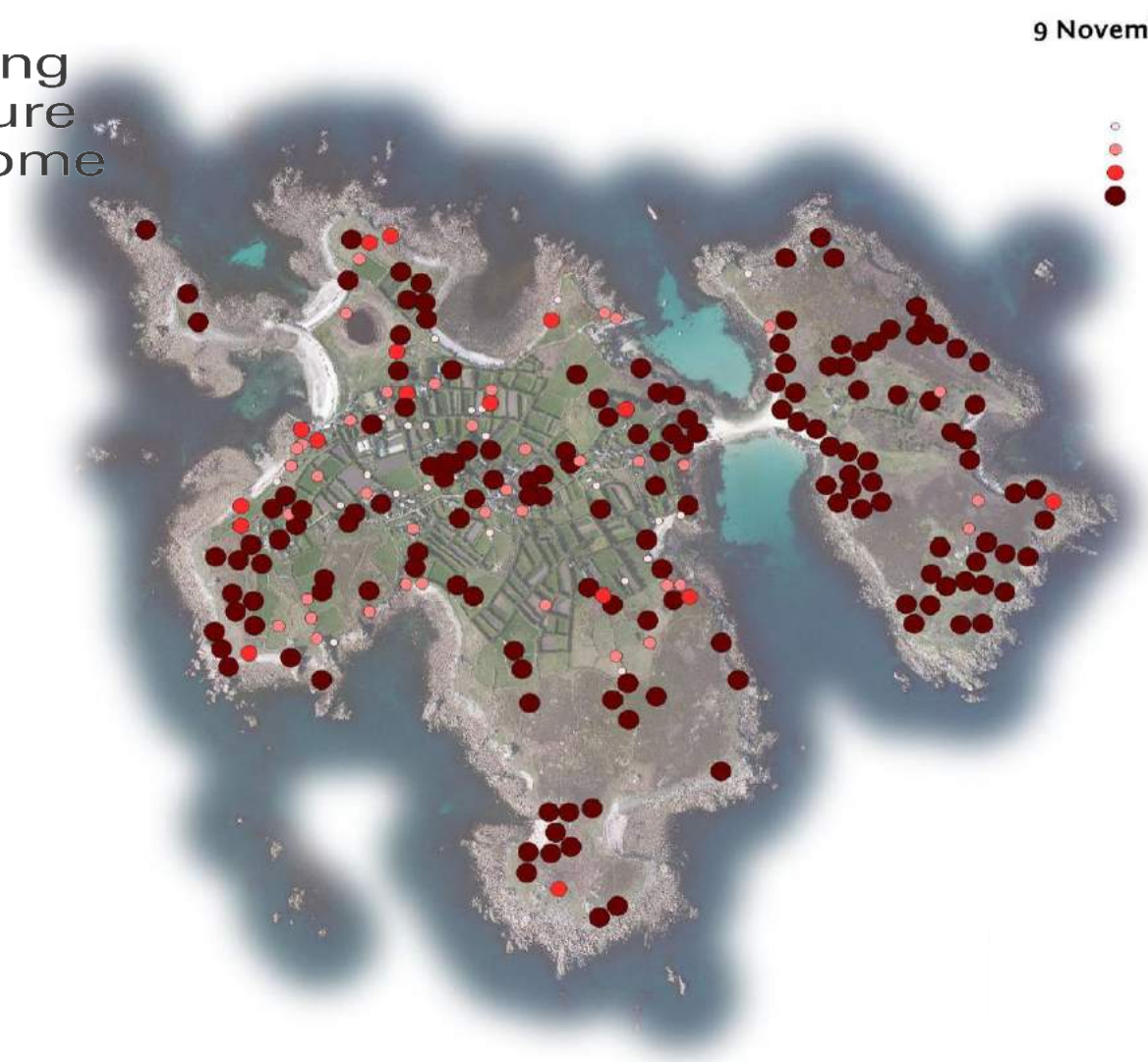




giving
nature
a home

9 November 2013

Rat Bait Take
Blocks



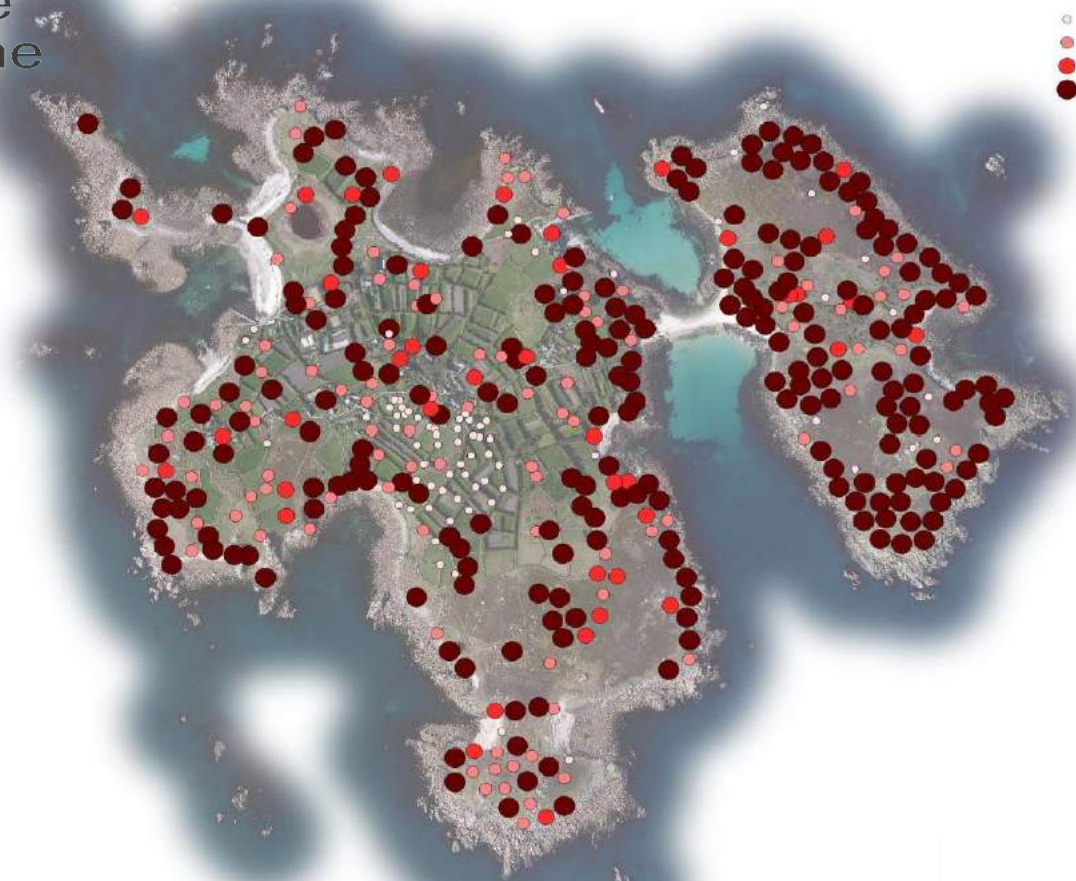




giving
nature
a home

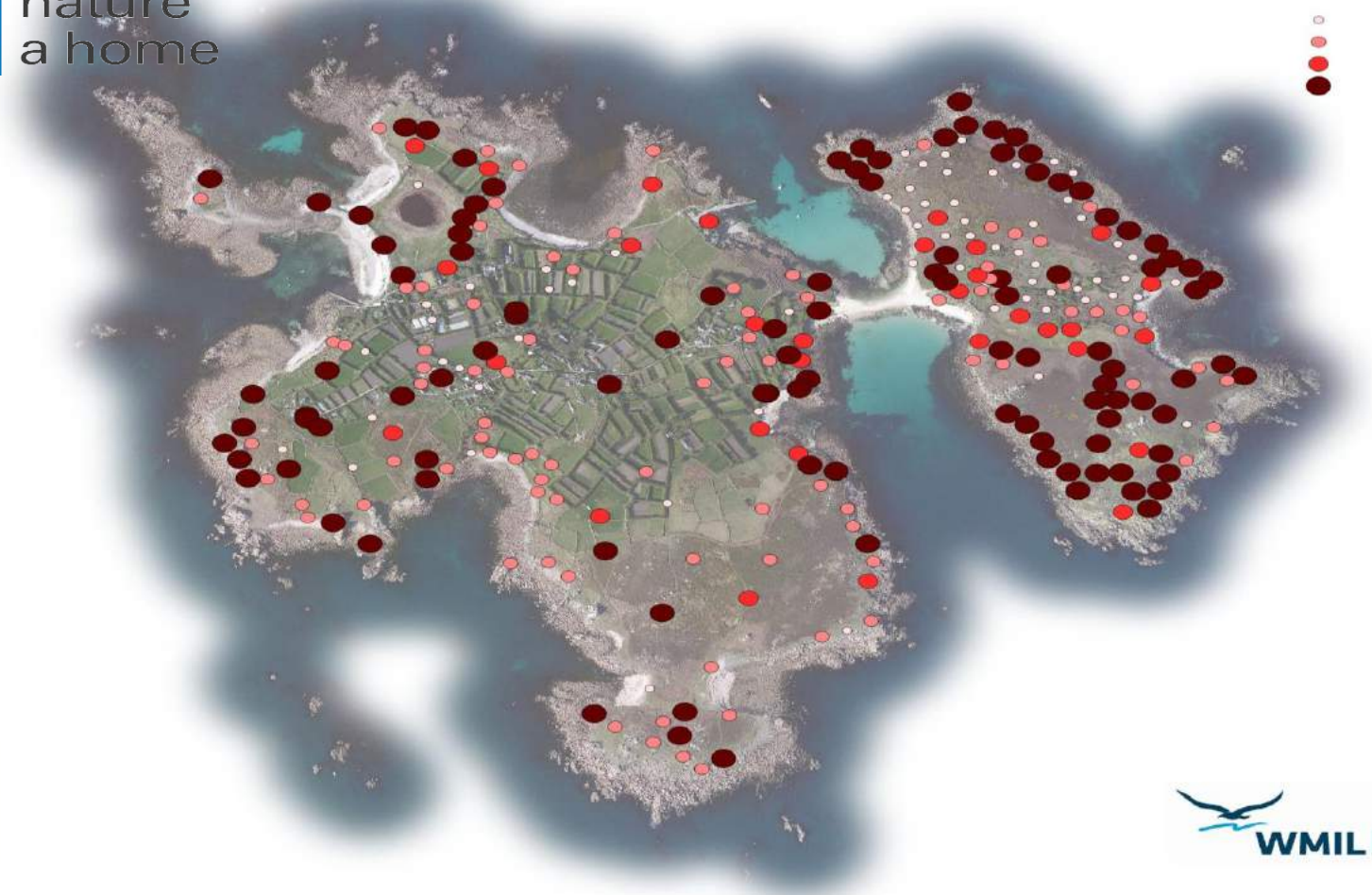
11 November 2013

Rat Bait Take
Blocks



Rat Bait Take
Blocks

<1
1...3
3...6
>6



Rat Bait Take

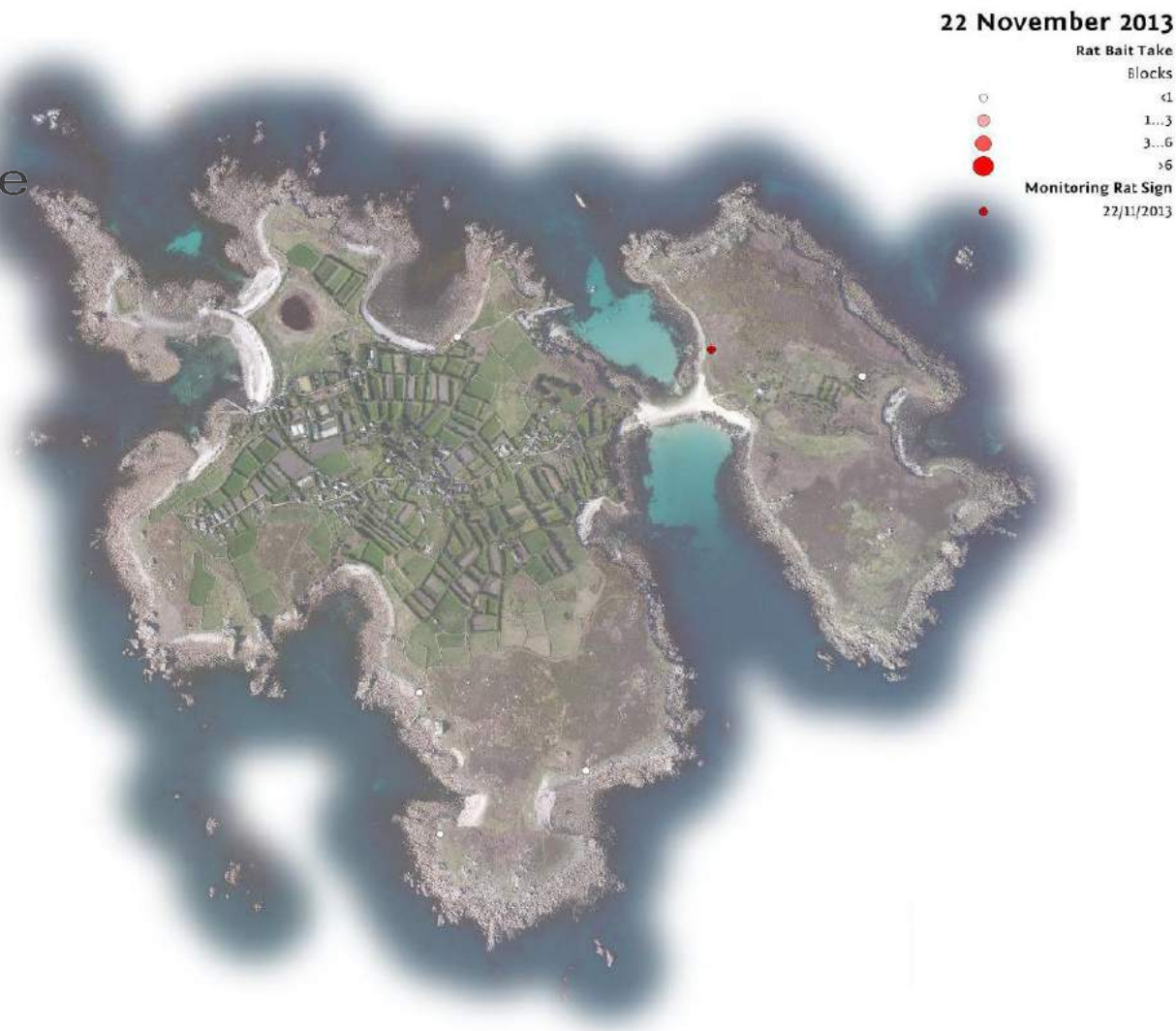
Blocks







giving
nature
a home





giving
nature
a home

11/30/2013 12:00 am

Last rat sign, Big Pool

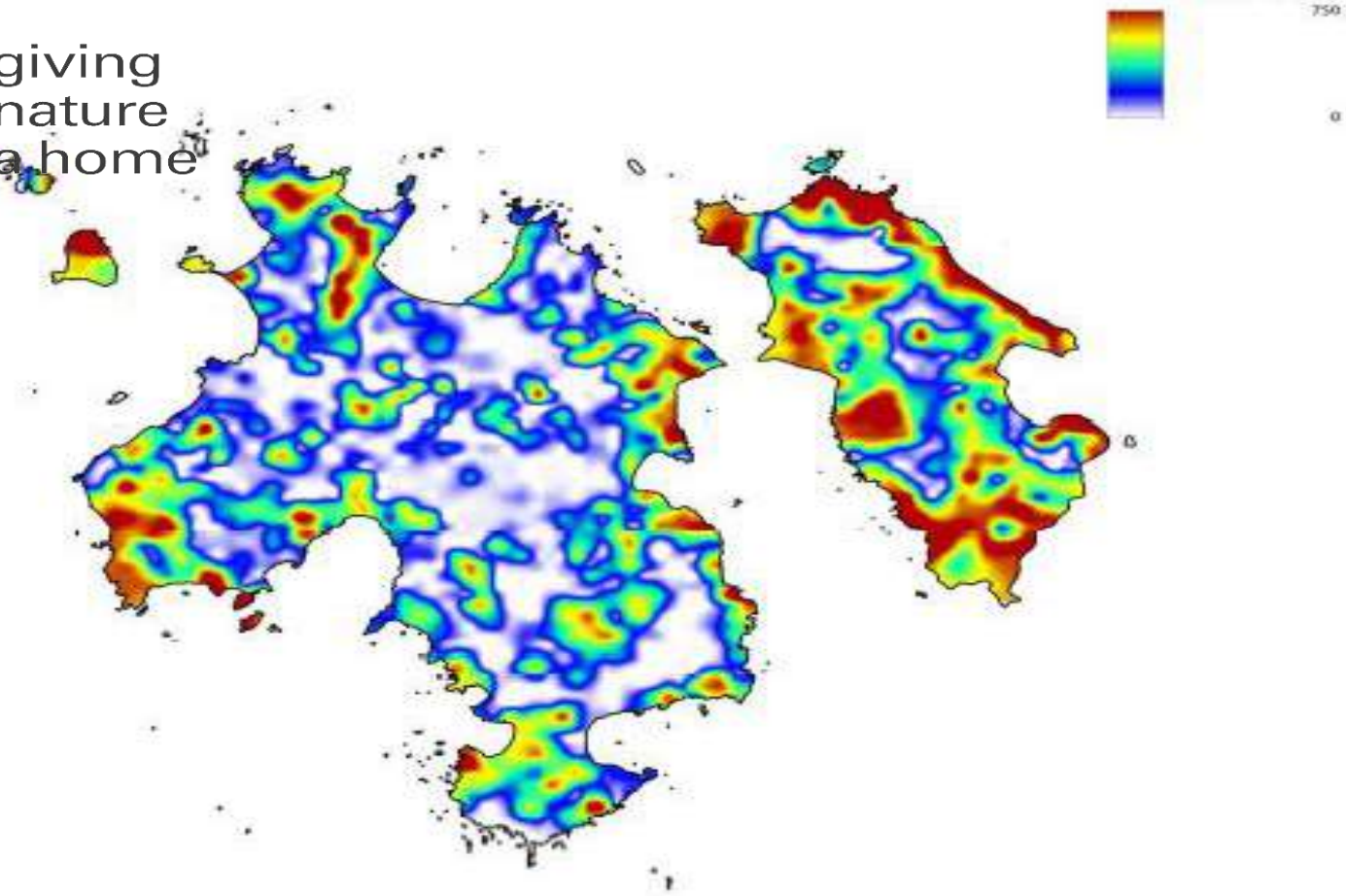
N
30th November
2013



Image © 2013 DigitalGlobe

Image © 2013 Getmapping plc

Google earth



Distribution of bait take by Brown Rats on St Agnes and Gugh, 8 November 2013 to 8 March 2014. Red denotes highest amount of bait take



giving
nature
a home

ECOLOGICAL MONITORING

2013 Baseline

- Seabirds
- Land birds
- Mammals
- Invertebrates
- Plants
- Fixed point photography

2014 first year post removal monitoring

2015 All island survey

2016/17 final monitoring



OUTCOMES

- Manx shearwater
- Shrews
- Land birds
- Other taxa





giving
nature
a home

COMMUNITY INVOLVEMENT

- 100% support
- Waste management
- Removal and Biosecurity
- Engaging visitors



VOLUNTEERING: IOS-SEABIRDS.ORG.UK

