

Contingency plan for invasive non-native freshwater animals

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 freshwater animal in England (note amphibians are considered terrestrial vertebrates for the purposes of contingency planning and are therefore not covered by this plan). Similar plans are in place for Wales and Scotland. The plan is for any incursion in any freshwater waterbody.

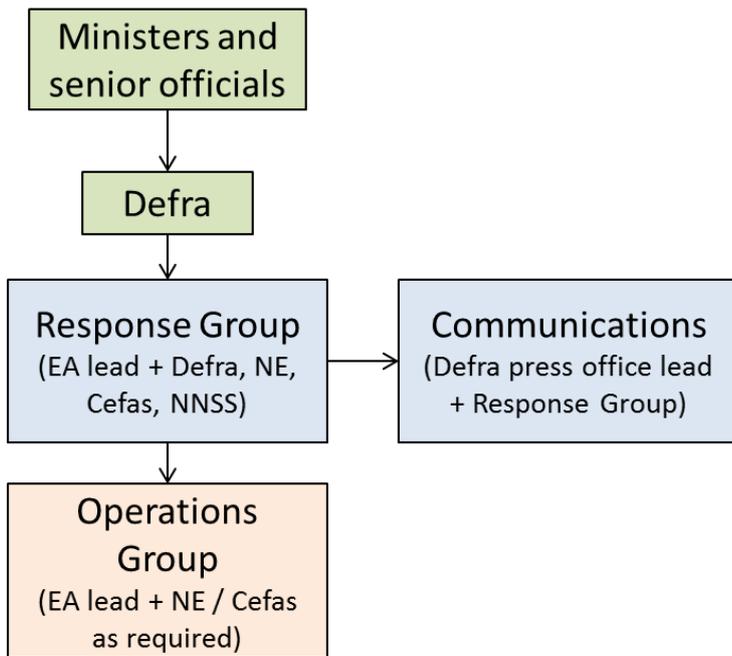
This plan is generic, with species-specific information provided in separate annexes. Annex 1 lists species on the horizon for which a response is expected as well as species for which there is a legal obligation to attempt a rapid response.

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 where required. 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 Environment Agency (EA) has overall responsibility for its delivery. A Response Group, led by the EA, will be responsible for overseeing the response, reporting to senior officials and Ministers, and escalation if necessary. An Operational Group will be responsible for implementation on the ground. The EA is expected to provide the majority of assessment and implementation work (in collaboration with Natural England as necessary). 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.



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 (NNSS), 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 should be completed as soon as possible following invasion (commissioned by the NNSS).

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 freshwater animals. However, where there is need, separate species-specific contingency plans should be developed.

5. Preparation

Staff resources

Staff from the EA will provide the initial emergency response capability.

If necessary the EA 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.

If necessary, Defra will also trigger the use of the cross Government Memorandum of Understanding on Mutual Aid and the Redeployment of Human Resources. This relates to the loan of staff from other government departments.

Training

Response and Operational staff should be familiar with this plan and trained in its delivery. Where necessary, short exercises should be undertaken annually to test preparedness for an outbreak event.

Operational staff should be familiar with relevant management techniques and obtain relevant training where necessary.

Equipment

The EA 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 EA 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. Reviews will be led by the EA and centrally stored by the NNSS.

6. Detection

There is no dedicated surveillance for invasive non-native freshwater animals in Britain.

Defra agencies monitor freshwater systems for other reasons (e.g. water quality monitoring) and may encounter invasive species as a result.

Reports are also made by the general public. This is encouraged through the provision of identification information (<http://www.nonnativespecies.org/index.cfm?sectionid=47>) and an alert system (alertnonnative@ceh.ac.uk).

Non-government organisations also survey water bodies for other reasons (e.g. Fishery Managers, Riverfly Partnership, Wildlife Trusts, Freshwater Habitats Trust, Freshwater Biological Association) and records are made by other interested parties and members of the public (e.g. anglers, students, etc). It is possible that incidental records may come through any of these networks

7. Response

A response is triggered when:

- A species listed in Annex 1 of this document is reported in the wild in England.
- Any other non-native freshwater animal is reported in the wild and identified as a significant threat by Defra, in consultation with its advisors.

Populations discovered in small garden ponds or commercial facilities may require a different response. This will be at the Response Group's discretion (see below).

Official action on suspicion

Reports of individual freshwater animals may not necessarily require a response. The EA will determine when a record should be considered of concern, undertaking investigation as necessary and, where relevant, consulting Defra, NNSS and NE.

In the case of species listed in Annex 1, a response is required should any self-sustaining population be detected or suspected. For species not listed in Annex 1 the EA will determine whether a response is required, in consultation with Defra, NE and NNSS.

Difficulties in identifying a specimen will be resolved by the EA, with support of other organisations and experts as required.

Official action on confirmation

The EA will confirm that a population of concern has been detected that may require a response. On confirmation, the EA will establish the Response Group, who will inform senior officials and Ministers as necessary and establish the Operational Group.

The Operational Group will:

- Assess the affected area to establish the likely extent of the population.
- Undertake a biosecurity risk assessment of pathways into and out of the affected areas.
- Undertake risk based surveillance of additional water bodies that may be affected.
- Immediately put in place initial biosecurity / containment measures as advised by the Response Group.
- Provide advice on the feasibility of management (particularly eradication and containment), including any site specific issues to be overcome.
- Liaise with landowners and interested parties as necessary to obtain access and other permissions, if necessary utilising species control orders.
- Investigate the source of the outbreak and pursue appropriate legal action.

On advice from the Operational Group, the Response Group will provide recommendations for action. These recommendations will be based on, but not limited to, the following priorities:

1. Complete eradication of the species is the first priority; however, this is unlikely to be feasible in many cases (particularly when an established population is discovered in a large or online water body).
2. The next priority is to contain the species to the invaded site. Measures to do this will be based on the biosecurity risk assessment undertaken by the Operational Group.
3. Where complete containment is unfeasible, the next priority will be to implement measures to slow the spread of the species.

The Response Group will determine the appropriate course of action, in consultation with Defra, senior officials and Ministers as necessary, and communicate this decision back to the Operational Group. To help inform their decision the Response Group should undertake (or commission) a risk management appraisal.

Rapid eradication

On a decision to eradicate, the Operational Group will:

- Produce an eradication strategy (including any necessary biosecurity measures), identifying any issues, to be approved by the Response Group and senior officials as necessary.

- Liaise with landowners and interested parties as necessary, in particular to obtain access utilising statutory powers 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 to move from the eradication phase to the monitoring phase and determine when monitoring can stop as a result of successful eradication.

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 (based on information from the Operational team). 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 will move to containment or slowing the spread through enhanced biosecurity.

Containment or slowing the spread through enhanced biosecurity

The Response Group will provide recommendations for containment or slowing the spread, based on the biosecurity risk assessment and advice of the Operational Group.

The Response Group will determine what action to take, in consultation with senior officials and Ministers as necessary, and communicate this decision back to the Operational Group.

The Operational Group will:

- Liaise with local stakeholders / landowners 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.

These steps are not detailed or exhaustive, additional steps may be required as determined by the Response Group.

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.

Eradication may not be feasible in all waterbodies. The illustrative cost of eradication in small, offline water bodies may range from £1ks to £1Ms depending on scale and complexity. Eradication is unlikely to be feasible in large scale, flowing water systems. If it were attempted it is likely to cost £1Ms to £10Ms.

Costs associated with containment or slowing the spread would normally be expected to be the responsibility of land owners and stakeholders. However, there are likely to be initial costs to government (e.g. in helping to establish local biosecurity) in the region of £10ks.

9. Risks to a successful response

Negative consequences of management are common in the freshwater environment (e.g. environmental impacts of using pesticides or piscicides in aquatic systems). The risk of such consequences should be weighed, by the Response Group, against the benefits of control. Where negative consequences are anticipated they should be mitigated where

possible. Where negative consequences are possible careful communication is likely to be important (i.e. with stakeholders, general public, media).

Pesticides or piscicides are one of the few tools that can be successfully used to eradicate freshwater species, however their use is highly restricted and regulated. Changes to regulation further limiting the use of pesticides may reduce the likelihood of successful management. This should be considered on a species specific basis and attention given to the use of off-label-approval or other mechanisms to reduce risk.

Lack of cooperation from landowners is a potential risk. Liaison will be carried out by the Operational Group in the first instance to reduce this risk, with support from the Response Group where necessary. Where negotiation is unsuccessful Species Control Agreements / Orders can be used to enforce access and in the case of freshwater fish, molluscs and crustaceans, powers to carry out investigations, management and eradication operations are available under the Keeping & Introduction of Fish Regulations 2015.

10. External communications

Press lines

Defra press office will be responsible for external communications, 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. 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 freshwater animal responses is provided in Annex 4.

ANNEX 1: Species to which this plan applies

This plan applies to invasive non-native freshwater animals that Defra has identified in advance of an invasion (Table 1). It should also be used to respond to any new invasive non-native freshwater animals 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 freshwater animals identified for rapid response in advance of an invasion

Scientific name	English name	EU Reg Species ¹	Horizon scanning ²	Risk	Feasibility of eradication ³
<i>Corbicula fluminalis</i>	Asian Clam		X	High	Low
<i>Echinogammarus ischnus</i>	Bald Urchin Shrimp		X	High	Very low
<i>Echinogammarus trichiatus</i>	Curly Haired Urchin Shrimp		X	High	Very low
<i>Neogobius melanostomus</i>	Round Goby		X	High	Low
<i>Percottus glenii</i>	Amur Sleeper	X		Unknown	Unknown
<i>Procambarus fallax f. virginalis</i> (<i>Procambarus virginalis</i>)	Marbled Crayfish	X		Medium	Unknown (high?)
<i>Proterorhinus marmoratus</i>	Tube-nose Goby		X	High	Low

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 and coordinate 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.
- Provide additional legal guidance and interpretation

The Environment Agency 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 Environment Agency, with Defra, NE and NNSS) will control the response and:

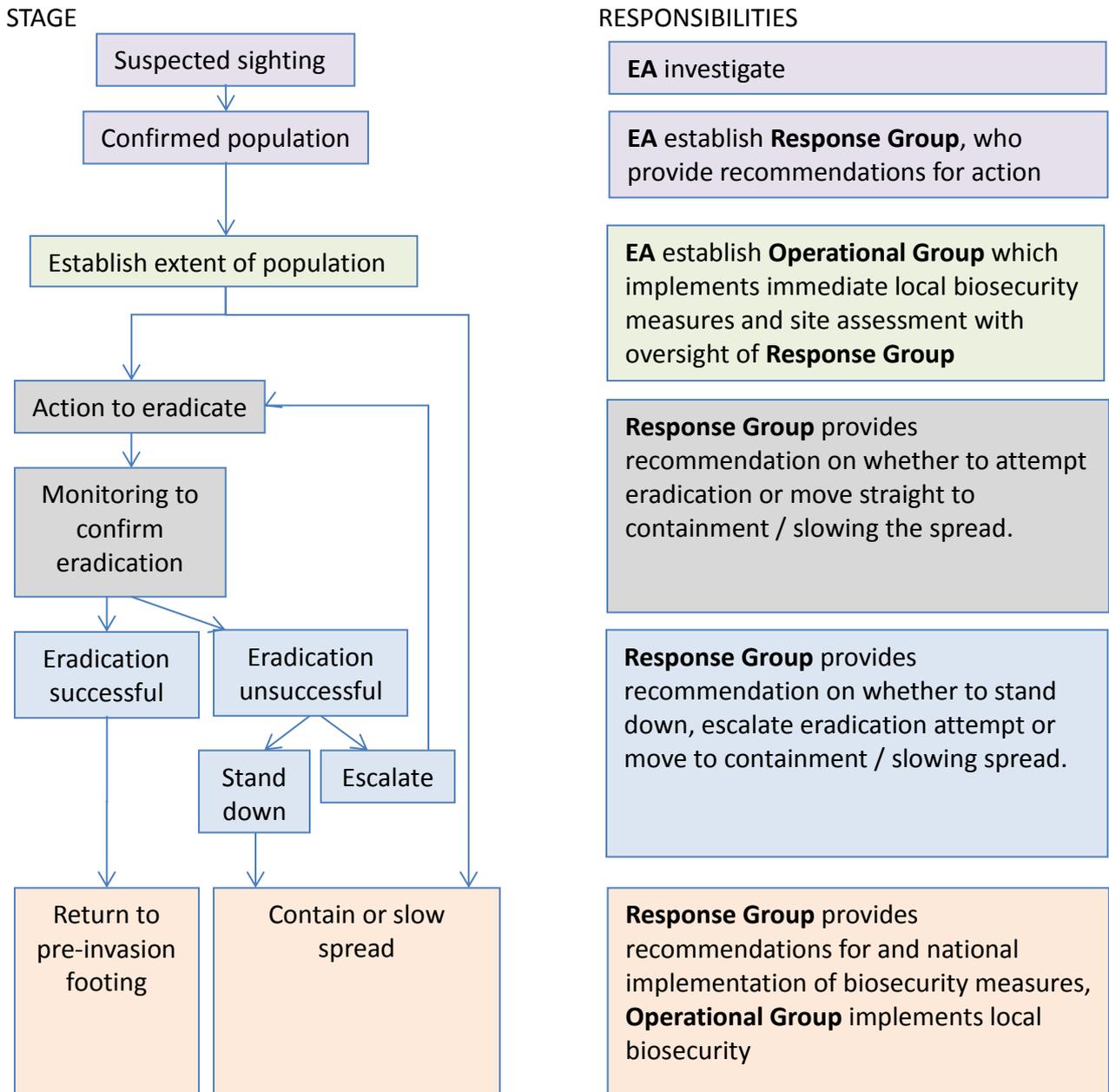
- Update Defra Ministers, senior officials, and Devolved Administrations about the outbreak.
- Develop recommendations as necessary for Ministers on control policies based on scientific advice.
- Agree communication and stakeholder engagement plans.

- Commission additional analytical work if there is insufficient understanding of the outbreak and/or its spread.

The Operational Group (led by the Environment Agency, with NE and / or Cefas as required and determined by the Response Group) 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.

ANNEX 3. Diagram of example stages in a response and responsibilities



ANNEX 4. Non-exhaustive list of potentially relevant national stakeholders

- Angling Trust
- Association of Rivers Trust
- British Canoeing
- Buglife
- Canal and Rivers Trust
- Freshwater Biological Association
- Freshwater Habitats Trust
- National Trust
- Ornamental Aquatic Trade Association
- Royal Society for the Protection of Birds
- Royal Yachting Association
- Salmon and Trout Conservation Trust
- The Wild Trout Trust
- The Wildlife Trusts
- Water companies
- Wildfowl and Wetlands Trust
- Wildlife and Countryside Link

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.