Infrastructure and Environment

Gouvèrnément d'Jèrri

Assessing the feasibility of managing Invasive Species in Jersey, CI

Adam Dallas-Chapman

Government of Jersey

18/09/25

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About me …

- Infrastructure & Environment
- Natural Environment
- Biosecurity
- Invasive Species Officer

The institution of environmental sciences

IIEM 2022

- Horizon Scanning for new invasive non-native species in Guernsey
- Agreement that collaboration is key

IIEM 2023

- Threat Score Analysis of established Non-Native Species in the Channel Islands
- First in-person Biosecure Bailiwick Meeting

IIEM 2024

- The INNS Action Plan for Guernsey
- Top 10 Alert List of INNS likely to arrive to the CI
- Invasive Species Mosquito Surveillance

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IIEM 2025

- Recap on previous work
- Ongoing work
  - Management feasibility studies
  - Example study – Feral greylag geese
- Next steps
  - Species Management Plans
  - Monitoring programmes
  - Species management

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Previously…

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Horizon Scanning

- Undertaken by States of Guernsey
- What species are likely to arrive in the future?
- How will they arrive?

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Threat Score Analysis

- Undertaken by Government of Jersey

- Risk assessing & ranking current established threats
  - Ecological impacts
  - Invasive potential
  - Geographic spread

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Threat Score Analysis

Rank	Common name	Ecological Impact	Invasive Potential	Geographic Spread
1	Three-cornered Leak	4	4	4
2	New Zealand Pygmyweed	4	3	3
3	Greylag Goose	4	4	2
4	Water fern	4	4	2
5	Sour fig	4	4	2
6	Pampas grass	4	4	2
7	Cape ivy	4	4	2
8	Purple dew plant	4	4	2
9	Tree lupin	4	4	2
10	Tree of heaven	4	4	1

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Now…

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Management Feasibility Studies

PRIMARY RESEARCH ARTICLE | Open Access

Using structured eradication feasibility assessment to prioritize the management of new and emerging invasive alien species in Europe

Olaf Booy, Pete A. Robertson, Niall Moore, Jess Ward, Helen E. Roy, Tim Adriaens, Richard Shaw, Johan Van Valkenburg, Gabrielle Wyn, Sandro Bertolino, Olivier Blight ... See all authors

First published: 28 July 2020 | https://doi.org/10.1111/gcb.15280 | Citations: 34

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Management Feasibility Studies

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Management Feasibility Studies

Criteria	Response Score				
	1	2	3	4	5
Effectiveness	Very ineffective	Ineffective	Moderate effectiveness	Effective	Very effective
Practicality	Very impractical	Impractical	Moderate practicality	Practical	Very practical
Cost	>£ 1 million	£100k - £1 million	£20k - £100k	£5k - £20k	<£5k
Negative impact	Massive	Major	Moderate	Minor	Minimal
Acceptability	Very unacceptable	Unacceptable	Moderate acceptability	Acceptable	Very acceptable
Window of opportunity	<2 months	2months - 1 year	1-3 years	4 - 10 years	>10 years
Likelihood of reinvasion	Very likely	Likely	Moderate likelihood	Unlikely	Very unlikely
Overall	Very low	Low	Medium	High	Very high

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Management Feasibility Studies

Eradication Strategy	Effectiveness	Practicality	Cost	Negative impact	Acceptability	Window of opportunity	Re-invasion likelihood	Overall feasibility
Strategy 1	1	5	5	1	1	3	1	Low
Strategy 2	1	4	5	4	3	3	3	Medium
Strategy 3	4	4	4	4	3	3	3	High
Strategy 4	5	3	3	4	1	3	4	Medium

Management Feasibility Studies

Species	Common name	Effectiveness	Practicality	Cost	Negative impact	Acceptability	Window of opportunity	Re-Invasion likelihood	Winning feasibility score
Impatiens glandulifera	Himalayan Balsam	5	3	4	4	4	4	5	4.14
Rosa Rugosa	Japanese Rose	4	4	5	4	4	3	4	4.00
Ailanthus altissima	Tree of heaven	5	4	4	4	2	4	4	3.86
Reynoutria japonica	Japanese knotweed	4	4	3	4	4	5	3	3.86
Azolla filiculoides	Water Fern	5	3	5	1	3	5	4	3.71
Cortaderia selloana	Pampas grass	4	4	3	4	3	4	4	3.71
Vespa Velutina	Asian Hornet	3	4	3	4	5	5	1	3.57
Anser anser forma domesticus	Greylag goose	4	4	4	4	3	3	3	3.57
Lupinus arboreus	Tree Lupin	4	4	4	4	4	3	2	3.57
Carpobrotus edulis	Sour Fig	4	2	1	3	4	5	4	3.29
Disphyma crassifolium	Purple Dew Plant	4	2	1	3	4	5	4	3.29

A very different top ten

2023

Rank	Common name
1	Three-cornered Leak
2	New Zealand Pygmy weed
3	Greylag Goose
4	Water fern
5	Sour fig
6	Pampas grass
7	Cape ivy
8	Purple dew plant
9	Tree lupin
10	Tree of heaven

2025

Rank	Common name
1	Himalayan Balsam
2	Japanese Rose
3	Tree of heaven
4	Japanese knotweed
5	Water Fern
6	Pampas grass
7	Asian Hornet
8	Greylag goose
9	Tree Lupin
10	Sour Fig

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Example

Feral greylag geese

Anser anser forma domesticus

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Feral greylag geese

1. Invite stakeholders

Government of JERSEY

PORTS OF JERSEY

National Trust Jersey

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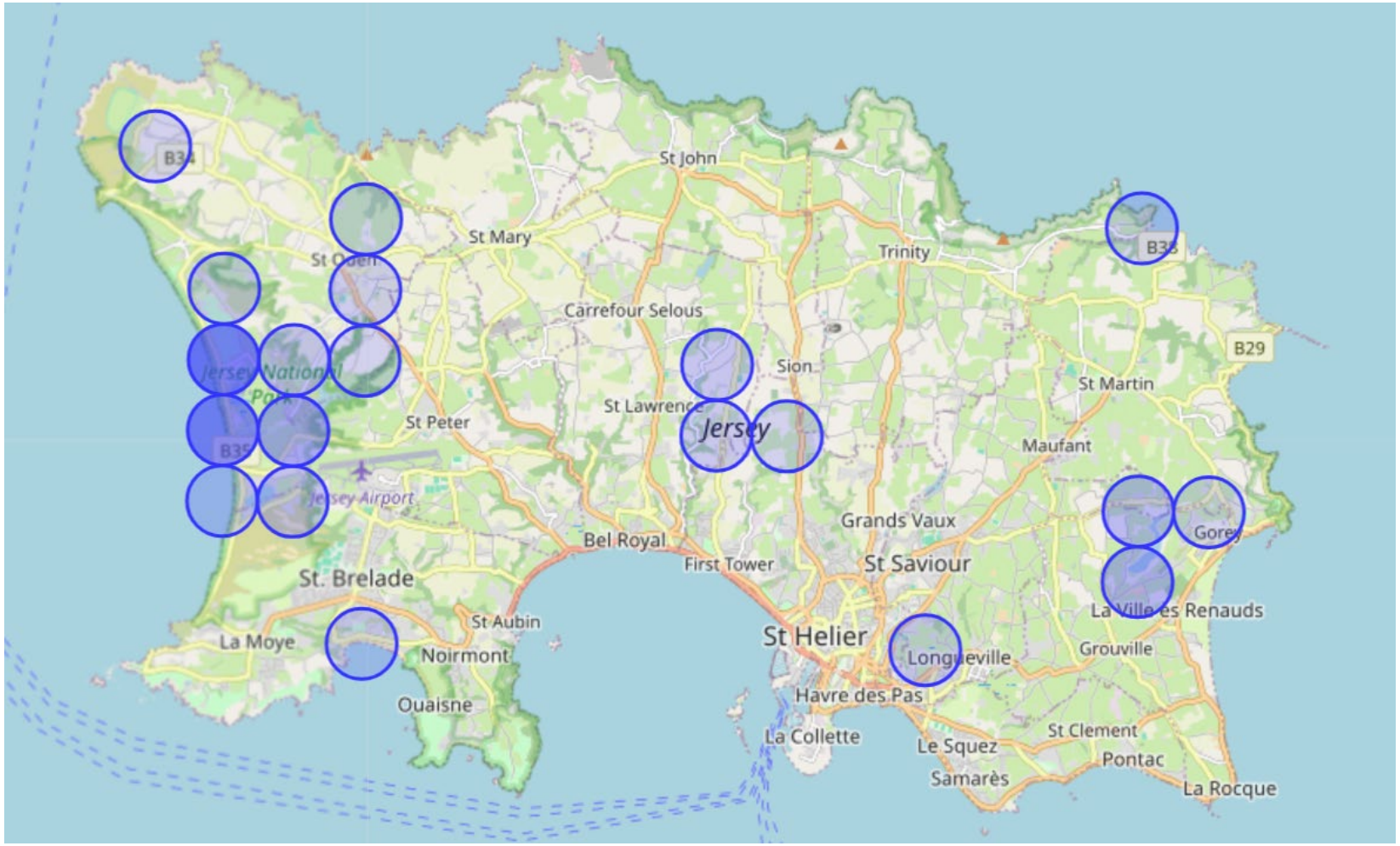
Feral greylag geese

2. Define the Eradication strategy



THE JERSEY BIODIVERSITY CENTRE

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Feral greylag geese

2. Define the Eradication strategy

“Although greylag geese have been recorded across the island, three significant populations of feral greylag geese are known to be present across the island. A western population of around 500 individual birds exists on a 168.5 ha area on the west of the island immediately west of Jersey Airport. This population has been historically controlled by a combination of management undertaken by the National Trust for Jersey and Ports of Jersey. A central population of between 20-30 mobile individuals lives within Waterworks Valley. This population has had little management in the past. Finally, an eastern population of around 200 individual birds are found on the arable fields and marshland of Grouville Marsh SSI. Like the central population, this population has received little historic management”

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Feral greylag geese

3. Define the Eradication Strategies

Eradication Strategy	Effectiveness	Practicality	Cost	Negative impact	Acceptability	Window of opportunity	Re-invasion likelihood	Overall feasibility
Strategy 1 – No further management								
Strategy 2 – Keep numbers at current levels								
Strategy 3 – Decrease numbers								
Strategy 4 – Total eradication								

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Feral greylag geese

4. Score each strategy

Eradication Strategy	Effectiveness	Practicality	Cost	Negative impact	Acceptability	Window of opportunity	Re-invasion likelihood	Overall feasibility
Strategy 1 – No further management	1	5	5	1	1	3	1	Low
Strategy 2 – Keep numbers at current levels	1	4	5	4	3	3	3	Medium
Strategy 3 – Decrease numbers	4	4	4	4	3	3	3	High
Strategy 4 – Total eradication	5	3	3	4	1	3	4	Medium

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Next steps…

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Next steps…

- Species Management Plans
- Monitoring programme
- Management
- Review

Rank	Common name
1	Himalayan Balsam
2	Japanese Rose
3	Tree of heaven
4	Japanese knotweed
5	Water Fern
6	Pampas grass
7	Asian Hornet
8	Greylag goose
9	Tree Lupin
10	Sour Fig

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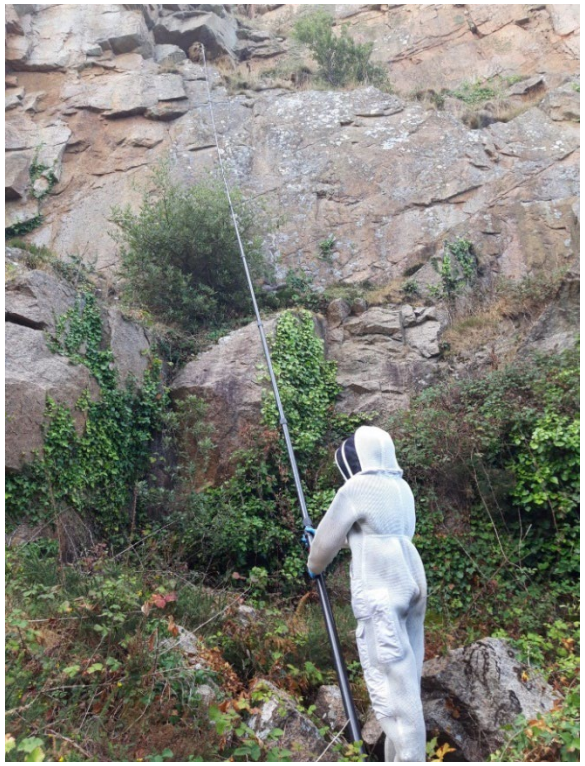
Next steps…

- Monitoring

Next steps…

- Management



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Thank you!