

## Non-Native Species Risk Analysis Panel (NNRAP)

Fourteenth Meeting  
11<sup>th</sup> March 2010

### Minutes

#### 1. Attendance and apologies

Present: John Mumford - Imperial College London (Chairman)  
Richard Baker - Fera  
Kenny Black - SAMS  
Mark Rees – Sheffield University  
Olaf Booy - Non-native Species Secretariat (Secretary)  
Niall Moore – Non-native Species Secretariat

Apologies: Matt Hartley - Defra  
Gordon Copp – CEFAS

#### 2. Review of risk assessments

2.1 First drafts, peer review not yet completed (RA for detailed consideration)

##### Canadian Pondweed (*Elodea canadensis*)

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| General:       | References should be cited in the text in order to support individual responses.<br><br>Where low uncertainty is recorded references are required to back this up (or other strong evidence should be provided).<br><br>Is there any evidence that risk assessments have previously been completed for this species (e.g. in North America)? |
| Entry:         | 1.1 – Consider revising from 'few' to 'moderate'?<br><br>1.3 – Are there any figures for the amount of trade in GB?<br><br>1.6 – Should response be moderately likely?   |
| Establishment: | 1.20 – Question misinterpreted, revise response to likely?<br><br>1.22 – Uncertain how comment relates to question (revise or provide more explanation).   |

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|                | <p>1.27 – Consider revising to ‘very adaptable’ given success as an invader.</p> <p>1.29 – Complete.</p> <p>1.30 – Consider revising to very likely with low uncertainty?</p>  |
| Spread:        | <p>2.1, 2.2 – References required.</p> <p>2.3 – Consider revising to very difficult?</p> <p>2.4 – Should specify which areas of the risk assessment area are not invaded and vulnerable to invasion (not just where the species currently is).</p>   |
| Impact:        | <p>2.5 – Consider whether this is an underestimate?</p> <p>2.6 – Consider whether this is an underestimate? Further information about economic impacts are required (are there definitely no economic impacts caused by this plant?)</p> <p>2.7 – Comment does not appear to relate to producer profits. Revise or explain further.</p> <p>2.8, 2.9 – Low uncertainty needs to be justified or revised.</p> <p>2.11 – Needs further justification and references</p> <p>2.12 – References required</p> <p>2.13, 2.14 – Are these underestimates? This species can clog boating lakes making them almost impossible to use. Removal costs are expensive and required harmful chemicals which may themselves have lasting effects. References required.</p> <p>2.17 – Consider removing mention of Common Carp and Diquat (not appropriate control mechanisms).</p> <p>2.18 – Comment appears not to reflect question (which is asking about the effect on control of other organisms). Should response be unlikely?</p> |
| Summaries:     | <p>Establishment – consider revising to very likely, given the species has already established?</p> <p>Spread - low in comparison to the answers in the detailed section on spread. Consider revising or explain further.</p>  |
| To be reviewed | Yes, following modification  |

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| again by panel? |  |
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In addition to the above the NNRAP ask (same scoring as the traditional risk assessment):

- What are the current impacts caused by this species in its current location?
- What are the likely impacts in areas that it has not yet invaded? [The NNRAP will continue to consider whether this question should apply to a specific timescale (e.g. 5 years from now) or at full spread.]

### Nuttall's Pondweed (*Elodea nutallii*)

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| General:       | <p>Does <i>E. nutallii</i> invade and then retreat in the same way that <i>E. canadensis</i> does?</p> <p>References should be cited in the text in order to support responses.</p> <p>Where low uncertainty is recorded references are required to back this up (or other strong evidence should be provided).</p> <p>Is there any evidence that risk assessments have previously been completed for this species (e.g. in North America)?</p> |
| Entry:         | <p>1.1 – Consider revising from ‘few’ to ‘moderate’?</p> <p>1.3 – Are there any figures for the amount of trade in GB?</p> <p>1.6 – Should response be moderately likely?</p>   |
| Establishment: | <p>1.20 – Question misinterpreted, revise response to likely?</p> <p>1.22 – Uncertain how comment relates to question (revise or provide more explanation).</p> <p>1.27 – Consider revising to ‘very adaptable’ given success as an invader.</p> <p>1.29 – Complete.</p> <p>1.30 – Consider revising to very likely with low uncertainty?</p>   |
| Spread:        | <p>2.1, 2.2 – References required.</p> <p>2.3 – Consider revising to very difficult?</p> <p>2.4 – Should specify which areas of the risk assessment area are not invaded and vulnerable to invasion (not just</p>   |

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|                                | where the species currently is).  |
| Impact:                        | <p>2.5 – Consider whether this is an underestimate?</p> <p>2.6 – Consider whether this is an underestimate? Further information about economic impacts are required (are there definitely no economic impacts caused by this plant?)</p> <p>2.7 – Comment does not appear to relate to producer profits. Revise or explain further.</p> <p>2.8, 2.9 – Low uncertainty needs to be justified or revised.</p> <p>2.11 – Needs further justification and references</p> <p>2.12 – Response appears low given the comments – consider revising. References should be provided.</p> <p>2.13, 2.14 – Are these underestimates? This species can clog boating lakes making them almost impossible to use. Removal costs are expensive and required harmful chemicals which may themselves have lasting effects. References required.</p> <p>2.17 – Remove mention of Common Carp and Diquat (not appropriate control mechanisms).</p> <p>2.18 – Comment appears not to reflect question (which is asking about the effect on control of other organisms). Should response be unlikely?</p> |
| Summaries:                     | <p>Establishment – consider revising to very likely, given the species has already established?</p> <p>Spread - low in comparison to the answers in the detailed section on spread. Consider revising or explain further.</p>   |
| To be reviewed again by panel? | Yes, following modification   |

2.2 First drafts with peer reviews (RA and PR for detailed consideration)

**Hottentot Fig (*Carpobrotus edulis*)**

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| General: | There is quite a lot of information not specifically relevant to the risk assessment (particularly in the pers. coms.). Where possible the relevant information should be synthesised (with pers. coms. cited as a reference). |
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|                | Unknown is not a sufficient response. Some explanation of the chosen response is always required (even if it is mostly guess work).   |
| Entry:         | 37 – If there are no known species on which the fig relies the response should be n/a.<br><br>38 – As the species has already established should the response score be higher?  |
| Establishment: | 42 – Very likely is the highest category – indicating complete eradication would be virtually impossible (e.g. similar to Giant Hogweed or Japanese Knotweed). Is this correct or should it be lower?<br><br>44 – Not sure to which question ‘see above’ refers?<br><br>48 – Is it possible to indicate how many hectads it spread to in the past 5 years?  |
| Spread:        | 52 – Comments are required here.<br><br>53 – Similar to 42, consider revising?  |
| Impact:        | Are there any significant impacts on the erosion of sand dunes (i.e. to monocultures forming then dying off and exposing the dunes to erosion)?<br><br>The impact scores are quite high, but without much strong justification. More justification is required (i.e. cited literature, grey literature, relevant pers. coms.). Where information is unavailable the uncertainty should be higher.<br><br>56 – Unknown suggests the level of confidence should be low. Where possible the cost of the management across GB should be estimated. Are there any other costs associated with this species?<br><br>57 – A score of major requires justification. It seems unlikely that the fig would impact on economic interests such as copy yield, livestock, etc. Should the score not be minor?<br><br>58 – It seems unlikely that the fig would have an impact on producer profits. Consider revising downwards or explain why this if high.<br><br>61 – Response required.<br><br>62 - More detail is required about the impact that this species could have on BAP habitats (i.e. which of the listed |

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|                                       | <p>habitats are most likely to be affected, how much of the habitat is likely to be affected – note that it is particularly important to examine how much lowland heath would be affected (as this is not only a coastal habitat)).</p> <p>63 – There appears to be quite a lot of information here that is not specifically relevant to the question. Relevant information should be summarised. In addition, further information should be included about the risk to key species and habitats. Given the relatively restricted habitat in which this species can occur, it may be relevant to reduce the risk level, unless key (i.e. rare / threatened) habitats and species are at risk.</p> <p>64 – It appears the response of ‘major’ relates to the fact that people consider the plant to be a good thing and therefore may respond badly to management efforts. This would be to misinterpret the question, which is asking whether the species itself causes social harm or health risks. Consider revising.</p> <p>65 – As 64.</p> <p>69 – The question is asking whether control of the fig would interfere with the control of any other invasive non-native species. Consider revising on this basis.</p> <p>71 – While the pers. coms. are useful, the relevant information should be summarised and referenced rather than included verbatim.</p> |
| <p>To be reviewed again by panel?</p> | <p>Yes, following modification</p>   |

In addition:

- The word format of this RA was not well liked. It will be provided in Excel format in future. It may be possible that a word table (as in the EPPO system) is developed. Once people are used to the format it may be that the .mdb file is circulated from which NNRAP members can print the format they desire.

**ACTION 1 – NNSS** to circulate NAPRA risk assessments in excel format, rather than word document.

2.3 Peer Reviews of RAs previously presented to the Panel

- None

2.4 Amended drafts following Panel and Reviewers' comments (to agree that they are now "fit for purpose")

**Parrot's Feather (*Myriophyllum aquaticum*)**

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| General:                       | <p>Some additional attention required to the bibliographic references.</p> <p>In general are the impacts of this species likely to be less significant in more northerly, colder parts of GB?</p> <p>Is it possible to extrapolate more evidence, particularly in relation to impacts, from research carried out in Europe?</p> <p>The references at the end of the risk assessment do not appear to be complete.</p>  |
| Entry:                         | 1.9 – The figure relating to the amount of this plant in the trade is very useful. How was this figure calculated?   |
| Establishment:                 | 1.15 – More detail required about the specific temperature tolerance of this species. Is there more information in the literature about this?  |
| Spread:                        | <p>2.4 – More detail required about the specific areas that are endangered. Current distribution indicates this species is more in the south than the north of GB, does that reflect difference in invasive behaviour as a result of temperature differences?</p> <p>2.6 – There is an error in the spreadsheet (percentage is used rather than proportions), the correct figure should be approximately 15.4 million over 25 years.</p> <p>2.7-2.9 – Low uncertainty should be justified with a more substantive comment.</p> |
| Impact:                        | 2.11 – Is there more information about impacts in the scientific literature? For example, are the impacts in Portugal and California likely to be similar in GB - if so across how much of GB? Is there any more literature about impacts specifically in GB?  |
| To be reviewed again by panel? | No, sign off following modification  |

**Giant Knotweed (*Fallopia sachalinensis*)**

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| <p>General:</p>       | <p>Section A. Responses should be completed (where necessary).</p> <p>In some cases references such as E62 (1.24) have been included. Explain what these are (if they refer to comment cells it is better just to refer to the question number, e.g. Qu. 1.20).</p>   |
| <p>Entry:</p>         | <p>1.1 – Why does the last sentence have a question mark?</p>   |
| <p>Establishment:</p> | <p>1.17, 1.18 – Provide responses and uncertainties.</p> <p>1.22 – The comment suggests the correct response should be likely (double negatives may have been confusing), consider revising.</p> <p>1.24 – Response and uncertainty should be provided.</p> <p>1.29 – This question is asking how often it has entered and established outside its native range in Japan (i.e. other countries etc), consider revising on this basis.</p>   |
| <p>Spread:</p>        | <p>2.2 – The last sentence in the comments box appears not to be relevant to the specific question, additional explanation should be provided.</p>  |
| <p>Impact:</p>        | <p>2.5 – Provide response. Where comparisons are made with Japanese Knotweed is it possible to say any more about the physiological similarities that might lead to similar impacts?</p> <p>2.7 – This question relates to producer profits (i.e. impacts on the production of goods and materials). The comment does not appear to reflect this.</p> <p>2.8 – There is some evidence with Japanese Knotweed that mortgage lenders may refuse to lend money to those with this plant in or near their property. Is it likely that this is the same with Giant Knotweed?</p> <p>2.11 – Low uncertainty should be supported with further justification.</p> <p>2.13 – Response should be provided.</p> <p>2.18 – This question asks whether the control of Giant Knotweed would interfere with the control of other invasive non-native species. The response and comment should be reviewed on this basis.</p> |

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| Summaries:                     | <p>Entry – Should this be very likely (the convention for species which have already entered)?</p> <p>Spread – Response should be provided.</p> <p>Impact – Uncertainty score does not appear to reflect the detailed impact section. Consider revising or explain why this is the case.</p> |
| To be reviewed again by panel? | No, sign off following modification  |

**Muntjac Deer (*Muntiacus reevesii*)**

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| General:                       | <p>There is disparity between the spread section (indicates fast spread) and summary score at the end (slow). This should be reviewed and modified or explained.</p> <p>Check for editorial issues (e.g. in the comments to Q2.6 the reference is cited as White et al. 2004).</p> |
| Impact:                        | 2.14 – Benefits of a species should not be taken into account in the risk assessment (this is done at a different stage). If necessary the score and comments should be revised to reflect this.   |
| To be reviewed again by panel? | No, signed off following modification  |

In addition:

- Changes to be made to the RA itself (NNSS to do this).

**Sika Deer (*Cervus nippon*)**

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| Impact                         | 2.12 – Reference to hybridisation should be removed – this is taken into account in 2.15 and should not influence the score to this question. |
| To be reviewed again by panel? | No, signed off.   |

**3. Risk assessments for which public comments have been received**

**Eagle Owl**

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| General: | <p>NNSS to send summary document to risk assessor for their consideration, response and modification to the risk assessment where appropriate.</p> <p>The NNRAP ask the assessor to particularly consider:</p> <ul style="list-style-type: none"><li>- Any new information relating to Eagle Owls arriving from mainland Europe (i.e. isotope analysis paper when available and Aebischer et al 2010).</li><li>- Key comments 2, 7 and 8</li></ul> |
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#### 4. AOB

JM presented a number of different methods for summarising the risk assessment scores in relation to the confidence scores and the final summary score. The NNRAP felt these would be useful (with support for both the bubble chart and bar chart) and asked JM to work on a way to automatically include them in the output of the new NAPRA scheme. **NNSS** to work with **JM** on this.

**ACTION 2 – JM** to consider how to include risk / confidence summary diagrams automatically within NAPRA system. **NNSS** to support where required.

The NNRAP instructed the NNSS to circulate a list of remaining risk assessments that have not yet been commissioned. These will then be considered by the NNRAP and instructions for risk assessors will be developed in order to guide them on the key aspects to consider (on a species specific basis). Initial comments on points to raise with risk assessors include:

- Why the risk assessment is being carried out.
- What the key questions / sections are that the assessor should focus on.
- Specific evidence that the risk assessor should take into account.

**ACTION 3 – NNSS** to circulate list of outstanding risk assessments and provide initial suggestions for the rationale behind carrying out the risk assessment (based on advice from stakeholders that have requested the risk assessment be produced).

The NNRAP decided that when considering impact two different questions should be asked:

1. What impacts does the species have in the parts of the risk assessment it currently occupies?
2. What would the impacts be if the species reached the limit of its range (i.e. abiotic and biotic tolerance) within GB? [There was discussion that this should

be time limited, i.e. what would the impact be in 5 years, or that this should be included as an additional question to allow for qualification. JM will prepare some wording and for the next meeting a demonstration of how the results might be interpreted.]

It was decided that a register of issues should be developed so that the NNRAP could provide an explanation of how to address key issues. The NNSS will provide an initial list on instruction from the chair, to which all members will be asked to add.

These issues and others will be considered by the NNRAP in a longer than usual meeting in Oban.

**ACTION 4 – NNSS and Chair** to draft initial register of issues and circulate for comment.

**5. Date and location of next meeting**

NNRAP 15 – Late May / early June, Oban [DATE TO BE CONFIRMED]

**ACTION 5 – KB** to circulate dates for the next meeting in Oban. **ALL** to notify KB of their availability on the dates provided.

**ACTION 6 – OB** to circulate dates for the next 4 meetings (after Oban). **ALL** to notify OB of their availability on the dates provided.