Contingency plan for invasive non-native terrestrial vertebrates

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 terrestrial vertebrate in England (note amphibians are considered terrestrial vertebrates for the purposes of contingency planning). 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 may be included in the annexes of this document. Defra are responsible for providing additional legal guidance and interpretation as necessary.

Guidance is provided on how to respond to a potential offence under ‘official action on suspicion’ below.

3. Policy, process and governance

Defra has overall policy responsibility for this contingency plan and officials will consult Ministers as necessary. Natural England has overall responsibility for its delivery. A Response Group, led by Natural England, 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 Animal and Plant Health Agency is expected to provide the majority of assessment and implementation work at the request of Natural England. 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 and communication. 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 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.

Species specific contingency plans
This generic plan, supported by species-specific information provided in its annexes, should be sufficient for most terrestrial vertebrate responses. However, where there is need, separate species-specific contingency plans should be developed.

5. Preparation

Staff resources

Staff from NE and APHA will provide the initial emergency response capability.

If necessary NE 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

APHA 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.

APHA 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 outbreaks, and as necessary following exercises, to identify lessons learned and improve future responses. Reviews will be led by NE and centrally stored by the NNSS.

6. Detection
There is no dedicated surveillance for invasive non-native terrestrial vertebrates in Britain.

Reports are 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). Natural England maintains a spreadsheet of non-native mammals records reported to them.

In addition, existing recording schemes and societies (e.g. The Mammal Society, British Trust for Ornithology, Amphibian and Reptile Conservation, etc.) monitor some terrestrial vertebrate populations and may also report incidental sightings of these species.

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 terrestrial vertebrate is reported in the wild and identified as a significant threat by Defra, in consultation with its advisors.

**Official action on suspicion**

Reports of individual terrestrial vertebrates may not necessarily require a response. Natural England will determine when a sighting should be considered of concern, in consultation with Defra, NNSS and APHA. A record is likely to be a concern if there is evidence to suggest a breeding population has formed, or has the potential to form, for example: multiple individuals recorded in a single location; juveniles are sighted within a mixed group; multiple records of individual animals are received from a similar area (e.g. 10km²); nest building or breeding behaviour is observed.

Suspected sightings will be investigated by Natural England or APHA acting on its behalf. The investigation may include site visits, assessment of field signs, use of surveillance equipment (e.g. camera traps), liaison with local landowners and others, etc.

Where an offence has (potentially) been committed (e.g. an animal listed on section 14 of the Wildlife and Countryside Act has escaped / been released) the agency with overall responsibility for delivery (i.e. Natural England) will contact the National Wildlife Crime Unit if deemed appropriate (having consulted with the Response Group if necessary).

**Official action on confirmation**

Natural England will confirm whether a population is, or is likely to be, present. Defra, NNSS and APHA will be consulted in cases where the presence of a population is uncertain. On confirmation, Natural England will establish the Response Group (responsibilities of all groups are set out in Annex 2) who will provide recommendations for action and establish the Operational Group. On the recommendation of the Response
Group, Defra will determine what action to take, in consultation with senior officials and Ministers as necessary. In general for invasive non-native terrestrial vertebrates the most appropriate response is likely to be to attempt eradication.

On instruction from the Response Group, the Operational Group, will:

- Undertake additional monitoring / surveillance as necessary to establish the likely extent of the population.
- Provide advice on the best eradication strategy to use and 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.
- Implement the eradication strategy.
- Monitor the site following eradication to ascertain success.
- Investigate the source of the outbreak.

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

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

If for any reason initial eradication efforts are not successful, the Response Group will advise senior officials / Ministers on the need for escalation of eradication efforts or to stand down and move to long term management.

In the case that eradication effort is stood down, management responsibility would usually revert to those that are affected by the invasive non-native species (e.g. local landowners, local authorities, farmers, householders as well as government bodies where interests are threatened such as on sites designated for conservation interest, etc.). The Response Group would usually be responsible for providing management advice to affected parties.

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. They will increase proportionately with the size of the affected area. Small outbreaks are expected to cost in the lower £10ks, whereas larger outbreaks could cost up to £100k or more. In general, the feasibility of eradicating
terrestrial vertebrates is high; however there may be circumstances in which it is very
difficult or potentially impossible.

These cost estimates are based on staff time and equipment. These may be real
additional costs, in which case funding would have to be found, and / or they may be
provided by reallocation of existing resources. The source of any such funding or re-
allocation of staff is not currently agreed, but should be resolved in advance of an
outbreak.

9. Risks to a successful response

Negative reaction to lethal control methods could be a reputational hazard and prevent
management being undertaken. In extreme cases this could also result in a safety threat
to staff. Careful reactive and, where appropriate, proactive external communications will
be essential in many cases (see external communications below). Details of staff involved
in the management work will not be divulged and staff involved will be trained in conflict
avoidance.

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 will be used to enforce access. It is not envisaged that there will be difficulties
accessing publicly owned land; however relevant bodies, such as the Forestry
Commission, should be consulted at an early stage.

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 non-exhaustive list of potential stakeholders with an interest in terrestrial
vertebrate responses is provided in Annex 4.
ANNEX 1: Species to which this plan applies

This plan applies to invasive non-native terrestrial vertebrates that Defra has identified in advance of an invasion (Table 1). It should also be used to respond to any new invasive non-native terrestrial vertebrate 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 terrestrial vertebrates 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>
</tr>
</thead>
<tbody>
<tr>
<td><em>Acridotheres tristis</em></td>
<td>Common myna</td>
<td>X</td>
<td>-</td>
<td>Not assessed</td>
<td>Not assessed</td>
</tr>
<tr>
<td><em>Callosciurus erythraeus</em></td>
<td>Pallas’s squirrel</td>
<td>X</td>
<td>-</td>
<td>Not assessed</td>
<td>Not assessed (high)</td>
</tr>
<tr>
<td><em>Corvus splendens</em></td>
<td>Indian house crow</td>
<td>X</td>
<td>X</td>
<td>High</td>
<td>Very high</td>
</tr>
<tr>
<td><em>Herpestes javanicus</em></td>
<td>Small Asian mongoose</td>
<td>X</td>
<td>-</td>
<td>Not assessed (low)</td>
<td>Not assessed (high)</td>
</tr>
<tr>
<td><em>Lithobates americanus</em></td>
<td>American bullfrog</td>
<td>X</td>
<td>-</td>
<td>High</td>
<td>Not assessed (high)</td>
</tr>
<tr>
<td><em>Myocastor coypus</em></td>
<td>Coypu</td>
<td>X</td>
<td>-</td>
<td>Not assessed (high)</td>
<td>Not assessed (high)</td>
</tr>
<tr>
<td><em>Nasua nasua</em></td>
<td>South American coati</td>
<td>X</td>
<td>-</td>
<td>Low</td>
<td>Not assessed (high)</td>
</tr>
<tr>
<td><em>Nyctereutes procyonoides</em></td>
<td>Raccoon dog</td>
<td>X</td>
<td>X</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td><em>Ondatra zibethicus</em></td>
<td>Muskrat</td>
<td>X</td>
<td>-</td>
<td>Not assessed (high)</td>
<td>Not assessed (high)</td>
</tr>
<tr>
<td><em>Procyon lotor</em></td>
<td>Raccoon</td>
<td>X</td>
<td>X</td>
<td>High</td>
<td>Very high</td>
</tr>
<tr>
<td><em>Sciurus niger</em></td>
<td>Fox squirrel</td>
<td>X</td>
<td>-</td>
<td>Not assessed</td>
<td>Not assessed (high)</td>
</tr>
<tr>
<td><em>Tamias sibiricus</em></td>
<td>Siberian chipmunk</td>
<td>X</td>
<td>X</td>
<td>High</td>
<td>Very high</td>
</tr>
<tr>
<td><em>Threskiornis aethiopicus</em></td>
<td>Sacred ibis</td>
<td>X</td>
<td>X</td>
<td>High</td>
<td>Very high</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](https://www.gov.uk/government/publications/threats-from-invasive-species-not-yet-established-in-great-britain)

³ Based on [most likely scenario of invasion](https://www.gov.uk/government/publications/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.

Natural England 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.

Animal and Plant Health Agency will:

- Implement the plan on instruction from the Response Group.
- Provide technical advice as required.
- Ensure staff have the required training and equipment.

The Response Group (led by NE, with Defra, NNSS, APHA) 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 NE with APHA) 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

STAGE

- Suspected sighting
- Confirmed population
- Establish extent of population
- Action to eradicate
- Monitoring to confirm eradication
  - Eradication successful
    - Stand down
    - Return to pre-invasion footing
  - Eradication unsuccessful
    - Escalate
    - Management responsibility moves to landowners

RESPONSIBILITIES

- NE investigate (using APHA as required)
- NE establish Response Group, who provide recommendations for action
- NE establish Operational Group which delivers operational response with oversight of Response Group
- Response Group provide recommendation on when to stand down and / or escalate
ANNEX 4. Non-exhaustive list of potentially relevant national stakeholders

- Amphibian and Reptile Conservation
- British Association for Shooting and Conservation
- British Ornithologists' Union
- British Pest Control Association
- British Trust for Ornithology
- Game and Wildlife Conservation Trust
- Mammal society
- National Trust
- Royal Society for the Prevention of Cruelty to Animals
- Royal Society for the Protection of Birds
- Wildfowl & Wetlands Trust
- Wildlife Link
- The Wildlife Trusts
- Woodland Trust
ANNEX 5. Template for species-specific information requirements

Box – issues to be resolved in advance of an invasion

1. **Policy and governance**

State the policy aim.

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

2. **Legal position**

Species-specific law that is relevant

3. **Risk assessment**

Is a risk assessment available – summarise it.

4. **Risk management**

Is a risk management appraisal available – summarise it.

5. **Detection**

6. **Training and equipment**

a. Training requirements

b. Equipment requirements

7. **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

d. Escalation and standing down thresholds and responses

8. **Resources and costs**

9. **Specific risks to successful response (beyond those stated)**

10. **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

11. Role of stakeholders

12. Supporting information
ANNEX 6. Species-specific contingency information

To be added as required.