

GB Non-native Species Rapid Response

Report of the GB Working Group – Final Report

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1. Introduction/Background

- 1.1. In 2002, the Parties to the Convention on Biological Diversity adopted a comprehensive Decision (Decision VI/23) concerning the issue of invasive alien species and implementation of article 8(h) of the Convention. Annexed to that Decision are a set of Guiding Principles for the implementation of the article 8(h) obligation to prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species. The second of the Guiding Principles sets out the so-called “three-stage hierarchical approach”, which has also been used as the central approach in the Invasive Non-native Species Framework Strategy for Great Britain (the GB Strategy), published in May 2008. The approach emphasises that measures to prevent introductions are the most cost-effective, but thereafter, early detection and rapid action – preferably eradication to prevent establishment - should be undertaken, followed as necessary by longer term control and management.
- 1.2. The GB Strategy also notes the need to observe the precautionary approach whilst ensuring that the action taken is proportionate to the risk and seeks to make best use of available resources. With regard to implementing early detection, reporting and rapid action, the Strategy sets out proposals for establishing a central data repository dedicated to managing information on non-native species, and the development of a means for clearly designating a lead agency to facilitate the delivery of a rapid response to different taxa and in different circumstances. The data repository, now called the GB Non-native Species Information Portal (GB NNSIP), is being developed under a 3 year contract between Defra and the Biological Records Centre (2009 – 2011). This report details the work of a working group commissioned by the GB Programme Board to recommend a framework for designating lead agencies for rapid response and what that might entail.
- 1.3. The GB Administrations will work through the Programme Board to consider the strategic policy response, for example on long term control measures for established invasive species and the desired response to less-established or absent and risk assessed species. To implement such responses however, there is a need to develop a clear understanding of operational decision-making roles and responsibilities amongst the various relevant government-family bodies to ensure that rapid and proportionate action is taken in appropriate cases.

2. Aims and Objectives

- 2.1. The GB Programme Board agreed at its ninth meeting in February 2008 to the establishment of a working group to explore the issues surrounding rapid response and to report to it with recommendations by 31st December 2008. The working group’s detailed Terms of Reference are at Annex 1. The group, composed of representatives of the three GB Administrations and key delivery bodies (membership

at Annex 2), met in February, April, June and September 2008, February & December 2009. Minutes of all the groups meetings can be found on the Secretariat website:

http://www.nonnativespecies.org/Members/05_Rapid_Response_Working_Group/

2.2. The overall aim handed down to the working group was: To draft and propose to the GB Programme Board, a protocol/position paper on establishing a clear process for implementing rapid responses against invasive non-native species in Great Britain. A full list of recommendations from this report is at Annex 3.

3. Facilitating Rapid Response

- 3.1. Where preventative measures have failed, early detection of introductions and rapid control to prevent establishment of invasive non-native species in the wild is regarded as the second most cost effective approach. There is however no single appointed agency wholly responsible for tackling invasive non-native species in all of the ways in which they can manifest themselves. In the absence of such, the working group considered its key task was to develop a clear understanding of how the existing bodies (with their current remits, powers, resources and limitations) might work most effectively together to enable rapid response when necessary. Invasive non-native species can affect a range of interests to different degrees and this cross-cutting nature means that a range of government family and related bodies in Great Britain are likely to have an interest or a role to play.
- 3.2. It became evident to the working group that facilitating dialogue, co-ordination and advice across the organisations represented would be highly valuable if not essential to maximise the effectiveness of a response. The working group therefore believes that there is strong merit in retaining a rapid response “core group” (RRCG) to advise on and oversee the mechanics of delivering rapid responses. The core group would be made up of a nominated contact person (with a deputy where necessary) in each of the bodies represented on the current working group (with scope for later adjustment if necessary).
- 3.3. Individual members of the core group would be the nominated liaison officer between the GB mechanism (primarily the Secretariat) and their respective organisations for the purpose of engaging that organisation in the rapid response process set out later in this report. The core group would be expected to do most of its work electronically but would aim to meet perhaps biannually or otherwise according to need.
- 3.4. The working group considered the likely involvement of local authorities and whilst it could envisage an important role for them, it was felt that both in general and as regards any single authority; it was unlikely that they would need to be engaged on such a regular basis as to require regular attendance as a core group member. Instead it was felt that at this time, the relevant local authority or authorities to any one response incident should be engaged by the co-ordinating body as necessary.

Recommendation 1:

That a GB rapid response core group be established comprised of representatives from the agencies and bodies listed below.

That would be:

- *INNS policy leads from the Department for Environment, Food and Rural Affairs; the Scottish Government and the Welsh Assembly Government;*
- *The GB Non-native Species Secretariat;*
- *Forestry Commission;*
- *Scottish Natural Heritage, Natural England and the Countryside Council for Wales;*
- *The Environment Agency for England & Wales;*
- *The Scottish Environment Protection Agency;*
- *The Food and Environment Research Agency;*
- *The Centre for Environment, Fisheries & Aquaculture Science;*
- *Marine Scotland - Science;*
- *The Joint Nature Conservation Committee*

Recommendation 2:

The functions of the core group membership would be to:

- *represent the interest of their respective organisations and facilitate effective collaboration between those key government bodies in relation to rapid response scenarios;*
- *enable swift resolution of any appropriate change of co-ordinating body (possibly in the light of emerging circumstances);*
- *enable sharing of expertise, experience and ideas at key stages of assessing the need for, and if necessary, delivering a rapid response;*
- *identify and scope the potential for sharing/mobilising relevant resources;*
- *identify 'opportunities', e.g. to incorporate rapid response work or subsequent monitoring as part of other planned operations;*
- *consider cross-border aspects;*
- *generally support the appointed co-ordinating body as appropriate; and,*
- *to learn lessons and identify ways to improve the effectiveness of rapid response delivery.*

4. Co-ordinating Rapid Responses

4.1. The working group agreed that for effective delivery, there was a need to designate a single lead organisation for each rapid response project. However, it considered that the term "lead body" as used in the Terms of Reference or "lead agencies" as used in the GB Strategy could mislead stakeholders and raise an unrealistic expectation that full responsibility for the issue would be internalised within the body concerned. It was highly likely that other stakeholders would have an interest in many of the situations that might be encountered. The consensus of the group therefore was that the term Rapid Response 'co-ordinating body' would be a less loaded term but that

the role would be similar to that envisaged in the Terms of Reference. That term will now be used for the remainder of this report.

4.2. Effective liaison and co-operation led by a single co-ordinating body is regarded as crucial in preventing confusion and inertia or loss of momentum in implementing a rapid response.

Recommendation 3:

That for each rapid response incident instigated through the GB mechanism, a government family body (often likely to be a member of the Rapid Response Core Group) should be appointed as the co-ordinating body with the following main functions:

- *acting as a clear focal point with regard to a potential rapid response alert/incident until the incident is closed;*
- *leading or facilitating assessment of the need for rapid response in the instant case – drawing for example on existing risk assessments where available;*
- *where rapid response is considered appropriate, identifying relevant considerations and assessing the feasibility of delivery;*
- *developing the proposed/preferred course of action;*
- *liaising (directly or via others as appropriate) with relevant stakeholders, eg land owners, site managers;*
- *delivering the action if appropriate, e.g. if clearly within the remit or current operations of the organisation, or liaising with and facilitating action by another more appropriate delivery body/bodies as identified;*
- *assisting in matching resources to needs;*
- *informing and drawing on the resources of the Core Group as often as necessary or desired, e.g. to develop solutions to issues arising and to report back on key progress milestones or obstacles;*
- *raising issues for further consideration (e.g. by the Programme Board) via the GB Secretariat;*
- *generally evaluating effectiveness of the response; and,*
- *overseeing/facilitating transition from a rapid response to an ongoing management scenario if the former becomes no longer achievable.*

4.3. This role is further expanded in detail at section 7 on Implementing Rapid Response.

5. Appointing the Co-ordinating Body

5.1. The working group recognised that there are many factors to take into account when seeking to appoint a co-ordinating body for any one rapid response scenario. For example, responsibility could be attributed based on statutory responsibility for conservation of biodiversity or functions relating to the medium mostly affected (freshwater, terrestrial, marine) etc. However, the nature of the issues involved mean that there may often be cases when it is not a simple matter, based on the current range of responsibilities and remits, to appoint a body on the basis of absolute prescription. The group therefore developed a decision tree (Annex 3) to form the basis for the initial appointing of a co-ordinating body. This decision-support tool draws on each body's existing role, functions, expertise and responsibilities (statutory or otherwise) as described in (Annex 4). It is expected that the co-ordinating body would most likely be one of the organisations represented on the Core Group though there remain one or two identified in the decision-tree as potential candidates that were not represented on the working group (e.g the Health Protection Agency and Scottish Government's Rural Directorate (Agriculture)) and would therefore need to be approached if the general proposal was to be approved by the Board.

6. Defining Rapid Response and the Core Group's Remit

- 6.1. Whilst the concept of rapid response is intuitively obvious, to define precisely what it means is more difficult. For example, it could be characterised simply according to the time elapsed since the species was introduced or began to establish in the wild. Alternatively, and bearing in mind that many invasive species have a considerable time-lag phase (even as long as decades) before truly emerging as having invasive capability, it could also be characterised as action taken early enough in the invasion process to prevent more widespread establishment and impacts once the threat from the species has been identified, which could be many years after introduction.
- 6.2. The concept of a rapid response can also be applied at a range of geographical scales from local to national – according to the area rendered free of the species' impacts. Whilst complete exclusion of an invasive species from the country may be the most desirable outcome, appropriately scaled down, decisive action to exclude such a species from one river catchment for example may in many cases be extremely worthwhile despite its presence in another catchment. Especially where such measures might provide a refuge for threatened native species.
- 6.3. Both the 'time-elapsed' and 'invasive process/stage' interpretations mentioned above may be valid interpretations and in essence the working group regards the concept of 'rapid response' as **the instigation of action against an invasive non-native species threat at a stage when a locally, regionally or nationally important strategic win might still be achievable**. It is not, however, intended that this Core Group should become concerned with an ongoing multitude of smaller scale local priorities or incidents for species already reasonably well established in Great Britain, e.g Himalyan balsam or giant hogweed, which are common targets for partnership initiatives managing discreet areas or stretches of waterways. Guided by the GB Strategy, more appropriate local delivery mechanisms will be encouraged in these

situations, (e.g. local county or regional invasive non-native species forums and projects), and encouragingly, several of these have emerged in the last few years.

Recommendation 4 (“first filter” – see Fig.1):

It is recommended that the Rapid Response Core Group’s primary concerns should be:

- *known or potentially invasive non-native species that have not yet established wild populations in GB (therefore rapid response will most probably be the default policy position);*
- *those non-native species known (or with the potential) to be invasive that have established a population(s) but for which major strategic wins or even full eradication may yet be feasible;*
- *those species that have been prioritised for possible national eradication or are subject to national eradication programmes – where this rapid response mechanism can complement those programmes;*
- *species not yet widely established for which the policy may be containment (and possibly depletion) as far as practically possible.*

6.4. This “first filter” seeks to identify those circumstances likely to be of relevance to the RRCG. Circumstances not meeting these descriptors would be matters for other types of management approaches. However, we consider it would be unhelpful to declare all such situations the exclusive competence of this proposed mechanism. There are likely to be occasions when another competent authority is already responding or plans to do so effectively, at least in respect of an occurrence on its own land. In the interest of expediency, that should be encouraged although where necessary or desired the Core Group’s expertise and resources might be brought in as appropriate to support that action.

7. Implementing Rapid Response

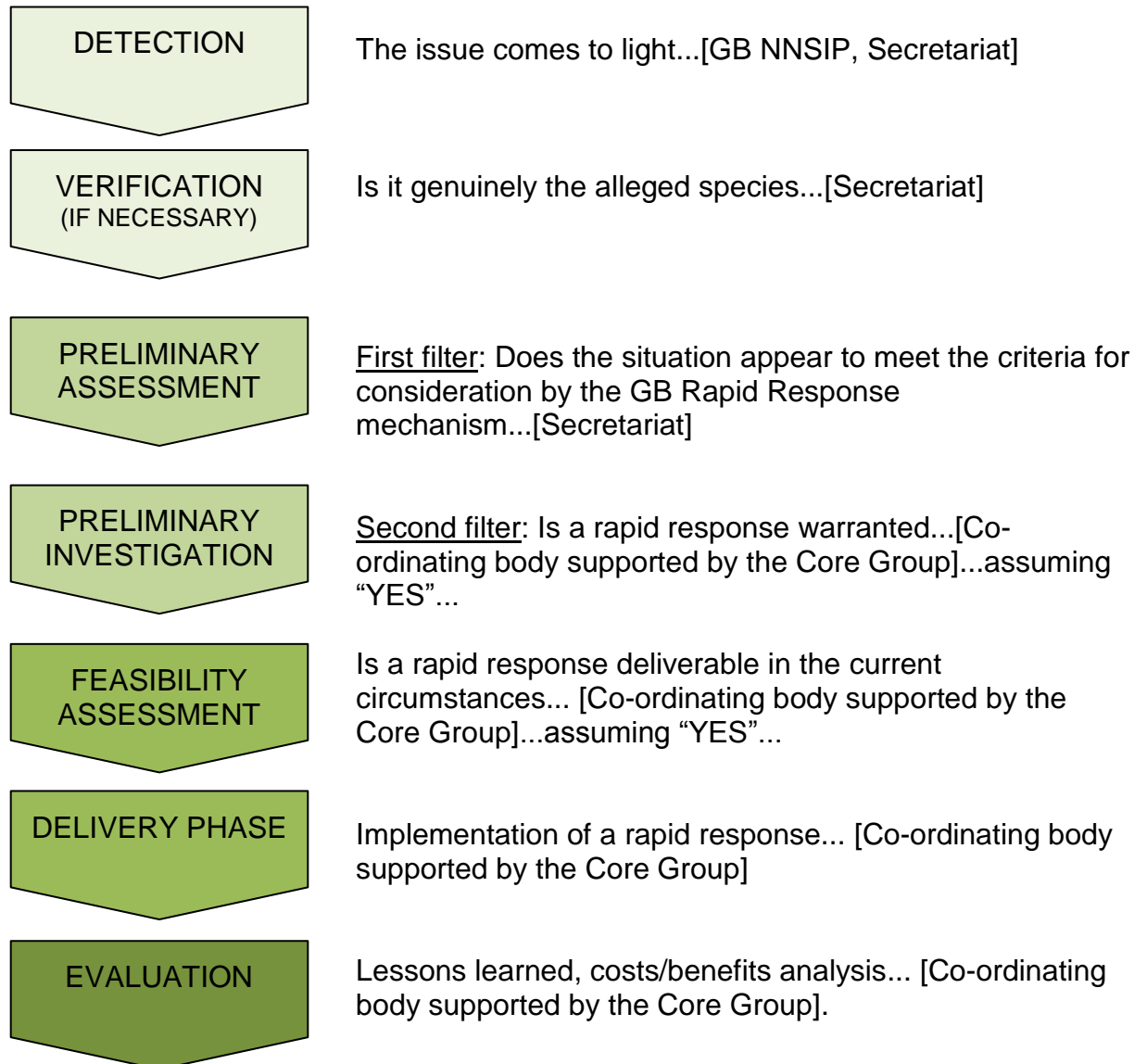
7.1. Implementation of the GB Strategy should result in greater awareness and understanding of invasive non-native species issues and it is quite possible that much might be achieved by the actions of landowners and other stakeholders in protecting their own interests when invasive species are found – assuming of course that they are able to recognise the species and potential threat involved. Initiatives such as county or regional IAS forums and projects could stimulate and deliver action at those scales whilst other bodies like those with significant land holdings for example, might act in any event to protect their estates as necessary.

7.2. However, such efforts cannot be wholly relied upon from a national perspective to adequately respond on each and every occasion in the circumstances described at Recommendation 4. In those circumstances, a more robust system for alerting, supporting, facilitating and delivering is necessary from a GB programme strategic point of view. This would place us on a much better footing in future for quickly tackling incidents such as the American bullfrogs in Essex and Kent, water primrose in a number of sites in England and Wales, oak processionary moth in London and the sea squirt *Didemnum vexillum* in Wales.

7.3. To achieve this, the GB Administrations have a number of bodies with specific roles, responsibilities or expertise that should be drawn upon to help ensure that the GB Strategy is implemented most effectively. These are described at Annex 4 and the principal organisations were represented on this working group.

7.4. Somewhat artificially breaking down what may at times be a fairly swift and intuitive process, the working group identified the following stages as components of a rapid response process:

Fig.1.



7.5. To aid understanding, these components are examined in more detail below:

7.6. Detection: reports of the presence of (invasive) non-native species would be submitted to the NNS Secretariat or the GB Non-native Species Information Portal (NNSIP). In time this might happen directly or as soon as the news reaches a person/organisation that is aware of the GB Secretariat or Portal. (A separate project

being undertaken by the National Biodiversity Network for Defra is exploring public reporting, based on the harlequin ladybird web-based model. This may in due course provide a basis for public reporting to the GB Portal.)

- 7.7. Verification: Assuming the species (correctly identified) would meet the criteria for reporting to the Core Group, the Secretariat should instigate reasonable efforts to verify the identification if there is any remaining doubt, e.g. through the reliability/credentials of the reporting source or requesting further photographic evidence. Otherwise to avoid delay, verification (possibly from a site visit) may have to form part of the Preliminary Investigation work detailed below;
- 7.8. Preliminary Assessment: It is expected that the Secretariat/NNSIP will apply the “first filter” and decide which reports are likely to be of relevance to the Rapid Response Core Group and which are not, e.g. reports from areas where the species is known to be widespread or commonplace would not. The GB Secretariat should also consider any existing risk assessment or established policy position for the species and if satisfied that this is a species/case for which a rapid response might be warranted, the Secretariat will then start a Case Summary Sheet (Annex 6) with the information known so far. This document will be circulated to alert all members of the Core Group and using judgment and the decision tree (Annex 3), the Secretariat will initially appoint a co-ordinating body.
- 7.9. Recommendation 4 above might also lead in time to the development of a set of more detailed criteria to sift out reports that should not be transmitted to the Core Group for consideration or the development of a ‘rapid-response’ species alert list. Other information relevant to the development of such criteria/list could include the results of horizon scanning work and outputs from an EU Early Warning System as proposed by the European Commission.
- 7.10. Preliminary Investigation: Applying the “first filter” the Secretariat will have satisfied itself that the reported incident is likely to come within the Core Group’s remit. The Secretariat’s decision to submit the report to the Core Group for consideration may have necessarily been made based on incomplete or scant detailed information. It is, however, recommended that the Secretariat should err on the side of caution in deciding whether to refer reports to the Core Group. Subsequently, a preliminary investigation of the case by a co-ordinating body is likely to be necessary to support the next decision of whether a rapid response is indeed warranted (i.e. apply the “second filter”).
- 7.11. The co-ordinating body’s preliminary investigation would gather as much relevant information as possible, including in relation to the following:
- engagement with the landowner;
 - final confirmation of species identification if still an issue;
 - the general geographic setting of the incursion;
 - any evidence of damage caused by the species – if not already known to be an INNS;
 - an estimate of the extent of the species’ prevalence at the site and the size of the area affected;
 - information on how the presence of the species was discovered;

- any history of the species in the area;
- identification of the likely introduction pathway;
- the extent of any ongoing activity that might pose a risk of further introductions or re-introduction (e.g. movements of people, vehicles and goods; new ventures; changes in land management operations or practices; onward transmission issues etc.)
- how and where the species is already spreading or may spread further – including any further associated risks (e.g. to a protected site or river catchment);
- assessing whether any existing or planned response by the landowner/another stakeholder is likely to suffice.

7.12. Having looked into the extent or severity of the problem, actions at this stage for the co-ordinating body could include:

- confirming that an existing or planned response by another body will suffice to deal with the problem (or may do so with some additional assistance);
- identifying and handing-over to a more appropriate co-ordinating body given the particular circumstances of the case;
- commissioning a full or more likely, a rapid risk assessment if necessary;
- advising that the situation is monitored, for example recommending re-visit/re-assessment at a specified date or time interval (possibly with advice as regards any likely pathway for introduction at the site &/or transmission from the site);
- seeking the RRCG's views on the need for rapid response; or,
- confirming that a rapid response is appropriate.

7.13. At the discretion of the Core Group or co-ordinating body, it may occasionally be helpful or appropriate to refer the case to the GB Programme Board before a final commitment is made.

7.14. Considerations to help answer the key question at this stage - "Is a rapid response to this incident warranted?" could include:

- addressing any remaining doubt as to whether the incident passes the "first filter" test at Recommendation 4 above (i.e. the incident comes within the RRCG's remit);
- if it is considered a '*potentially*' invasive species, is sufficient known about its potential threat to justify rapid response;
- has detection occurred early enough for rapid response to be a viable option in principle or is it already too well established;
- is rapid response likely to be cost-effective?

7.15. Feasibility Assessment: if the incident passes the second filter, i.e. a rapid response is considered appropriate in principle, then the co-ordinating body (with assistance from the RRCG as appropriate) would look into the feasibility of delivering the response, considering factors including the following:

- Access to site(s) - (physical), rights of entry - (legal);
- Staff resources (including other bodies who might assist, e.g. volunteer organisations; local groups; NGOs; specialist/skilled staff needs etc.);

- Identifying/locating equipment;
- Any seasonal or other temporal factors likely to affect control operations;
- Identifying suitable methods - options and techniques considered (including any identified in the GB Risk Analysis) should be recorded along with the reasons for choosing the final option;
- Identifying any likely collateral risks;
- Identifying likely costs of delivery;
- Identifying any potential business/economic impacts;
- Preparing (or further refining) a simple cost/benefits analysis;
- Other practicalities of delivery (e.g advice on any health and safety risks at the site, opportunities for alignment with other relevant planned operations, etc.);
- Disposal of species – animal or plant material;
- Identifying any authorisations, consents, licenses etc likely to be necessary and the appropriate granting body and timescales;
- Arrangements for post-control monitoring for re-emergence and follow-up action;
- The criteria for declaring the response complete/successful. (The working group considered prescribed criteria un-helpful and that discretion and a well publicised case-by-case approach is needed in this regard);
- Preparation of press/media lines as necessary, Q&A briefing etc, (taking into account any confidential or sensitive issues); and,
- Placing a species alert if appropriate on the GB website or elsewhere to raise awareness and encourage reporting of any further detections.

7.16. Delivery Phase: assuming that no insurmountable problems remain this will entail the co-ordinating body organising or overseeing implementation of the response according to the delivery arrangements and parties involved. It is expected that any anticipated problems will have been resolved with the RRCG's assistance or through elevation to the GB Board or relevant Administration as necessary during the feasibility assessment of the response. Problems arising during the delivery phase should be brought to the RRCG or Board as appropriate for advice/assistance.

7.17. The working group drafted a helpful checklist for use by the co-ordinating body at this stage and this proposed Site Information form is at Annex 7.

7.18. Whilst not being overly prescriptive, it would be helpful for the co-ordinating body to update and circulate the Case Summary Sheet to reflect significant developments and to enable the RRCG to retain adequate awareness of progress. The Secretariat will ensure that a copy of the latest version of the Case Summary Sheet is retained for reference in a RRCG section of the website. This will enable

easy reporting to the Programme Board at any time, an audit trail of decision-making and a potential means for learning lessons and identifying future needs and improvements.

- 7.19. Evaluation: post-implementation, the co-ordinating body would evaluate the outcome and record key lessons learned and the costs of the response. Capturing costs in particular as a contribution to the Rapid Response Core Group's collective knowledge-base will help facilitate longer-term assessment of the effectiveness of rapid response actions in both management and value for money terms.

Recommendation 5:

- (a) *The co-ordinating body should update and circulate the Case Summary Sheet to reflect significant developments and to enable the RRCG to retain awareness of progress.*
- (b) *The GB Secretariat should retain latest copies of the Case Summary Sheet in a section of the website for the use of the RRCG.*

- 7.20. It should be recognised that this process has been extensively dissected above for clarity. Over time, it would be expected that in many instances the principal decision-making aspects of the process should become easier and faster, for example as the same species is re-encountered or similar cases are encountered. In practical or delivery terms however, the individual circumstances of each case may vary, for example with regard to the extent of the species' presence at the time of detection/reporting, the stakeholders involved, landowner attitudes and availability of resources at the relevant time. The process might then be most drawn out only occasionally, e.g. in respect of novel species about which little is known or where particular difficulties are encountered.

8. Resources

Financial arrangements

- 8.1. Whilst the bodies represented on the working group are agreed in principle to recommend sharing physical equipment and human resources when possible for the purpose of delivering rapid response, there are currently no known contingency budgets within the government family that are specifically devoted to rapid responses for INNS. Indeed government accounting arrangements generally discourage maintaining contingency funds. Some bodies do have contingency funds that are associated with their register of risks and these registers may to some extent provide a suitable mechanism to assist with obtaining resources in the event of a rapid response being needed. This would most likely depend on the risks posed by the impacts of invasive species incursions to the organisation's core responsibilities.
- 8.2. Implementing a rapid response is essentially a policy delivery function, but given the different ways in which the responsibilities of the current relevant bodies might relate to it; many of the potential co-ordinating bodies may have to bid for funds as and

when the need arises and would probably find it difficult to put aside resources from their budgets to be used for rapid responses.

Recommendation 6:

- (a) *Those bodies represented on the RRCG should investigate the extent to which their risk management arrangements could be used to secure financial resources to support or deliver rapid response.*
- (b) *The agencies and the GB Administrations should consider how a more secure and responsive basis for funding rapid response when needed might be achieved. This might involve for example, clear business cases and swift bidding processes for funding, scope for diverting funds for ongoing management work to rapid response scenarios as they arise, etc.*

Human resources (including skills and expertise)

8.3. The current arrangements have shortcomings in terms of reliable and effective delivery of rapid response and even the expertise within Great Britain contains many gaps (although these are not necessarily unique to GB), for example eradication skills and expertise in the marine environment. However, there is valuable expertise and both existing and potential delivery capacity within the government family that could be used to inform and carry out rapid responses. There are already a small number of specialist teams within Great Britain with skilled staff who currently carry out control and which might be able to respond to emergencies. These include for example:

- Fera ruddy duck control team – this team of nine full-time staff is highly skilled (firearms) and is well equipped relevant to bird control (especially waterfowl) but also species such as parakeets. The team also has relevant skills for (and has previously undertaken) control of bullfrogs;
- SNH mink control team (trapping) – this team of twelve FTE staff is currently attempting to eradicate mink in the Western Isles. This team could therefore have the potential to be used for rapid response situations elsewhere, particularly involving mammals on islands;
- EA Fish control team – this is well equipped and experienced in use of biocides to eradicate fish populations. At present delivery capacity is limited in terms of staff days available but in principle, this team could also be used to eradicate amphibian species in some circumstances.

8.4. As well as the specialist teams detailed above there is also other capacity within the government family that could be used for rapid responses. This includes for instance the large number of staff at the Forestry Commission who currently carry out control of deer, staff within the EA and IDBs that control riparian and water plants and staff at Fera who carry out control of geese for flight safety reasons.

8.5. It could also be highly beneficial to be able to easily second key staff from relevant agencies as has been done successfully for animal health emergencies such as outbreaks of Foot and Mouth Disease (FMD), avian influenza (AI), and Newcastle

disease where staff from various agencies all work side by side to respond to emergencies.

- 8.6. There is also potential to use the volunteering facility that exists within the government family – especially for staff with key skills. This is potentially valuable but is limited to 1- 2 days per annum and is therefore far from a complete staff resource solution. It could be a useful mechanism for training staff and broadening experience.

Recommendation 7:

- (a) Consideration should be given to a strategy for retaining the expertise of existing specialist teams that can be used for delivery of rapid responses. This might involve some element of core or support funding from Agencies, NDPBs or their sponsoring Departments. Such teams might also expand their skills base thus providing species management expertise that could be deployed and re-deployed between lower and higher priority INNS work when necessary.*
- (b) Greater response capacity (addressing skills and expertise gaps) needs to be developed – possibly including specialised teams like those above but also marshalling other more disparate skills and expertise within the government family of bodies.*
- (c) Mechanisms should be developed to encourage volunteering or short secondment of key staff between government agencies and bodies within GB for the purpose of rapid responses. It is considered that commitment from the relevant bodies to the proposed RRCG framework in this report could include an agreement to facilitate such working where it would be highly beneficial in delivering a rapid response.*
- (d) Consideration should be given to developing and maintaining a register of key staff (including volunteers and specific skilled or authorised staff) at agencies who may be available for rapid response situations.*
- (e) The dissemination of rapid response and species management experience within GB and knowledge of best practice from overseas acquired by the relevant bodies should be facilitated by the Secretariat.*

Equipment and consumables

- 8.7. Through an audit of resources for rapid response, the working group has attempted to achieve a record of equipment that exists within the government family in Great Britain and that could be of use in rapid response scenarios Annex 8 (in which 'A' denotes advisory resources and 'D' denotes delivery resources). This includes firearms (the Forestry Commission is a notable example), traps (e.g. FERA), nets, boats etc. It should be remembered however that much of the specialist equipment may not always be available where and when needed and it may also need the appropriately trained or authorised staff to use it. Appropriate safety and skills capability will also be relevant to any sharing of equipment for use by others and there is the issue of whether existing and available equipment would be sufficient for the job. The working group also considered that another record of resources might be produced for any partner stakeholders.

Recommendation 8:

- (a) The current audit of equipment and resources should be developed into a register of potentially available equipment and regularly updated.*
- (b) An annually updated record of specially trained, skilled, authorised or accredited personnel should also be considered.*
- (c) A Memorandum of Understanding or other suitable type of agreement/commitment should be considered as a means for setting out arrangements for securing use of such equipment between government family bodies. (The rapid response protocol/MoU that RRCG bodies will be asked to sign up to at senior level would include a broad principle about sharing or committing resources but more detailed inter-agency agreements/arrangements will probably be needed over equipment use.)*

9. Non-governmental Response Capacity

- 9.1. There is potentially a significant amount of non-government capacity that, if appropriately encouraged, supported and/or directed, could be employed to good effect in some rapid response scenarios. Relevant interests include land-owners and gamekeepers, conservation NGOs (especially those that own or manage land, such as the RSPB, Wildlife Trusts and the National Trust), and possibly utility/rail companies that may already manage impacts on their own land. In some cases industry may also play a part, e.g. the mussel industry's intervention in the Menai Strait to eradicate slipper limpet. Many of these organisations are already carrying out extensive control on a range of species, both plants and animals. Additionally, conservation bodies and volunteer groups might be an ideal resource to assist with post-control monitoring and addressing any re-emergence. Several multi-stakeholder county-based non-native species initiatives and some sectoral group initiatives have emerged in recent years which also may have a supporting role to play.
- 9.2. When the rapid response subject was discussed at the Cardiff forum in 2008, there were positive signs as regards this potential partnership. Integrating this capacity within this rapid response framework however, presents some challenges. Options might include some form of high level integration into the proposed protocol (e.g. in terms of personnel, skills and equipment registers) at national level or to establish relevant linkages at other levels.
- 9.3. A system of national contacts (akin to those government family representatives on the RRCG) could be explored and held by the Secretariat or alternatively there may be a role here for the three Country Working Groups (on which at least some of these bodies are represented) to explore further.
- 9.4. The current proposed protocol must provide a clear operating framework for the relevant government family bodies. However it would be useful to explore possibilities for enhancing it in partnership with the non-government bodies.

Recommendation 9:

The GB Secretariat should instigate a dialogue with the key non-government bodies to explore how an effective partnership with the RRCG mechanism might be developed for implementing rapid response.

9.5. The use of specialist contractors from outside government is a vital part of animal health contingency responses and for rapid responses within plant health circles there are call-off contracts with pest controllers to remove pests by, for instance, spraying with pesticides. This is done under supervision by government agencies such as Fera. This model may also work in some circumstances with other taxa and has been used by Natural England in its attempted eradications of bullfrogs and African clawed toads. In the former private contractors were used to both monitor and control the species. The extent to which such arrangements might benefit the Great Britain rapid response arrangements should be further explored. For example, the Secretariat could hold a list of suitable contractors which in plant health circles, is done on a county basis.

Recommendation 10:

The need for and scope to develop contingency contracts which could further enhance the effectiveness of the rapid response framework should be explored. This should include consideration of any relevant existing contractual arrangements in relation to plant or animal health issues.

10. Regional, Catchment and County/Local Responses

10.1. It is likely that for the time being at least, the GB mechanism would mainly focus on significant strategic wins. For example acting to eradicate all known populations of the invasive non-native water primrose species or responding to known occurrences of *Didemnum vexillum* etc. However, in relation to species that have already progressed beyond that stage or which are now an ongoing management target from the national perspective, there will also be a need to respond occasionally (or perhaps even more regularly) to incursions at a more regional or local level. These sub-national level strategic wins are important and bodies on the Core Group may nevertheless be involved in such projects in their normal capacity. This activity will be important for keeping worthwhile areas free of certain high impact species and is already an element of certain projects and invasive species fora. For example, the Rivers and Fisheries Trusts of Scotland (RAFTS) Biosecurity Project includes elements of rapid response at a catchment scale and several other multi-partner county initiatives are working towards delivering strategic management of invasive species at their relevant scale of operation.

Recommendation 11:

(a) Clear guidance should be developed on the relationship between the role of this proposed GB mechanism and the roles of other existing initiatives and partnership projects. This should explore the scope for joint working in appropriate circumstances.

- (b) *The need for guidance on biosecurity and rapid response for the regional, county and other initiatives and projects should be explored. Such guidance if needed, might usefully be developed and shared via the country working groups.*
- (c) *The development and sharing of best practice between local initiatives should be facilitated via the GB Secretariat; and significant management wins captured via the Secretariat's Projects Database and/or the GB Portal where distributional information should be appropriately updated.*
- (d) *Consideration should be given to facilitating the spread of best practice by e.g. promoting the involvement of key personnel from government agencies to assist local/regional fora at key stages of planning or delivery.*

11. Gaps and Risks in Rapid Response Capacity

Financial resources

11.1. As noted at paragraph 8.1, there is no specific provision of funding across the range of relevant bodies to enable rapid response delivery and there may be some concern about the ability to secure funding when the need arises. Whilst some improvement may be possible as recommended earlier, it is also true that the extent to which rapid response action will be necessary in future cannot be accurately estimated. This will remain to be seen as the GB Strategy's implementation improves awareness, detection and reporting. However, since the GB response to INNS has started to develop, several cases for early action have already been considered by the Board, e.g. monk parakeets, water primrose, *Didemnum vexillum* and a population of African clawed toad. As the GB risk analysis provides more and more risk assessments, other species are likely to be identified in future for rapid response as the preferred policy position. This will require resourcing by way of investing to save and contingency planning as appropriate.

Statutory powers/legislation

11.2. This proposed framework for cross-government delivery of rapid response capacity is predicated on existing remits and co-operation. It is not inconceivable that in the longer term, and particularly with the notion of a legislative EU Strategy in prospect, that specific statutory responsibilities as regards managing invasive non-native species may become necessary.

11.3. In terms of legislation, a key issue for rapid response is that at present there is no power of compulsory access to land to deliver invasive species control. This is already an issue for several rapid responses, including NE's bullfrog eradication attempt in Essex. It is also an issue for strategic catchment scale control and for longer-term control e.g. access to some waters for ruddy duck control. Such a power is considered essential if rapid response is to form a truly effective measure in minimising future threats. Consider for example the provision in section 5 of the Destructive Imported Animals Act of 1932:

- (1) The following provisions of this section shall have effect with respect to musk rats found at large at any time while an order under section one of this Act is in force.

(2) The occupier of any land who knows that musk rats, not being musk rats kept by him under a licence, are to be found thereon shall forthwith give notice to the appropriate department.

(3) The appropriate department so soon as they become aware that musk rats, not being musk rats kept under a licence, are to be found on any land, may take such steps as they consider necessary for their destruction, and it shall be the duty of the occupier of the land to afford all such facilities as it is in his power to afford to [any authorised persons].

11.4. There are proposals to introduce a right of access for control/investigation of invasive non-native species in Northern Ireland.

11.5. In Scotland, there are proposals to provide powers to control invasive non-native species through a Wildlife and Natural Environment Bill¹. These include powers for specified persons to:

- enter land on reasonable suspicion of the presence of an invasive non-native species
- enter into a management agreement for the purpose of controlling a specified invasive non-native species
- lay a control order to require an individual to control a specified invasive non-native species; and
- have a default power to act to control an invasive non-native species.

Licensing

11.6. Many of the control/removal methods need specific licences or consents such as FEPA licensing in the marine environment and certain operations within SSSIs are controlled by the statutory nature conservation bodies. Other actions may disturb European Protected Species or occur within European designated sites. Some methodologies such as spraying herbicide near water bodies requires authorisation from the Environment Agency or SEPA. A protracted licensing/authorisation process could potentially risk further delay in instigating rapid responses. However, assuming that the relevant bodies sign-up and commit to the proposed rapid response framework, it would be part of the role of the relevant representatives on the RRCG to assist as appropriate in expediting necessary action within their organisations.

11.7. A further consideration is that not all operators of regulatory frameworks are represented on the RRCG, eg the Marine Management Organisation for marine consents, local authorities regarding tree preservation orders or the Chemicals Regulation Directorate for example regarding off-label approvals. It will be important for the Programme Board to ensure that such bodies are aware of the policy importance of engaging with invasive non-native species rapid response incidents with due expediency.

Access to data on land ownership

11.8. Data on land ownership are held at various sources and expedient access may be another issue worth investigating to assist rapid response co-ordinating bodies or those acting to instigate a rapid response under their guidance/direction. For example, accurately ascertaining details of riparian landownership is notoriously difficult.

¹ Note that precise details of proposals may change as the legislative process progresses.

Land-owner co-operation

11.9. There is nothing to compel land-owners or managers to manage invasive non-native species on their own land (see paragraph 11.5 for possible changes in Scotland). Those claiming single farm payment have certain obligations under the cross-compliance arrangements (eg. GAEC 11 in England: a duty to take all reasonable steps to prevent the spread of certain specified plants on the land and onto adjoining land); and those with SSSIs on their land may be obliged via a management scheme to manage invasive species affecting the SSSI if not more willing to do so under a management agreement. However, in general, a land-owner can choose to tolerate an invasive species on his/her land and Natural England has already experienced some refusal of access for the purpose of the work on American bullfrogs. Consideration may need to be given to whether such co-operation should be incentivised or required (see above at paragraph 11.3), perhaps on the basis that the action would be for the benefit of the general environmental/economic public interest.

Economic aspects

11.10. It is unlikely that there would be a significant economic interest in an invasive non-native species itself but on occasion, associated species may be of value. For example in tackling the introduction of slipper limpet through contaminated mussel seed at the Menai Straits, CCW had to specifically consider the timing of action to remove mussel seed and the risk of collateral economic losses. The slipper limpet was introduced through the industry's own activities but there may be other scenarios where this issue may at least require some consideration.

Media/public response

11.11. There are risks that rapidly precipitated management action, particularly lethal control of birds or mammalian species, could generate significant media interest (positive or perhaps more likely, negative). Each of the individual agencies will already be alert to handling media interest in relation to its own actions but there may be need for more strategic co-ordination especially where lethal control of vertebrates is concerned. Through the RRCG, it should be possible to agree consistent media lines in any particular scenario. It is hoped that implementation of the GB Media and Communications strategic plan will assist in generating better understanding of the INNS issues within media and public circles in general.

Capacity

11.12. The current proposal for a rapid response mechanism in this report will seek to maximise the value of existing bodies, remits, powers and resources but there are some gaps or shortfalls in expertise and likely to be some difficulties at times in terms of resource availability, technical know-how etc. It is likely to be some time before the Species Information Portal, wider awareness, improved detection/reporting and the scope for working with external stakeholders clearly points to the likely future capacity need for effective rapid response but the few current examples of rapid response issues considered by the Programme Board are highlighting the existing difficulties and are providing something of a learning curve.

Rapid response exit strategy

11.13. A number of factors will need to be borne in mind in relation to any commitment to deliver or sustain a rapid response project or policy and these would be relevant at

both the national and sub-national scale. For example – frequency of introductions from the primary pathway or re-introductions from a reservoir somewhere; new information on the extent of establishment and failure of the chosen rapid response approach or of a novel technique. No single rule would be suitable for all scenarios because the characteristics of the species and the circumstances will vary. Such information may need to be kept under review and may affect the continuance of any single rapid response project and the general policy in that regard. Subsequent options might include:

- maintaining the national rapid response priority, e.g. if GB-wide eradication remains the policy objective – each future incident would be acted upon;
- accept persistent presence in future but scale down the rapid response approach to exclusion from smaller managed areas (e.g. regions, catchment(s), county etc) – essentially change to a containment/longer-term management approach.

11.14. The Rapid Response Core Group may need to develop guidelines for itself to help decide when a rapid response should be abandoned and when to recommend to the Board an amendment of the policy objective to one of containment / longer-term management. This may also involve handing over management responsibility for such to the landowner or another management body/initiative.

12. Links to other parts of the GB Mechanism

12.1. There are clearly important linkages to other elements of implementing the GB Strategy that are established already or are in the process of being set up. These include the GB risk analysis mechanism and the Species Information Portal. Links to the Portal will be crucial and it is vital that information on the occurrence of relevant species of concern gets to the Rapid Response Core Group as soon as possible. The use of an alert system with a number of species on a watch list will be helpful as will the development of contingency plans, individual species and pathway action plans (ISAPs and PAPs). In the meantime it would be important to maintain contact between the Portal, Secretariat and the RRCG. The Portal for example will itself need to verify the accuracy of reports being submitted to it.

12.2. The risk analysis mechanism will continue to develop a ready library of risk assessments but may also be called upon to carry out a rapid risk assessment if necessary. Linkages with the country working groups will also be important as this will enable liaison with many of the relevant bodies.

13. International aspects and interaction with Overseas Response Capacity

13.1. As well as domestic capacity there is also considerable expertise overseas that could potentially be called upon for rapid responses in GB. This is already ongoing with expert opinion sought from overseas on a range of species that have newly occurred in Britain. Overseas expertise is also used to train GB staff in particular control or eradication techniques. A good example of this is the EA fish control team

who were trained in the USA in the use of the piscicide 'rotenone' and it is known that Norway also has extensive experience in this field. Teams from overseas are also used for actual control work in GB, one example is the use of New Zealand expertise on rodent eradications to eliminate rats on several UK islands – notably Canna and Lundy.

EU

13.2. The European Commission is developing proposals for an EU Invasive Alien Species Strategy, which is expected to include proposals on rapid response. These proposals may well integrate to some extent with its proposal to establish an EU Early Warning System. Whilst a dedicated EU rapid response unit seems an unlikely prospect, sharing or co-ordinating expertise and control capacity among Member States may form an important element, particularly in any cross-border cases. It will therefore be important to monitor the development of the EU Strategy and to subsequently ensure that the GB rapid response mechanism is compatible and capable of effectively engaging with any EU arrangements.

Ireland

13.3. Rapid response is also seen as an important tool in the armoury against INNS in Ireland, where some rapid responses are being delivered and expertise is developing. The Secretariat's role as a link between the GB mechanism and the Ireland framework is important therefore in facilitating the sharing of practical information between the two islands. In some cases there will also be a need to develop joint responses across the British Isles.

UK Overseas Territories

13.4. The UK Overseas Territories (OTs) and Crown Dependencies (CDs) are also threatened by IAS, in some cases the threat is far more acute than that in GB. Consideration should be given to how relevant GB expertise can be shared with the OTs where appropriate – the new biodiversity strategy for the OTs, developed by the JNCC may provide the framework for this. However, it is not likely to be a one-way flow of information and expertise developed within the OTs may also be useful in a GB context e.g. some elements of the control techniques used on monk parakeets in the Cayman Islands have helped inform the development of control techniques in England.

14. Generic Contingency Planning

14.1. It is suggested that the framework proposed in this report would form the basis for a general contingency plan for rapid responses to INNS in GB. Whilst a basic process and key communication/decision-making components have been identified, e.g. the Programme Board, the GB Risk Analysis Panel, the Secretariat and the role of the proposed Rapid Response Core Group; the report highlights several types of constraints that would need to be overcome in order to develop a general contingency plan. The Working Group considers that this aspect of its Terms of Reference could not be usefully progressed until the acceptability of the proposed framework to the Board and the relevant government-family bodies is known. This would then provide a basis for further development, including scoping other aspects such as the potential relationship with external contractors and non-government stakeholders.

15. Reporting to the Programme Board

- 15.1. As well as regular updates via the GB Secretariat it is anticipated that the Rapid Response Core Group would report formally to the Programme Board on an annual basis and that this report is made available to the public via the Secretariat website when approved by the Board.

Annexes:

9. Terms of Reference (p.24)
10. Members of the Working Group (p.25)
11. List of Recommendations (p.26)
12. Responsibilities of key bodies/agencies in relation to invasive non-native species and rapid response (p.30)
13. Decision tree for designating a co-ordinating body (p.35)
14. Rapid Response Case Summary Sheet (p.36)
15. Rapid Response Site Information Form (p.41)
16. Audit of resources within the Government family (p.43)

Annex 1 - Terms of Reference of the Working Group

Overall aim

To draft and propose to the GB Programme Board, a protocol/position paper on establishing a clear process for implementing rapid responses against invasive non-native species in Great Britain.

Terms of Reference

- To establish a common understanding of the existing invasive non-native species responsibilities of relevant bodies, especially as regards the potential for implementing rapid response;
- To define the potential role of a rapid response lead body or entity;
- To establish a rationale or guiding principles for clearly designating the most appropriate rapid response lead body in different circumstances;
- To describe a process by which rapid response could be implemented – including consideration of:
 - significant gaps in remits and decision-making ability;
 - legal authority and obstacles and possible temporary solutions;
 - cross border issues;
 - clear lines of communication;
 - investigation of access issues; and,
 - interaction with other bodies such as NGOs, land-owners, local groups; (e.g. to assist with rapid response or site monitoring for re-emergence).
- To explore the currently available resources and existing capacity within government relevant to rapid response – human, monetary, equipment etc.;
- To identify potential non-government capacity (e.g. contractors, specialist services or organisations etc);
- To consider the scope for funding options (including contingency arrangements within existing budgets);
- To identify and advise the Programme Board of significant resource gaps and risks as regards future rapid response capacity;
- To scope a general contingency plan to include risk assessment, mechanisms for flow of information and a protocol for rapid approval of emergency action.

Annex 2 - Members of the Working Group

Huw Thomas (Defra - Chair)

Niall Moore (GB Non-native Species Secretariat - Secretary)

Sallie Bailey (Forestry Commission)

Mark Fletcher (Food and Environment Research Agency)

Tracy McCollin (Marine Scotland - Science)

Robin Payne (Scottish Natural Heritage)

Trevor Renals (Environment Agency)

Angela Robinson (Scottish Government)

Alasdair Scott (Centre for Fisheries and Aquaculture Science - Weymouth)

David Slawson (Plant Health and Seeds Inspectorate)

Ruth Waters, Ben McCarthy & Matt Heydon (Natural England)

Gabe Wyn (Countryside Council for Wales)

Stephen Atkins (North Wales & North West Sea Fisheries Committee)

Jessa Battersby & Victoria Appleyard (Joint Nature Conservation Committee)

Gordon Copp (Cefas - Lowestoft)

Jo Long & Scot Mathieson (Scottish Environment Protection Agency)

William Somerfield (Welsh Assembly Government)

Marina Curran-Colthart (COSLA)

Annex 3 – List of Recommendations

Recommendation 1:

That a GB rapid response core group be established comprised of representatives from the agencies and bodies listed below.

That would be:

- *INNS policy leads from the Department for Environment, Food and Rural Affairs; the Scottish Government and the Welsh Assembly Government;*
- *The GB Non-native Species Secretariat;*
- *Forestry Commission;*
- *Scottish Natural Heritage, Natural England and the Countryside Council for Wales;*
- *The Environment Agency for England & Wales;*
- *The Scottish Environment Protection Agency;*
- *The Food and Environment Research Agency;*
- *The Centre for Environment, Fisheries & Aquaculture Science;*
- *Marine Scotland - Science;*
- *The Joint Nature Conservation Committee*

Recommendation 2:

The functions of the core group membership would be to:

- *represent the interest of their respective organisations and facilitate effective collaboration between those key government bodies in relation to rapid response scenarios;*
- *enable swift resolution of any appropriate change of co-ordinating body (possibly in the light of emerging circumstances);*
- *enable sharing of expertise, experience and ideas at key stages of assessing the need for, and if necessary, delivering a rapid response;*
- *identify and scope the potential for sharing/mobilising relevant resources;*
- *identify 'opportunities', e.g. to incorporate rapid response work or subsequent monitoring as part of other planned operations;*
- *consider cross-border aspects;*
- *generally support the appointed co-ordinating body as appropriate; and,*
- *to learn lessons and identify ways to improve the effectiveness of rapid response delivery.*

Recommendation 3:

That for each rapid response incident instigated through the GB mechanism, a government family body (often likely to be a member of the Rapid Response Core Group) should be appointed as the co-ordinating body with the following main functions:

- *acting as a clear focal point with regard to a potential rapid response alert/incident until the incident is closed;*
- *leading or facilitating assessment of the need for rapid response in the instant case – drawing for example on existing risk assessments where available;*
- *where rapid response is considered appropriate, identifying relevant considerations and assessing the feasibility of delivery;*
- *developing the proposed/preferred course of action;*
- *liaising (directly or via others as appropriate) with relevant stakeholders, eg land owners, site managers;*
- *delivering the action if appropriate, e.g. if clearly within the remit or current operations of the organisation, or liaising with and facilitating action by another more appropriate delivery body/bodies as identified;*
- *assisting in matching resources to needs;*
- *informing and drawing on the resources of the Core Group as often as necessary or desired, e.g. to develop solutions to issues arising and to report back on key progress milestones or obstacles;*
- *raising issues for further consideration (e.g. by the Programme Board) via the GB Secretariat;*
- *generally evaluating effectiveness of the response; and,*
- *overseeing/facilitating transition from a rapid response to an ongoing management scenario if the former becomes no longer achievable.*

Recommendation 4 (“first filter” – see Fig.1):

It is recommended that the Rapid Response Core Group’s primary concerns should be:

- *known or potentially invasive non-native species that have not yet established wild populations in GB (therefore rapid response will most probably be the default policy position);*
- *those non-native species known (or with the potential) to be invasive that have established a population(s) but for which major strategic wins or even full eradication may yet be feasible;*
- *those species that have been prioritised for possible national eradication or are subject to national eradication programmes – where this rapid response mechanism can complement those programmes;*
- *species not yet widely established for which the policy may be containment (and possibly depletion) as far as practically possible.*

Recommendation 5:

- (c) *The co-ordinating body should update and circulate the Case Summary Sheet to reflect significant developments and to enable the RRCG to retain awareness of progress.*
- (d) *The GB Secretariat should retain latest copies of the Case Summary Sheet in a section of the website for the use of the RRCG.*

Recommendation 6:

- (c) *Those bodies represented on the RRCG should investigate the extent to which their risk management arrangements could be used to secure financial resources to support or deliver rapid response.*
- (d) *The agencies and the GB Administrations should consider how a more secure and responsive basis for funding rapid response when needed might be achieved. This might involve for example, clear business cases and swift bidding processes for funding, scope for diverting funds for ongoing management work to rapid response scenarios as they arise, etc.*

Recommendation 7:

- (f) *Consideration should be given to a strategy for retaining the expertise of existing specialist teams that can be used for delivery of rapid responses. This might involve some element of core or support funding from Agencies, NDPBs or their sponsoring Departments. Such teams might also expand their skills base thus providing species management expertise that could be deployed and re-deployed between lower and higher priority INNS work when necessary.*
- (g) *Greater response capacity (addressing skills and expertise gaps) needs to be developed – possibly including specialised teams like those above but also marshalling other more disparate skills and expertise within the government family of bodies.*
- (h) *Mechanisms should be developed to encourage volunteering or short secondment of key staff between government agencies and bodies within GB for the purpose of rapid responses. It is considered that commitment from the relevant bodies to the proposed RRCG framework in this report could include an agreement to facilitate such working where it would be highly beneficial in delivering a rapid response.*
- (i) *Consideration should be given to developing and maintaining a register of key staff (including volunteers and specific skilled or authorised staff) at agencies who may be available for rapid response situations.*
- (j) *The dissemination of rapid response and species management experience within GB and knowledge of best practice from overseas acquired by the relevant bodies should be facilitated by the Secretariat.*

Recommendation 8:

- (d) The current audit of equipment and resources should be developed into a register of potentially available equipment and regularly updated.*
- (e) An annually updated record of specially trained, skilled, authorised or accredited personnel should also be considered.*
- (f) A Memorandum of Understanding or other suitable type of agreement/commitment should be considered as a means for setting out arrangements for securing use of such equipment between government family bodies.*

Recommendation 9:

The GB Secretariat should instigate a dialogue with the key non-government bodies to explore how an effective partnership with the RRCG mechanism might be developed for implementing rapid response.

Recommendation 10:

The need for and scope to develop contingency contracts which could further enhance the effectiveness of the rapid response framework should be explored. This should include consideration of any relevant existing contractual arrangements in relation to plant or animal health issues.

Recommendation 11:

- (e) Clear guidance should be developed on the relationship between the role of this proposed GB mechanism and the roles of other existing initiatives and partnership projects. This should explore the scope for joint working in appropriate circumstances.*
- (f) The need for guidance on biosecurity and rapid response for the regional, county and other initiatives and projects should be explored. Such guidance if needed, might usefully be developed and shared via the country working groups.*
- (g) The development and sharing of best practice between local initiatives should be facilitated via the GB Secretariat; and significant management wins captured via the Secretariat's Projects Database and/or the GB Portal where distributional information should be appropriately updated.*
- (h) Consideration should be given to facilitating the spread of best practice by e.g. promoting the involvement of key personnel from government agencies to assist local/regional fora at key stages of planning or delivery.*

Annex 4 - Responsibilities of key bodies/agencies in relation to invasive non-native species and rapid response

Across Great Britain and in the context of the GB Strategy, a range of bodies have responsibilities or duties concerning conservation of biodiversity – for some it may form a central part of their purpose, for others it will be a less direct or immediate function. Some organisations will also have responsibilities to protect other interests that could also be adversely impacted by invasive species and it is important to also bear in mind yet other responsibilities, powers or functions that could also be relevant to implementation of a rapid response. It is useful to understand at the outset how each body views its responsibilities.

Regardless of their specific statutory functions or remits, it should also be borne in mind that all public bodies in England and Wales are bound by the duty in section 40 of the Natural Environment and Rural Communities Act 2006 to have regard to the purpose of conserving biodiversity in the exercise of their functions. In Scotland this duty is enshrined in section 1 of the Nature Conservation (Scotland) Act 2004 (to further the conservation of biodiversity).

Department for Environment, Food and Rural Affairs (Defra) – Defra has the policy making role concerning biodiversity, landscape, fisheries, wildlife management and health and also flooding issues to name some of the sectors likely to be of relevance in this context. Plant health policy now resides within the Food and Environment Research Agency (Fera). Defra leads on invasive non-native species policy for England; UK representation on Invasive Alien Species (IAS) issues in the EU and to the multi-lateral agreements such as the Convention on Biological Diversity and the Bern Convention, and is also responsible for relevant legislation in England. The Protected and Non-native Species policy team within Defra's Biodiversity Programme controls a budget that supports the entire GB Non-native Species mechanism and currently makes some provision to assist in instigating rapid responses, promoting research and supporting partnership initiatives. Though primarily for action in England, collaborative 'rapid response' funding could be considered in a threat situation of significance at the GB scale.

Defra is also the parent department for key Executive Agencies, Non-departmental Public Bodies and others like the Centre for Environment, Fisheries and Aquaculture Science (Cefas); the Environment Agency (EA); Natural England (NE); and Fera as mentioned above.

Scottish Government (SG) – The Scottish Government is the devolved government for Scotland and is responsible for developing and implementing policy on devolved issues including devolved aspects of the environment, fisheries, plant health, animal health, and human health. Within the Landscapes and Habitats Division, the Biodiversity Strategy team has responsibility for invasive non-native species policy, while the Species Licensing Team licenses for non-native species releases. This team also chairs the Scottish Working Group on non-native species, which co-ordinates the overall response of public sector bodies in Scotland to the environmental, social and economic challenges presented by invasive non-native species, and supports the effectiveness of wider action at the GB level. As well as supporting the implementation of key actions of the GB Strategy this team is responsible for legislation concerning non-native species in Scotland, and for revisions to that legislation.

The Scottish Government also has a sponsoring function for Scottish Natural Heritage and Scottish Environment Protection Agency.

Welsh Assembly Government (WAG) - The Welsh Assembly Government is the devolved administration for Wales, with responsibilities for the development and implementation of policy on devolved areas such as Environment, Plant Health and Fisheries. The Nature Conservation and Biodiversity Branch leads support of the implementation of actions within the GB Strategy and has responsibility for invasive non-native species policy in Wales. The Nature Conservation team are responsible for licensing for non-native species releases. The Biodiversity team chairs the Working Group on invasive non-native species and, although they generally co-ordinate the public sector response to the challenges presented by invasive non-native species in Wales, these responsibilities are shared with other departments within the Assembly. An example being the Department of Economy and Transport who are taking the lead with development involving Japanese knotweed.

GB Non-native Species Secretariat – the Secretariat provides the administrative support for the GB Programme Board, the Non-native Species Risk Analysis Panel and the Board's working groups. The Secretariat also networks with the country working groups and other stakeholders to promote the GB Strategy and its implementation; promotes collaboration between initiatives; helps to identify management/research synergies and opportunities, including capturing this work in a website database; pursues actions agreed by the Programme Board and will perform an initiating role in relation to rapid response through liaison with the appropriate delivery bodies and any other relevant stakeholders. The Secretariat also reports to the Programme Board on Strategy implementation progress and relevant developments.

Forestry Commission (FC) – The Forestry Commission is the statutory organisation with responsibility for forestry throughout Great Britain and is a non-Ministerial Government Department. Under the Devolution Settlement it was designated as a 'cross border public authority'. This means it is a GB organisation delivering a devolved subject through England, Scotland and Wales and receives separate funding in England, Scotland and Wales.

Forestry and biodiversity policies and strategies are decided and delivered on a country basis, to integrate with legislation and the rural agenda in each of the three countries. However, some functions remain not devolved, and are delivered at the GB level, Plant Health is one such function. The FC has tree health inspectors at ports and also conducts research and surveillance on the ground. The Forestry Commission also has wildlife management staff who could be redeployed to assist in situations requiring a rapid response. Equipment such as traps and cages can also be made available.

Forest Research, the Forestry Commission's research agency, provides policy relevant research and advice on invasive species that impact on the forestry industry and woodland biodiversity, for example Rhododendron, grey squirrels and edible dormouse. The researchers have significant experience in providing advice regarding the control of invasive species.

Environment Agency (EA) – The EA is responsible for implementation of the Water Framework Directive in England and Wales and has important roles in flood prevention and as a regulator. The Agency has a general biodiversity duty delivered through: (i) controlling pollution to air, land and water; (ii) regulating water abstraction; (iii) maintaining and creating wetland habitats as a result of its flood risk management activities; and (iv) local partnership projects with fisheries and wildlife organisations. The Agency has a lead role for 39 species

and five habitats associated with water and wetlands under the UK Biodiversity Action Plan (UKBAP). It responds to IAS threats where that benefits its statutory remit.

Scottish Environment Protection Agency (SEPA) – a similar role in Scotland to that of the EA in England and Wales. SEPA is, however, primarily a regulator and mainly deals with pollution issues. It does not have the role in flood defence and releases of fish that the EA does. SEPA is the lead authority in River Basin Planning.

Scottish Natural Heritage (SNH) – SNH has broad role in relation to Invasive Non- Native Species (INNS) particularly their impact on biodiversity but covering landscape and access issues as well. SNH provides advice to Scottish Government and other bodies on the need for rapid response control and eradication measures. With the forthcoming merger of SNH and the Deer Commission Scotland a new focus on wildlife management and the establishment of a specialist unit will enhance SNH's ability, where appropriate, to provide leadership and coordination on rapid response. Currently SNH has limited powers to compel actions on INNS within designated sites where persuasion and agri-environment support payments have failed to generate action. The Wildlife and Natural Environment Bill, expected in the Scottish Parliament in 2010, sets out wider powers for SNH and a range of government bodies to enforce action on INNS. Bringing designated sites in unfavourable condition due to INNS impacts into favourable or recovering condition will remain a particular focus for SNH. In addition SNH leads the large scale mink eradication project in the Western Isles and provides grant aid to a range of INNS control projects as well as supporting the formation of local forums for action on INNS.

Countryside Council for Wales (CCW) – CCW's role in the rapid response context is mainly to advise on the need for control measures (for example where non-native species threaten designated conservation sites or protected species) and the implications of control measures for existing conservation features (e.g. where control measures themselves could threaten sites/species). CCW has very limited powers (and resources) to take non-native species control action itself, except perhaps in National Nature Reserves where CCW is the managing authority and/or landowner. CCW also has various powers to influence land/sea management (e.g. SSSIs, management agreements, grant-aiding, education/awareness) which can be used to help control non-native species in the longer term.

Natural England (NE) – Natural England's general purpose is to ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations. This includes promoting nature conservation and protecting biodiversity, conserving landscapes and promoting access to the countryside. Natural England is the Lead Delivery Body for the England Biodiversity Strategy. It works with Defra and others to achieve the 2010 Public Service Agreement target to bring 95% of SSSIs into favourable or recovering condition and in relation to that work, invasive non-native species are sometimes an issue that needs to be addressed to achieve favourable condition of SSSI units. Under the SSSI regime, Natural England has powers to enter into management agreements with land owners/occupiers or to impose management requirements in certain circumstances. These powers may be valuable in terms of long term control, containment and management of invasive species but would be too cumbersome to instigate decisive action for the purpose of a rapid response. Natural England also manages a suite of National Nature Reserves where it is either the landowner or occupier. It has an extensive licensing role pertaining to protected species and non-native species, manages agri-environment schemes in England

and commissions research and management activity relevant to conserving biodiversity. It also has an advisory and lobby role.

The Joint Nature Conservation Committee (JNCC) – JNCC is the statutory adviser to Government on UK and international nature conservation. Its work contributes to maintaining and enriching biological diversity, conserving geological features and sustaining natural systems. JNCC delivers the UK and international responsibilities of the four country nature conservation agencies - Council for Nature Conservation and the Countryside, the Countryside Council for Wales, Natural England and Scottish Natural Heritage. JNCC represents the country conservation bodies on the GB Invasive Non-Native Species Programme Board and assists in developing strategic thinking in relation to biodiversity conservation and INNS in the UK, but also working with the Overseas Territories and Crown Dependencies and at European and international levels.

JNCC has responsibility for the provision of nature conservation advice in the offshore area. 'Offshore' is defined as beyond 12 nautical miles (nm) from the coastline to the extent of the United Kingdom Continental Shelf (UKCS). Within territorial limits (<12 nm) nature conservation advice is the responsibility of the relevant country conservation bodies. JNCC works closely with the country conservation bodies to ensure that there is consistency with the advice given to both industry and the competent authorities.

Food and Environment Research Agency (Fera) – Fera's overarching purpose is to support and develop a sustainable food chain, a healthy natural environment, and to protect the global community from biological and chemical risks. In the Plant/Bee Health area Fera has clearly defined inspection and rapid response roles delivered through its Bee Health and Plant Health and Seeds Inspectors. For vertebrates Fera's main role could be to deliver control action on the ground – appropriately diverting existing trained control staff as a matter of priority to tackle rapid responses. It could be a supplier of intervention skills and capacity in this regard but such core skills need to be maintained to benefit a rapid response mechanism. Fera also offers ability to research, trial and validate control methodologies.

Marine Scotland - Marine Scotland was established on April 1 2009 as a Directorate of the Scottish Government (SG), one part of which is Marine Scotland – Science. The purpose of Marine Scotland is to integrate core marine functions involving scientific research, compliance monitoring, policy and management of Scotland's seas. Marine Scotland will combine the functions and resources of the former SG Marine Directorate, Fisheries Research Services and the Scottish Fisheries Protection Agency.

Marine Scotland's mission is to manage Scotland's seas for prosperity and environmental sustainability - supporting the SG's overall purpose of sustainable economic growth and our vision for our marine and coastal areas.

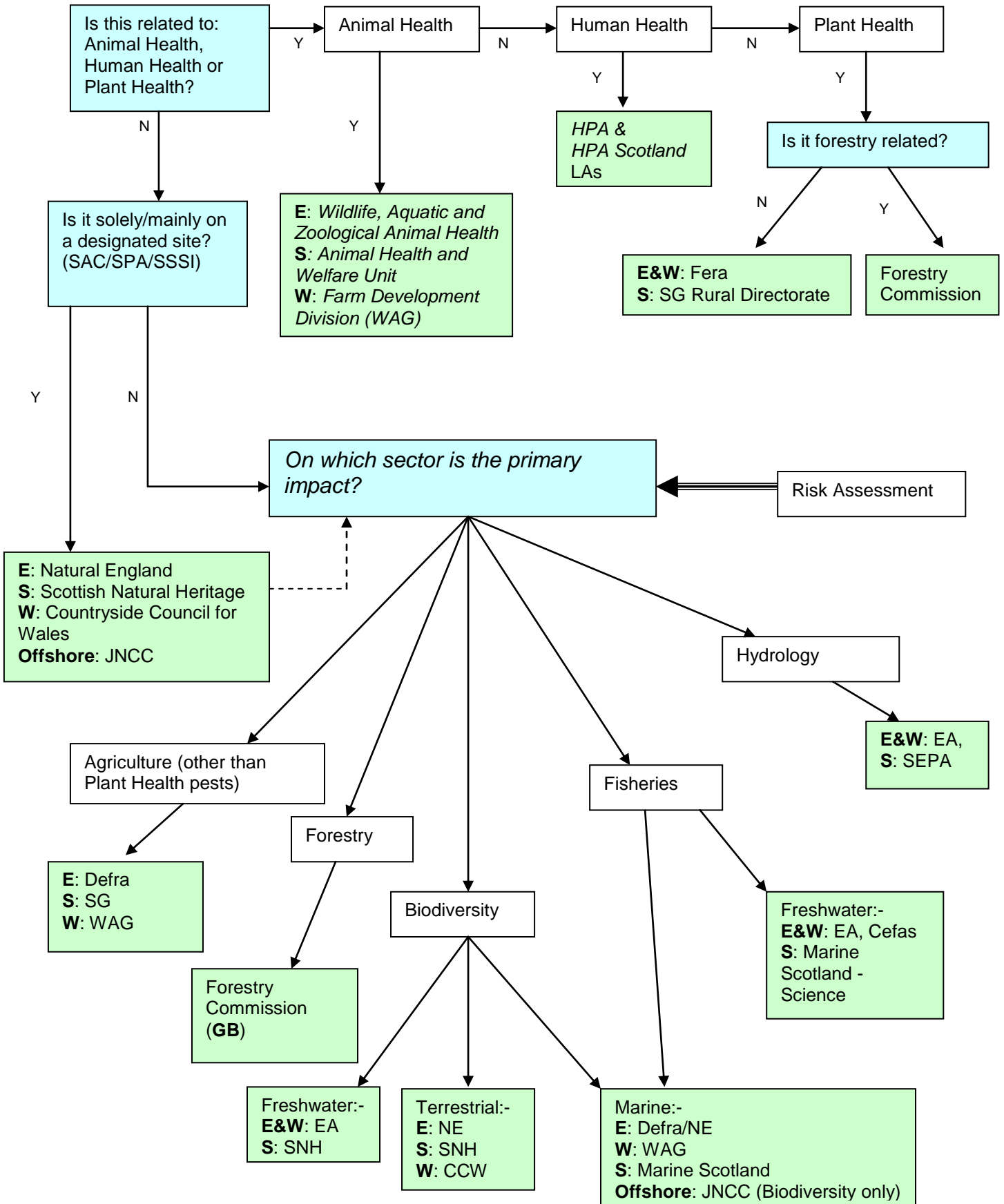
Marine Scotland - Science provides expert scientific and technical advice to the Scottish Government on marine and freshwater fisheries, aquaculture and the protection of the aquatic environment. In the rapid response context Marine Scotland's main resource contribution would be staff that would be able to provide advice on a range of issues such as taxonomy, control measures and use of specialised equipment. Marine Scotland also has access to a range of scientific equipment and may in certain circumstances be able to allow use of this equipment for a limited time.

Centre for Environment, Fisheries & Aquaculture Science (Cefas) – is an agency of Defra that carries out research and provides expert scientific and technical advice to the UK Government on the protection of marine and freshwater ecosystems, with specific regard to fisheries, including salmon and freshwater fishes. This encompasses the natural environment as well as aquaculture. Cefas' contribution to NNS rapid response would be in the provision of advice on potential risks and impacts of marine and freshwater organisms. Cefas possesses a variety of scientific equipment, which could be made available in certain circumstances for specified periods of time.

The Fish Health Inspectorate at Cefas has a specific role to enforce non-native species legislation made under the Import of Live Fish Act, and acts to prevent the import and keeping of regulated non-native fish and crayfish species within the fish farm, ornamental aquatic animal and seafood industries. Its staff have expertise in chemical eradication of serious fish diseases, on fish farms and other trade premises, techniques which may be applicable for the eradication of invasive aquatic species in controlled environments.

Annex 5 - Decision tree for appointing a co-ordinating agency.

START: ↓



Annex 6 - Case Summary Sheet.

Rapid Response Case Summary Sheet

SPECIES/OUTBREAK INFORMATION

1. Species

2. Officially verified

Yes No

3. Taxonomic Group

4. Location(s)

England
Scotland
Wales

5. Date Reported/Sighted

6. Estimated size of population/extent of presence

7. Comments

RISKS

8. Estimated rate of spread

Fast
Medium
Slow
Unknown

9. Has a risk assessment been completed?

Completed
In Progress
Not Started

[Hyperlink to doc](#)

10. Are other GB countries at risk in the future?

- Less than 5 yrs
- 5-50 yrs
- 50 yrs +

11. Environmental impacts/risks

Please rank the following impacts/risks. (1=low, 5=high, leave blank if N/A or unknown)

- | | | |
|------------------------|--------------------|--------------------------|
| Vulnerable Environment | Marine | <input type="checkbox"/> |
| | Coastal | <input type="checkbox"/> |
| | Freshwater | <input type="checkbox"/> |
| | Terrestrial | <input type="checkbox"/> |
| Area | Rural | <input type="checkbox"/> |
| | Urban | <input type="checkbox"/> |
| Sector Impacted | Biodiversity | <input type="checkbox"/> |
| | Agriculture | <input type="checkbox"/> |
| | Forestry | <input type="checkbox"/> |
| | Fisheries | <input type="checkbox"/> |
| | Infrastructure | <input type="checkbox"/> |
| | Recreation/Access | <input type="checkbox"/> |
| | Human Health | <input type="checkbox"/> |
| | Wildlife Health | <input type="checkbox"/> |
| | Hydrology/Flooding | <input type="checkbox"/> |

12. Are there any known relevant regulatory regimes or statutory designations?

Tick any that apply

- SAC
- SPA
- SSSI
- Ramsar
- MPAs

MANAGEMENT ISSUES

13. What relevant legislation covers this species?

14. Is any form of licensing or other authority required for control action?

Yes No

Action required: (eg Licence/Consent)

15. How urgent is action required?

Immediate (within 3 months)
3-12 months
> 12 months

16. When (month/season) is control most appropriate?

17. What action is the most likely control action/method?

Manual/mechanical removal
Chemical
Shooting
Trapping

Other - list

18. Co-ordinating Body:

Lead Contact

19. Bodies with relevant Human Resource experience/capacity:

20. Bodies with relevant Equipment/Consumables:

21. List of people to inform:

UPDATE FROM CO-ORDINATING BODY

Comments on progress, issues etc.

Post-rapid response summary

When was the management performed?

Were the management objectives achieved?

What are your future recommendations for management and monitoring?

Annex 7 – Site Information Form

Rapid Response Site Information form

Species:

Site name:

Site location:

England Scotland Wales

NGR:

Has access been agreed with the landowner? Yes/No

Does the landowner agree to the management plan? Yes/No

Who has the contact details for the landowner?

Tel:

Please note, to avoid restricting the distribution of this report under the Data Protection Act, do not include landowner details on this sheet.

Checklist of appendices:

1. Map – Does it include:

- | | | | |
|---------------------------------------------------|-----|----|-----|
| a) the position and extent of the known invasion? | Yes | No | n/a |
| b) any potential safety hazards? | Yes | No | n/a |
| c) vehicular access and parking? | Yes | No | n/a |
| d) areas that must not be disturbed? | Yes | No | n/a |
| e) areas suitable for receiving/composting waste | Yes | No | n/a |

2. Management Plan – Does it include:

- | | | | |
|-------------------------------------|-----|----|-----|
| a) a clear methodology for control? | Yes | No | n/a |
| b) an inventory list of equipment? | Yes | No | n/a |

c) management objectives? Yes No n/a

d) any necessary permits, licences or authorisations? Yes No n/a

3. Risk Assessments:

a) has a site risk assessment been completed? Yes No

b) have all staff read and understood the site assessment? Yes No

c) has the activity been risk assessed? Yes No

d) does everyone understand the r.a. for their activity? Yes No

e) have all relevant staff read and understood any C.O.S.H.H

(Control of Substances Hazardous to Health) that may be

relevant to the activity?

Yes No n/a

f) does everyone have the appropriate protective clothing? Yes No

g) does everyone know how to operate safety equipment? Yes No n/a

Completed by:

Contact details:

Date:

Annex 8 - Audit of resources within the Government family.

				GB WIDE						SCOTLAND					ENGLAND WIDE					WALES			OTHER					
		MoD	Police	CEH	FC	HA	NET-WORK RAIL	BRITISH W.WAYS	Scot Fish Prot Agency	SNH	SEPA	SASA	DCS	FRS	NE	VLA	EA	CSL	DEER INITIATIVE	CEFAS	DEER INITIATIVE	CCW	EA	CEFAS	LOCAL COUNCILS	SFCs	DRAINAGE BOARDS	
TERRESTRIAL	PLANTS			√	√		√	√		√	A	A/D			AD		√					A	√		√			
	MAMMALS				√					AD		A/D	√		A		?	AD	√		√	A	?		√			
	BIRDS											A/D			A			AD				A			√			
	INVERTEBRATES	ARTHROPODS										A/D			A			A				A			√			
		MOLLUSCS													A			A				A						
		ANNELIDS										A										A						
		REPTILES													A							A						
FRESHWATER	PLANTS			AD			√			A				A		AD					A	√		?		√		
	AMPHIBIANS													A			D				A							
	INVERTEBRATES	ARTHROPODS							√	A			√	A		√					A	√						
		MOLLUSCS									A			A								A						
		ANNELIDS									A											A						
		FISH									A			√			AD		√			A	√	√				
MARINE	PLANTS									A				A	A						A							
	INVERTEBRATES	ECHINODERM								A				A	A						A							
		ARTHROPODS								A				A	A						A							
		MOLLUSCS								A				A	A						A					D		
		ANNELIDS								A				A	A						A							
		TUNICATES								A				A	A						A							
		FISH								A				A	A					√		A		√		D		
RESOURCES AND EQUIPMENT																												
TRANSPORT	BOATS								Number?	22						√	10					√			D			
	VEHICLES				74																				D			
CAPTURING EQUIPMENT	MAMMAL TRAPS	SMALL (mouse)			50													250										
		MEDIUM (squirrel, mink, fox)			1000											√		780										
		LARGE (wild boar, deer)											?					10										
		DEER NETS			2000 m								?						?		?							
		Dart guns			?								?															

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Dory

SEPA Boats - all FW?

SASA guns - Shotguns, Rifles and air pistols.