Contingency plan for invasive non-native marine species

England

January 2020

1. Scope

This plan is designed to be used by government officials and sets out how government and agencies would respond to an incursion of any invasive non-native marine species in England. Similar plans are in place in Wales and Scotland.

This plan is generic, with species-specific information provided in separate annexes. Annex 1 lists species on the horizon for which a response is expected as well as species for which there is a legal obligation to attempt a rapid response.

2. Legal position

Relevant legislation is set out on the ‘gov.uk’ website as well as the NNSS website (www.nonnativespecies.org). Additional reference to species-specific legislation is included in the annexes of this document. Defra are responsible for providing additional legal guidance and interpretation as necessary.

3. Policy, process and governance

Defra has overall policy responsibility for this contingency plan and officials will consult Ministers as necessary. The Responsible Authority will be responsible for its delivery and is determined as follows:

- The Marine Management Organisation (MMO) is the Responsible Authority when the primary impact of the invasive non-native species is on a marine fisheries interest.
- Cefas is the Responsible Authority when the primary impact of the invasive non-native species is on a marine aquaculture interest.
- Natural England is the Responsible Authority when the primary impact of the invasive non-native species is on biodiversity and within 12 nautical miles of the English coast.
- The Joint Nature Conservation Committee is the Responsible Authority when the primary impact of the invasive non-native species is on biodiversity and beyond 12 nautical miles of the English coast.

A Response Group, led by the Responsible Authority, will oversee the response, reporting to senior officials and Ministers, and providing recommendations for escalation if necessary. An Operational Group will be responsible for implementation on the ground. The Responsible Authority, or an agent working on their behalf (e.g. Cefas), will provide
the majority of assessment and implementation work. Defra press office will be responsible for external communications, supported by the Response Group. The following flow diagram illustrates the link between these organisations. Annex 2 provides detail on the roles and responsibilities of each organisation and group. Annex 3 provides a flow diagram summarising the roles and responsibilities during different stages of a response.

Standing Environment Groups are already used in the marine environment to support responses to marine pollution (e.g. oil spills). It is unlikely that these groups would play a role in a response to a marine invasive species; however this should be reviewed on a species by species basis.

**Stakeholder consultation and the role of volunteers**

Stakeholder support will be important to a successful response in many cases. Their role could include, but is not limited to: detection, assessment, access, communication and biosecurity. Plans to engage stakeholders should be detailed in species-specific annexes of this plan.

4. **Anticipation & Assessment**

**Risk analysis**

The GB Programme Board for non-native species, chaired by Defra, is responsible for coordinating non-native species policy in GB (but note the Board is not responsible for non-native species related to plant or animal health). The Board has established a GB risk analysis mechanism which provides evidence of the risk posed by non-native species as well as the feasibility of management. The process is managed by the Non-native Species
Secretariat, with a dedicated panel of risk analysis experts (known as the Non-native Risk Analysis Panel) responsible for ensuring risk assessments are fit-for-purpose. The Board has also established the Non-native Species Information Portal which has responsibility for horizon scanning, which is undertaken at regular intervals.

Ideally risk assessments (rapid or detailed) and risk management appraisals should be completed before species invade. However, where this is not the case it should not prevent a response. Instead a rapid assessment (commissioned by the NNSS) should be completed as soon as possible following invasion.

Where available a summary of the risk assessment and risk management appraisal should be provided in the species-specific annex.

**Specific contingency plans**

This generic plan, supported by species-specific information provided in its annexes, should be sufficient for most responses to marine species. However, where there is need, separate species-specific contingency plans should be developed. Responsibility for producing species specific annexes and plans lies with the Responsible Authority.

5. **Preparation**

**Staff resources**

Staff from the Responsible Authority (or its agent), will provide the initial emergency response capability.

If necessary the Responsible Authority will seek authority to require the release of further staff from Defra and Defra Agencies to work on emergency duties.

Defra has arrangements in place which identify suitable volunteers who could provide assistance to an emergency for core Defra policy roles. The Emergency Response Group has volunteers from across the Department who would support Defra emergency teams in the event of a serious and sustained outbreak.

Memorandum of Understanding on Mutual Aid and the Redeployment of Human Resources. This relates to the loan of staff from other government departments.

**Training**

The level of training undertaken in advance of a response should be proportional to the envisaged action that will be taken.

Response and Operational staff should be familiar with this plan and trained in its delivery. Relevant organisations are responsible for finding and undertaking their own training. Where necessary, short exercises should be undertaken annually to test preparedness for an outbreak event, organised by the Responsible Authority.
Operational staff should be familiar with relevant management techniques and obtain relevant training where necessary.

**Equipment**

The equipment procured in advance of a response should be proportional to the envisaged action that will be taken.

The Responsible Authority will be responsible for ensuring suitable equipment is available to deliver responses to the species identified in Annex 1. This could include maintaining a stock of equipment, or ensuring there is a ready supply of stock to be brought in as necessary.

The Responsible Authority will be responsible for sourcing additional equipment as necessary for an invasion of any species not listed in Annex 1.

**Evaluation and review**

A review should be carried out after all major outbreaks, and as necessary following exercises, to identify lessons learned and improve future responses.

6. **Detection**

There is no dedicated surveillance for invasive non-native marine species in Britain.

Limited monitoring is done by government (e.g. MMO, IFCAs, JNCC, NE, EA) for other reasons and may encounter invasive species as a result.

Limited reports from stakeholders or the general public are possible. ID sheets for some species are available and alerts can be sent to (alertnonnative@ceh.ac.uk).

Where reports come through the alert system the NNSS will inform the relevant Responsible Authority. If the report comes to any other organisation it should be sent to the NNSS who will identify and contact the Responsible Authority.

7. **Response**

A response is triggered when:

- A species listed in Annex 1 of this document is reported anywhere in England.

- Any other non-native marine species is reported anywhere and identified as a significant threat by Defra on the basis of risk analysis (above) and in consultation with its advisors.

**Official action on suspicion**
Reports of individual marine species may not necessarily require a response. Any records will be investigated by the Responsible Authority (or its agent) which will determine whether a population is established or there is the potential for a population to establish.

**Official action on confirmation**

The Responsible Authority will establish the Response Group. If necessary the Response Group will establish the Operational Group to provide advice / support as necessary.

The Operational Group will investigate the extent of the species and source of introduction. Taking advice from the Operational Group, the Response Group will consider the feasibility of a response and provide recommendations to senior officials and / or Minsters. To help inform their decision the Response Group should undertake (or commission) a risk management appraisal.

Where relevant, the Response Group will be responsible for determining when a release / escape requires investigation with a view to prosecution. If so, the relevant enforcement agency should be identified to lead the investigation.

There are three broad potential responses: eradicate, slow the spread, or 'take no action'. In most cases in the marine environment cost effective management is not feasible and so 'take no action' is likely to be the most appropriate course of action. However, responsibilities associated with each level of response are set out below.

**On a decision to ‘take no action’**

If no cost effective action can be taken the Response Group will:

- Communicate this decision to stakeholders as necessary.
- Support press office in developing appropriate lines of communication and responding to enquiries.

**On a decision to slow the spread**

The Response Group will provide recommendations for slowing the spread (based on advice from the Operational Group as necessary). The Responsible Authority will determine what action to take, in consultation with senior officials and Ministers as necessary, and communicate this decision to the Response Group.

The Operational Group will:

- Liaise with local stakeholders / landowner to make them aware and seek support and/or apply regulatory conditions (where appropriate) to secure enhanced biosecurity.
• Implement additional local biosecurity measures where appropriate and / or help landowners and other stakeholders to implement measures (landowners and stakeholder may be required to implement these measures).
• Monitor the effectiveness of biosecurity measures as necessary.

The Response Group will:
• Liaise with national stakeholders to make them aware and seek support for enhanced biosecurity.
• Develop and promote national biosecurity messages as necessary.
• Consider and if relevant take forward any regulatory or statutory measures to improve biosecurity.
• Monitor and review biosecurity measures as appropriate.

On a decision to attempt rapid eradication

On a decision to attempt eradication, the Operational Group will:
• Produce an eradication strategy to be approved by the Response Group and senior officials as necessary.
• Liaise with local stakeholders as necessary.
• Implement the eradication strategy.
• Update the Response Group as necessary and advise on any required changes to the planned response, including the need to escalate or stand down.
• Monitor the site following eradication to ascertain success.

The Response Group will:
• Support the Operational Group by reviewing the eradication strategy and helping to resolve issues.
• Liaise with national stakeholders as necessary.
• Maintain an overview of the eradication strategy and determine whether to escalate or stand down if necessary.

The Response Group will determine when eradication has been successful.

Escalation and standing down eradication effort
The Response Group will advise senior officials / Ministers if there is a need to escalate eradication efforts or to stand down. This may be appropriate if, for example:

- Eradication is unsuccessful or more difficult / expensive than initially estimated.
- New populations are discovered that cannot be eradicated.

If a decision is taken to stand down, the Response Group will provide recommendations for further action (i.e. slowing the spread or ‘doing nothing’).

8. Resources and costs of response

The resources and costs associated with a response will be dependent on the species and the circumstances of the invasion.

There are no costs associated with taking no action; however when considering the feasibility of a response this should be balanced against the cost of inaction (e.g. environmental, economic or social impacts of the invader).

Costs associated with slowing spread may include, for example, awareness raising and installation of biosecurity facilities. These are usually generic, rather than species specific actions. Example costs of biosecurity campaigns include c. £40k per annum for Check, Clean, Dry.

True eradication is rarely attempted in the marine environment due to cost and lack of feasible options, although interception of releases has also been attempted in the case of the American Lobster.

9. Risks to a successful response

Licenses and approvals may be required to take action in the marine environment, particularly associated with placing objects or chemicals in the water. There is a risk that this will slow down a response.

Species specific annexs should identify products that would need to be approved before use in the marine environment and approvals should be sought for these in advance on an invasion.

Marine invasions may be associated with a particular boat or in-water structure. Cooperation with owners will usually be required but may not be forthcoming (or worse boats / structures may be moved potentially spreading the problem). Voluntary cooperation should be sought in the first instance, but if necessary the use of legislation (including Control Orders) may be required. Control Orders could be issued by the Secretary of State, Defra, NE or EA.

10. External communications
Press lines

Defra press office will be responsible for media communication, with support from the Response Group. Reactive lines should be prepared for each species on suspicion, confirmation, during a response, following a response and in the case of a need to escalate or stand down (the latter is particularly important for marine species). Proactive messaging should be considered where possible and appropriate. External communications should take into account local and national stakeholders and should be developed and shared with them where appropriate.

Communication with external stakeholders

The Response Group is responsible for communicating with national stakeholders as appropriate. A list of potential stakeholders with an interest in marine responses is provided in Annex 4.
ANNEX 1: Species to which this plan applies

This plan applies to invasive non-native marine species that Defra has identified in advance of an invasion (Table 1). It should also be used to respond to any new invasive non-native marine species not listed, at the direction of Defra and ideally on the basis of rapid risk analysis.

Certain species are listed because the UK has a statutory obligation to eradicate under EU law. The reason for listing each species is given in the table below.

Table 1. List of invasive non-native marine species identified for rapid response in advance of an invasion

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>English name</th>
<th>EU Reg Species¹</th>
<th>Horizon scanning²</th>
<th>Risk</th>
<th>Feasibility of eradication³</th>
<th>Likely primary impact (major secondary in brackets)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celtodoryx ciocalyptoides</td>
<td>A Sponge</td>
<td>-</td>
<td>X</td>
<td>High</td>
<td>Very low</td>
<td>Biodiversity</td>
</tr>
<tr>
<td>Gracilaria vermiculophylla</td>
<td>Rough Agar Weed</td>
<td>-</td>
<td>X</td>
<td>High</td>
<td>Very low</td>
<td>Biodiversity</td>
</tr>
<tr>
<td>Homarus americanus</td>
<td>American Lobster</td>
<td>-</td>
<td>X</td>
<td>High</td>
<td>Low</td>
<td>Fisheries</td>
</tr>
<tr>
<td>Mnemiopsis leidyi</td>
<td>American Comb Jelly</td>
<td>-</td>
<td>X</td>
<td>High</td>
<td>Very low</td>
<td>Fisheries (Biodiversity)</td>
</tr>
<tr>
<td>Ocenebra inornata</td>
<td>Japanese Sting-Winkle /Oyster Drill</td>
<td>-</td>
<td>X</td>
<td>High</td>
<td>High</td>
<td>Aquaculture (Biodiversity)</td>
</tr>
<tr>
<td>Rapana venosa</td>
<td>Rapa Whelk</td>
<td>-</td>
<td>X</td>
<td>High</td>
<td>Low</td>
<td>Aquaculture</td>
</tr>
</tbody>
</table>

¹ Listed as species of Union Concern under EU IAS Regulation

² Identified as within the top 30 threats from invasive species not yet established in GB

³ Based on most likely scenario of invasion
ANNEX 2: Roles and responsibilities

Defra will:

- Provide updates to the Press Office and agree media handling plans.
- Apply for any necessary and additional funding required for the duration of the outbreak.
- Inform the EU Commission and other member states as necessary.

The Responsible Authority will:

- Establish and chair the Response Group.
- Establish a framework for the overall management of the outbreak.
- Provide resources and set limitations on resources.
- Ensure clear lines of communication.
- Commission advice from scientific advisors and/or core stakeholders if required to facilitate decision on strategic direction.
- Undertake appropriate liaison with other agencies and stakeholders.
- Develop, communicate and monitor the plan.
- Implement the plan through the Operational Group, on instruction from the Response Group.
- Provide technical advice as required.
- Ensure staff have the required training and equipment.

The Response Group (led by the Responsible Authority with Defra, NNSS, Cefas, MMO, NE, JNCC, Ass. of IFCAs and / or EA as required) will control the response and:

- Update Defra Ministers, senior officials, and Devolved Administrations about the outbreak.
- Develop recommendations as necessary for Ministers on control policies based on scientific advice.
- Agree communication and stakeholder engagement plans.
- Commission additional analytical work if there is insufficient understanding of the outbreak and/or its spread.
• Consider, and if relevant take forward, any regulatory or statutory measures.

The Operational Group (led by the Responsible Authority, with the local IFCA, MMO, Cefas and / or EA as required) will implement the response and:

• Assess the extent of the outbreak, the number of required resources and risks.

• Liaise with stakeholders and land owners on the ground as necessary.

• Provide overall management of field activities.

• Provide regular updates to the Response Group.

• Support the implementation of regulatory or statutory measures and, where relevant, support the investigation and gathering of evidence.
ANNEX 3. Diagram of example stages in a response and responsibilities

**STAGE**

- Suspected sighting
  - Confirmed
    - Attempt eradication
    - Slow spread
    - Take no action
      - Successful
        - Stand down
        - **Return to pre-invasion footing**
      - Unsuccessful
        - **Operational Group** implement action with direction from **Response Group**

**RESPONSIBILITIES**

- **Responsible Authority** verifies and confirms potential to establish
- **Responsible Authority** establishes **Response Group** which considers the feasibility of a response and produces recommendations
- **Ministers / senior officials** determine appropriate response based on recommendations
- **Operational Group** implement action with direction from **Response Group**
- **Response Group** monitors activity and recommends whether to escalate or stand down
- **Response Group** provides recommendations for ‘slowing spread’ or ‘doing nothing’ in the case of failed eradication.
ANNEX 4. Non-exhaustive list of potentially relevant national stakeholders

- Association of Inshore Fisheries and Conservation Authorities
- British Marine
- Marine Biological Association
- Marine Conservation Society
- Maritime and Coastguard Agency
- Royal Yachting Association
- Standing Environment Groups
ANNEX 5. Template for species-specific information requirements

Box – issues to be resolved in advance of an invasion

1. Description of species

2. Policy and governance

State the policy aim.

If necessary, clarify any roles above and beyond that given in the generic plan.

3. Legal position

Species-specific law that is relevant

4. Risk assessment

Is a risk assessment available – summarise it.

5. Risk management

Is a risk management appraisal available – summarise it.

6. Detection

7. Training and equipment
   a. Training requirements
   b. Equipment requirements

8. Response
   a. Official action on suspicion [cover trigger points]
   b. Official action on confirmation [cover surveillance requirements, scenarios and eradication methods]
   c. Post eradication monitoring requirements [if relevant]
   d. Escalation and standing down thresholds and responses

9. Resources and costs

10. Specific risks to successful response (beyond those stated)

11. External communications
a. Press lines (on suspected sighting, confirmed sighting, during eradication, following removal, in the case of standing down).

b. Communication with external stakeholders

12. Role of stakeholders

13. Supporting information

14. Drafted by
ANNEX 6. Species-specific contingency information

To be added as required.