

Pest Management Research Priorities

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for the
Biosecurity Managers Group

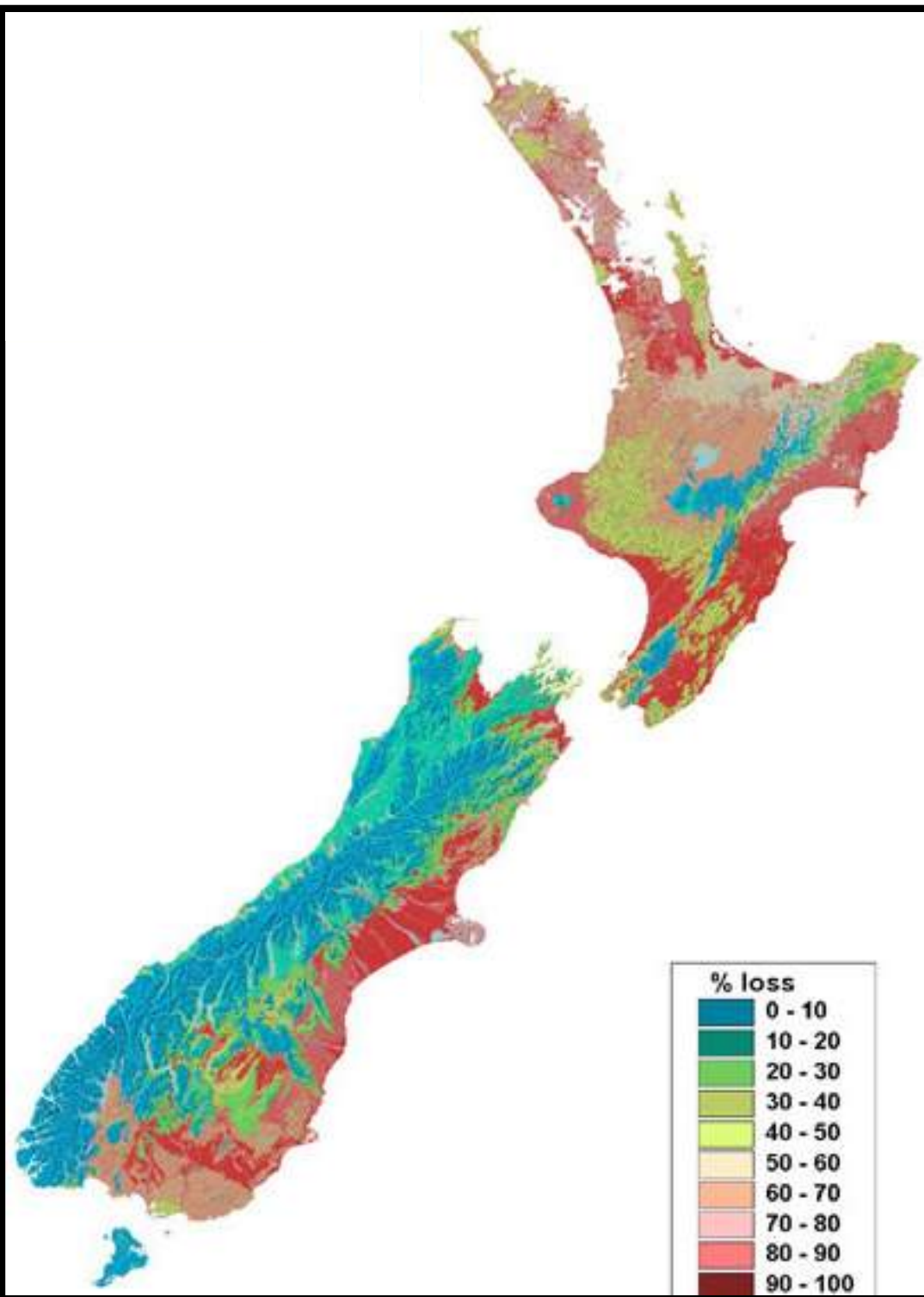
BMG Top 3

- 1. Biodiversity Outcomes** - Cost effective measurement of pest management intervention benefits.
- 2. Alternative Toxins** - for 1080 and brodifacoum.
- 3. Integrated Possum and Predator Control** - at sites and across landscapes – Post Tb transition.

Identification and Selection Process

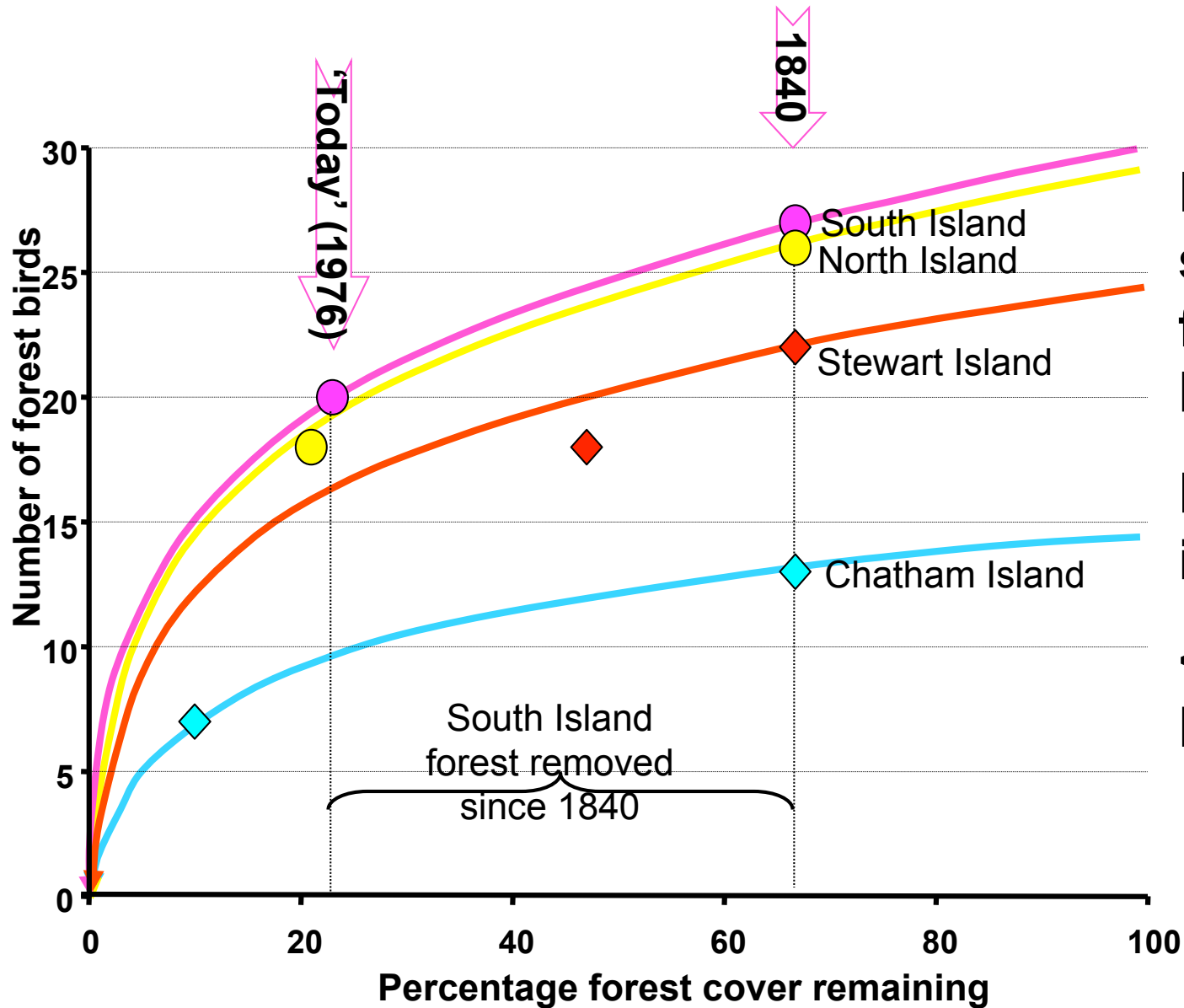
- Sought five research topics from all RC/UAs through BMG members.
- Compiled a list of about 50 topics
 - Covered pest animals, pest plants, freshwater, marine, invertebrates, biodiversity, other.
- Resurveyed all RCs/UAs seeking top five - ranked in order.
- Final selection and ranking of top 3 based on 10 responses.

Indigenous Biodiversity Decline – loss of habitat



From LENZ – Threatened
Environments Classification

- loss of species



Loss of bird species results from loss of habitat.

Key biodiversity indicator

<20% = Critical Decline

From Lee
Biosummit (2004)

1. Biodiversity Outcomes

- Identify Biodiversity Outcomes sought
 - National strategy/policy
 - Regional - RPS, Plans, RPMS
- Ability to monitor/measure achievement of Biodiversity Outcomes over time.

Research Needs

- Better information/tools to define
 - Extent and state of native habitats.
 - Presence and abundance of key species.
 - Pressures/pest impacts.
- **New and better tools to measure ecosystem state based on key indicators.**
- Improved data analysis/reporting systems.



Warning 1080 Poison

Sodium fluoroacetate

will be present from: **MAY—SEPT**

**ENOUGH BAIT TO
KILL 600,000 PEOPLE**

For more information contact: **Your local DOC Office**

2. Alternative Toxins

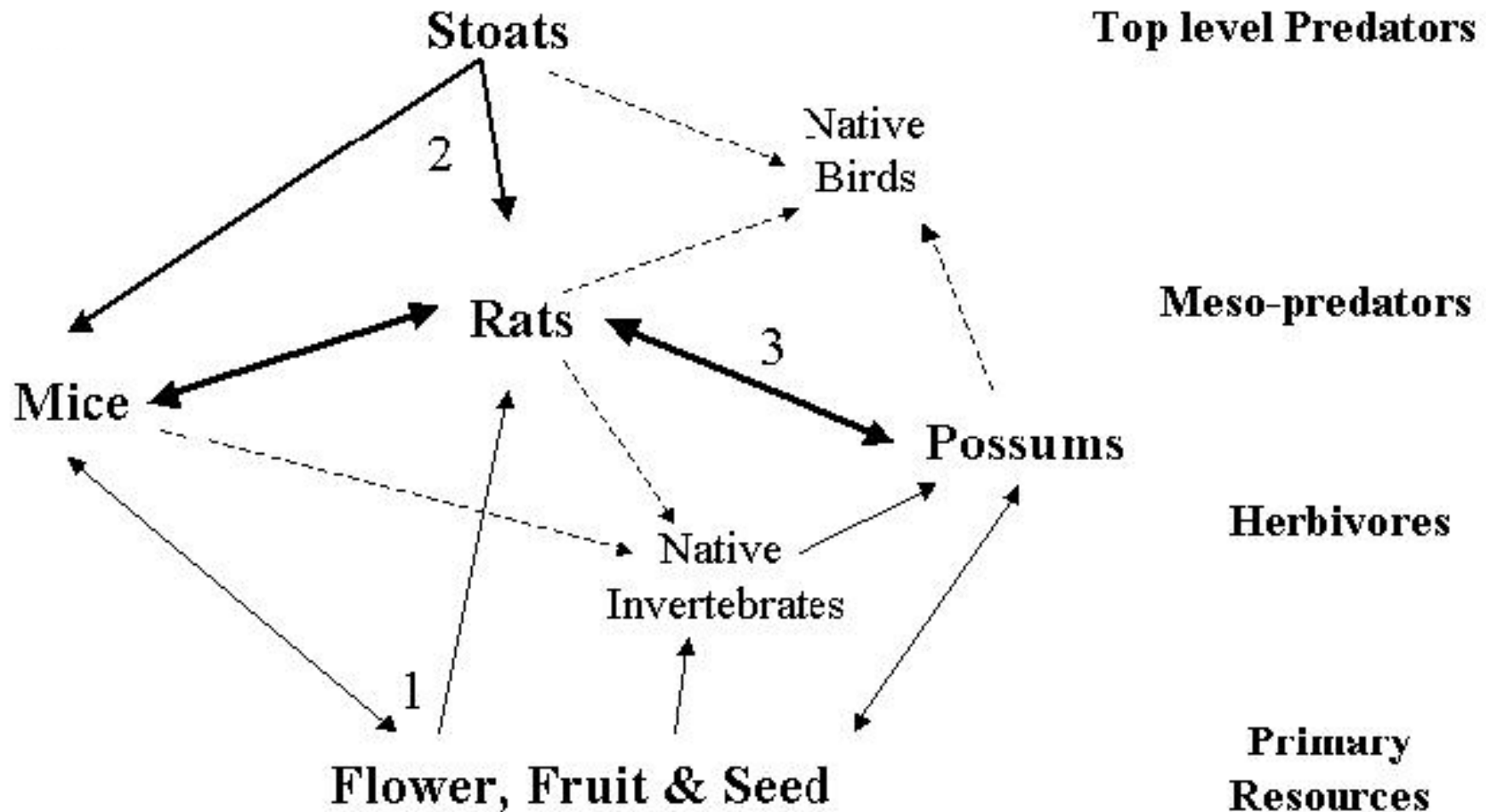
- 1080 and Brodifacoum under threat
- Most commonly used and cost effective vertebrate toxins.
- Pressures
 - Anti toxin protestors/opponents
 - Animal welfare issues
 - Environmental effects
 - Regulation
- Their loss would decimate our current pest management programmes
 - Biodiversity
 - Bovine Tb

Need new and better toxins

- Humane
- Cost effective
- Specific to target species
- Environmentally friendly
- Safe to handle and store
- Acceptable to public
- Urgent – next five years

Multiple Pest Management

Extremely complex and dynamic interactions between prey, predators and the environment.



3. Integrated Possum and Predator Control

- Systems (tools and methodologies) to manage multiple pests at sites and across landscapes.
 - Biodiversity and economic benefits
 - Sustainable and cost effective over the long term.
 - Optimise and retain benefits of Tb Vector management (25% of NZ land area).