GB Invasives work of potential relevance to the OTs

Niall Moore

Head of the GB Non-native Species Secretariat

How big a British problem?

- In England - 2,721 non-native species
- In Scotland – 988 non-native species
- C. 70% vascular plants
- Negative impacts
  - 71 moderately/highly negative in Scotland
  - 19 ‘strongly negative’ in England

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Prioritisation at UK ‘Government’ level

- Scale of problem is huge
  - £2 billion PA
  - Est. £1.5 billion to eradicate Japanese Knotweed
  - £50 million to clear London Olympic site
- Available resources are small in comparison
  - Total GB Government - £10-15 Million PA?
    - Central Govt.
    - Local Govt.
- Current UK priorities
  - Majority to prevention measures (from outside EU)
    - > 200 staff in Plant Health Service

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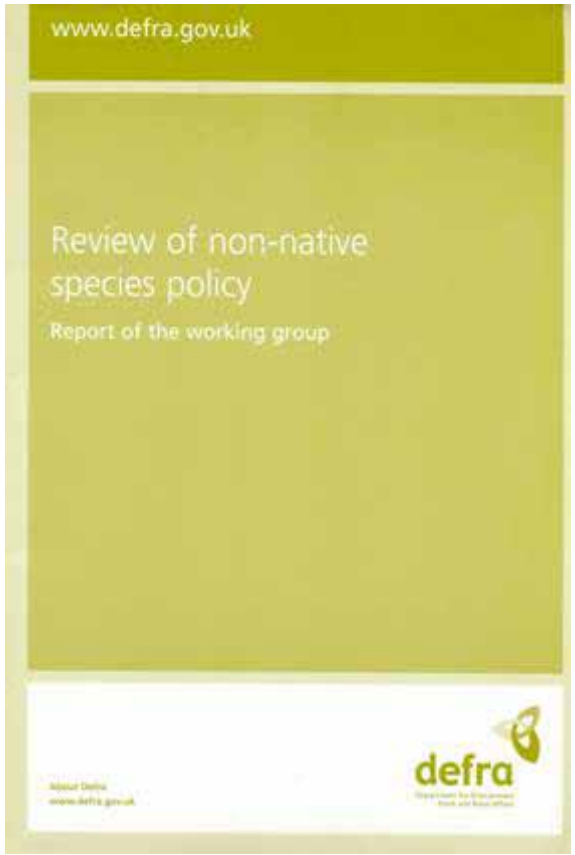
Policy Review 2001 - 2003

- 2001 - Policy Review launched
- 2003 - Review Group report



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Policy Review report - Recommendations:

- A single lead co-ordinating organisation
- Comprehensive risk assessment
- Develop codes of conduct
- Targeted education and awareness
- Revise and update existing legislation
- Establish adequate monitoring and surveillance
- Develop policies for control of established and new invasives
- Forum for stakeholder engagement

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Development of NNS Mechanism

- Risk Assessment
  - 2003 - Development of methodology
- Legislation –
  - 2004 Nature Conservation (Scotland) and 2006 NERC Acts allow for sales bans
- Co-ordination
  - 2005 – GB Programme Board established
  - 2006 - GB Programme Board Secretariat established

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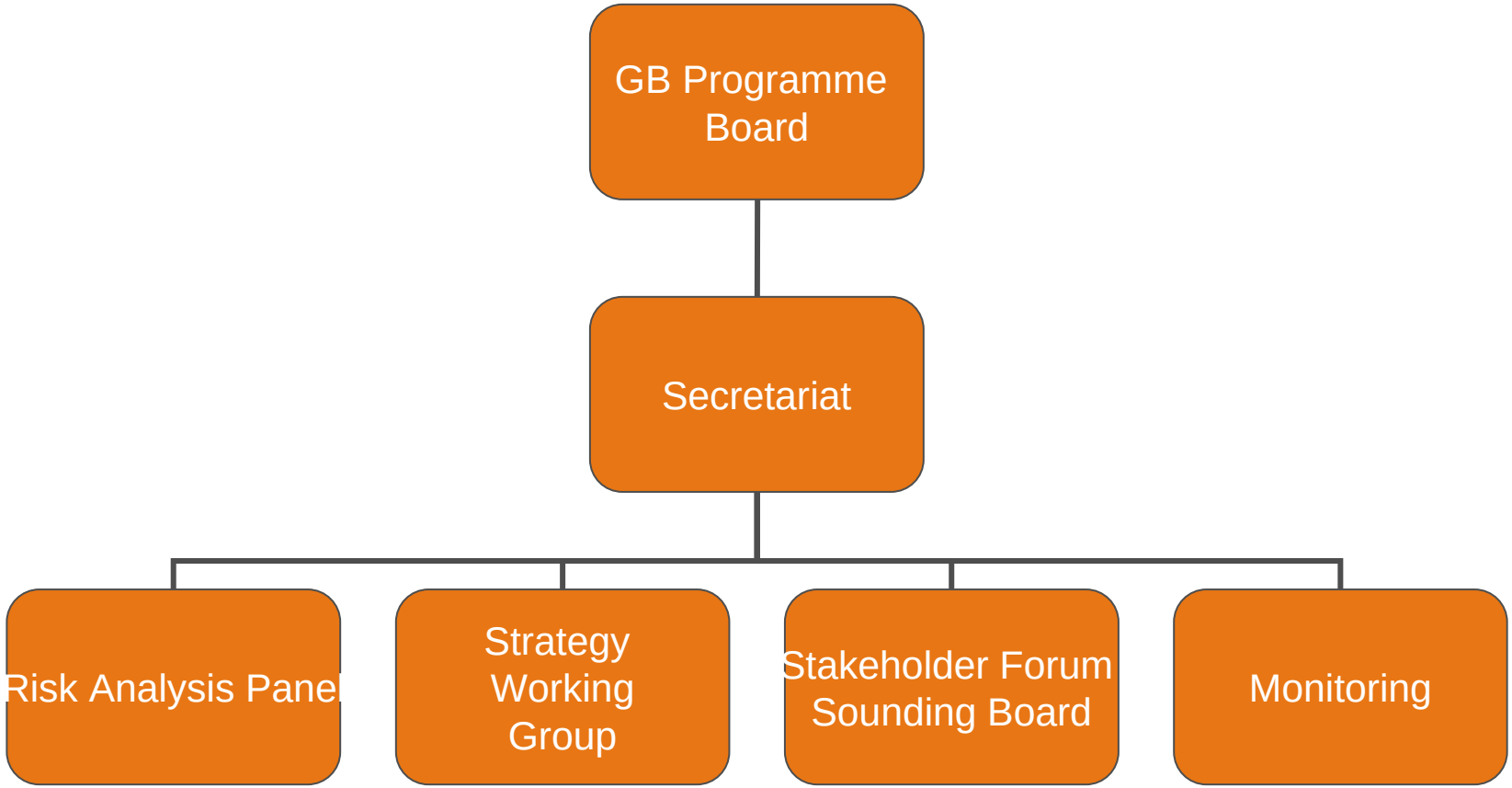
Key GB Mechanism Components



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Non-native Species Secretariat

- Set-up - March 2006
  - 2 full-time staff
- Supports Programme Board
  - All Non-native Species
  - Co-ordination at a GB level
- Main link outside GB
  - All Ireland steering group
  - UK Overseas Territories
  - Worldwide
- Website – www.nonnativespecies.org

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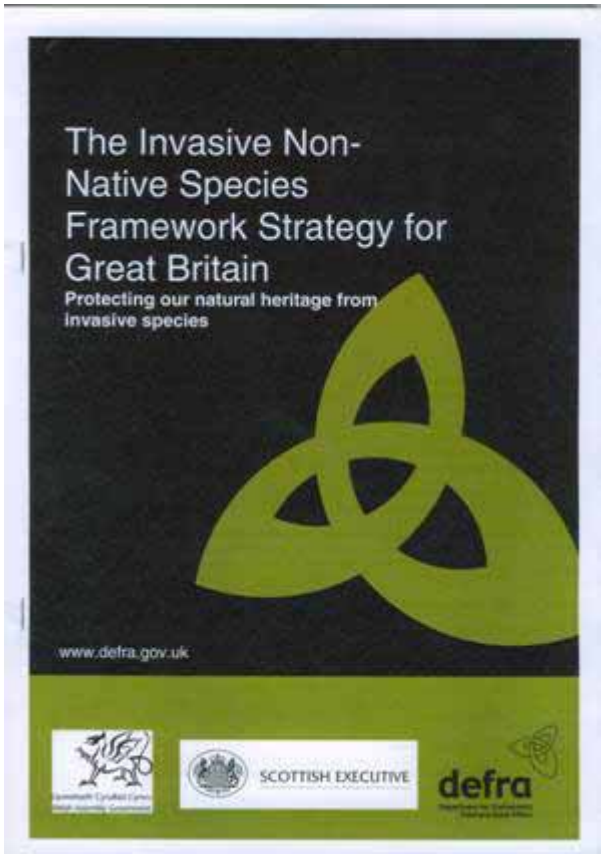
GB Framework Strategy



- Prevention is key
- Rapid response ethos
- Resources are limited and prioritisation is needed
- OTs mentioned in one Key Action

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Strategy covers:

49 Key actions cover

- Prevention
- Early detection, surveillance, monitoring and rapid response
- Mitigation, control and eradication
- Building awareness and understanding
- Legislation
- Research
- Information exchange and integration

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Monitoring and surveillance

- Audit
- Developing comprehensive monitoring for GB
- Needs rapid detection and reporting
- Horizon Scanning for new threats from overseas

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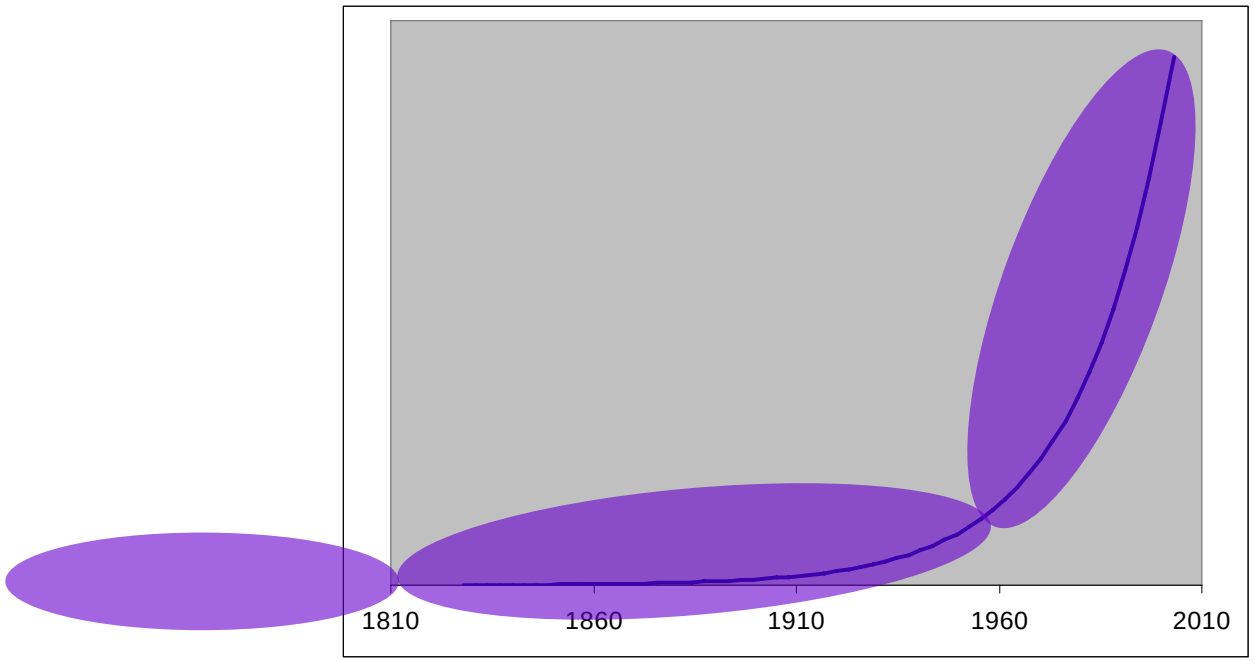
How predict which species will be problems?



Risk Assessment methodology

	Probability of Entry	RESPONSE	UNCERTAINTY	COMMENT	SUM
1.1	List the pathways that the organism could be carried on. How many relevant pathways can the organism be carried on?	few - 1	LOW - 0	Rhizome contaminants of soil. Relatively few different pathways apart from natural dissemination along rivers and through movement of soil and waste	1

	Probability of Establishment	RESPONSE	UNCERTAINTY	COMMENT
1.15	How similar are the climatic conditions that would affect establishment in the Risk Assessment area and in the area of current distribution?	very similar - 4	LOW - 0	Climate envelope models have identified that Europe has a similar climate to its native range. Altitude range: 0 - 3800 m- Mean annual rainfall: 580 - 2200 mm- Rainfall regime: - Dry season duration: 0 - 0 months- Mean annual temperature: 5 - 17ºC- Mean

	Spread	RESPONSE	UNCERTAINTY	COMMENT
2.1	How rapidly is the organism liable to spread in the Risk Assessment area by natural means?	intermediate - 2	LOW - 0	Can spread along river systems quite far and the species has spread substantially since the 1962 Atlas of the British and Irish Flora
2.2	How rapidly is the organism liable to spread in the Risk Assessment area by human assistance?	very rapid - 4	LOW - 0	Human transport of soil
2.3	How difficult would it be to contain the organism within the Risk Assessment area?	very difficult - 4	LOW - 0	Too difficult to detect, rhizome fragments weighing as little as 0.7 g are capable of regenerating into a new plant
2.4	Based on the answers to questions on the potential for establishment and spread define the area endangered by the organism.	UK Lowlands	LOW - 0	Disturbed and waste ground, suburban areas, abandoned buildings and riparian habitats
	Impacts	**RESPONSE**	**UNCERTAINTY**	**COMMENT**
2.5	How important is economic loss caused by the organism within its existing geographic range?	major - 3	MEDIUM -1	Limited quantitative data from outside the UK but there is no reason to expect that costs would differ from those within the Risk Assessment Area

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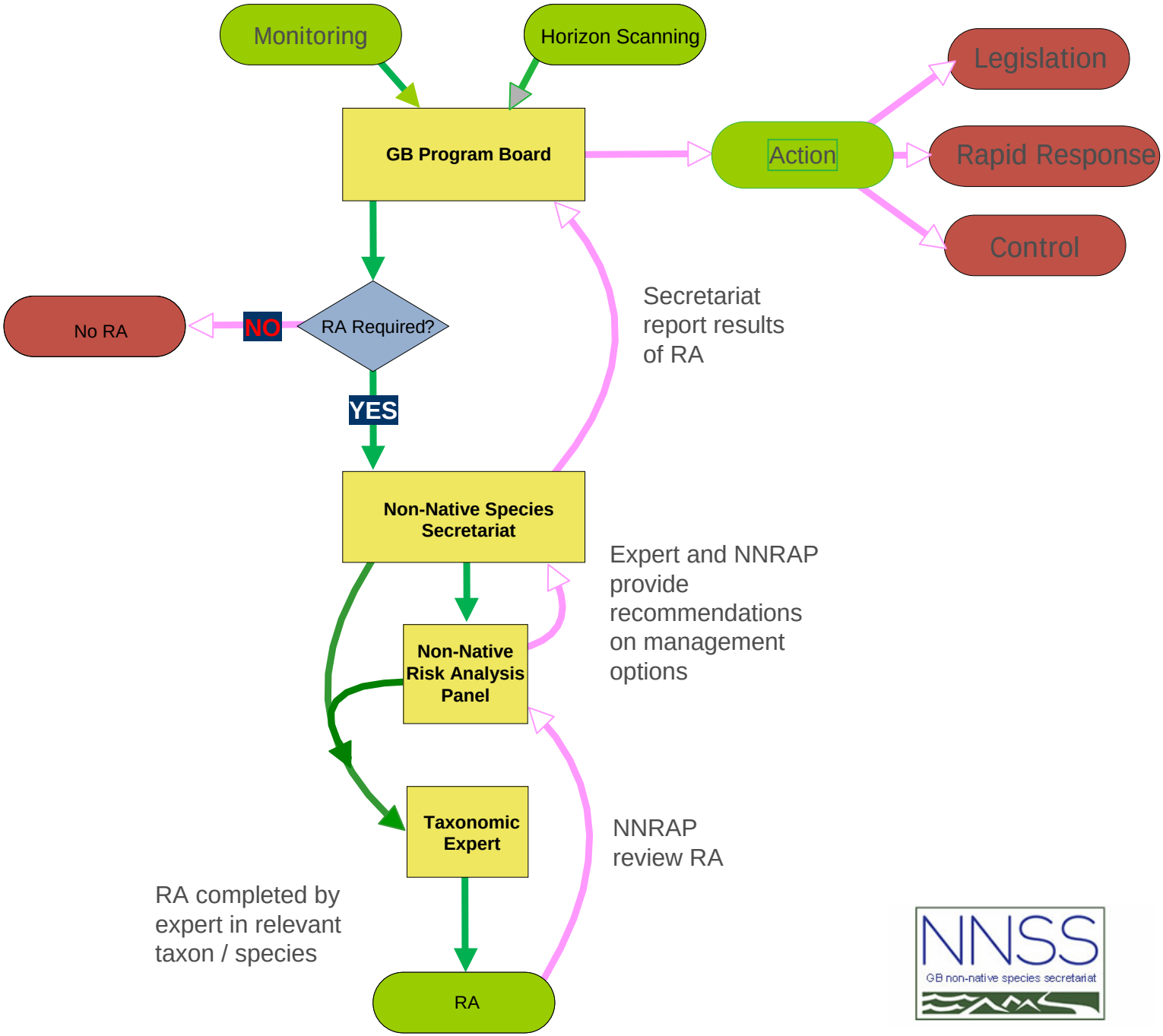
Monitoring
Horizon Scanning
GB Program Board
Action
Legislation
Rapid Response
Control
No RA
NO
RA Required?
YES
Secretariat report results of RA
Non-Native Species Secretariat
Expert and NNRAP provide recommendations on management options
Non-Native Risk Analysis Panel
Taxonomic Expert
NNRAP review RA
RA completed by expert in relevant taxon / species
RA

Rapid Intervention

- Water Primrose
  - Control trial/eradication
  - S. England (<10 sites)
  - Cost - £10K
  - Using existing capacity
- In contrast:
  - Established aquatic weeds – £3M per annum
  - Japanese Knotweed – £1.5 Billion to eradicate

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Rapid reaction: bullfrog eradication

- Found in Kent in 1999
- Natural England
  - Removed c.11,000 individuals
- New population in Essex – 2006
  - Over 100 adults removed
- Developing/using existing capacity

Development of Rapid Response Mechanism

- Currently identifying existing capacity
  - Manpower
  - Equipment
- Exploring with agencies roles and responsibilities

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Large scale eradication: Ruddy Ducks

- Unique Programme started in Autumn 2005
  - Population – 4,411
- 21 months later
  - 600 remain?
- Pan-European effort
  - France, Spain, (Portugal, Morocco, Denmark, Iceland, Ireland?)
- Textbook case

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How can GB Mechanism help the OTs

- Risk assessment
- Develop codes of conduct
- Advice on monitoring and surveillance
- Advice on control of established and new invasives
- Stakeholder Forum

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