Marine Pathways
Managing marine non-native species

Marine Pathways Risk Reduction (Biosecurity) Guidance – Lessons learned

13th August 2015

Introduction

Analysis of the pathways by which species are arriving and spreading has identified key sectors whose activities can contribute to the spread of invasive species. These sectors are also part of the solution and can play an important role in invasive species management by implementing best practice biosecurity. The project worked with the Pathways Advisory Groups for aquaculture recreational boating and water use to incorporate advice on simple, easy and effective biosecurity measures and biosecurity planning into industry guidance and training. The specific aims of the marine pathways project work on biosecurity were:

- Engagement with industry and dissemination of guidance leading to increased awareness of the potential impacts from invasive marine species which will hopefully lead to the sector voluntarily adopting best practice to limit the introduction and spread of high impact species now and in the future.
- Increased awareness contributing to surveillance for potential invaders and better information on the distribution of species already established

The purpose of this brief project report is to outline the process that we went through to develop risk reduction guidance in two key sectors and the lessons we learnt along the way through discussions and feedback from industry. This information will be useful for any future work/projects investigating further requirements for guidance and training.

In summary, the key lessons learned were:

- Measures need to be proportionate to the risk and in order to do this we need to have a clear understanding of which species are likely to pose the greatest risk in order to focus effort.
- There needs to be incentives for action – this links again to the need for clear evidence on impacts and risks
- A consistent approach is needed across different sectors.

Biosecurity for aquaculture (Shellfish)

Original project aims:

- Developing a marine alien species Code of Practice for Aquaculture with SAGB
- Work with Seafish to develop modules on marine alien species in existing aquaculture training courses

An initial meeting was held with industry representatives to discuss a potential code of practice for biosecurity and INNS. Key feedback was that any proposals need to be proportionate, applied equally across sectors and that although worth progressing, it would need buy in from industry. This may be difficult to achieve due to the following issues:

- There is an apparent disconnect between government funding/action to address INNS and the profile it has as one of the top key issues impacting biodiversity.
- There are continued mixed messages of approach and policy to INNS and exploited species that need to be resolved e.g. Pacific oyster, Manila clam
- The Aquaculture industry is potentially seen as an easy target to address INNS issues and there isn't a balanced approach being taken across sectors i.e. Ballast Water Convention still isn't ratified by UK, there is also no regulation covering the marina sector – there needs to be even approach.
- There is an ongoing lack of easily accessible records to show where INNS are present and to help make decisions on biosecurity
- There are many issues facing the industry, of which INNS is only one, this will make it very difficult to justify any further requests/burdens.
- Voluntary measures are unlikely to work – legislation is needed to move forward across sectors (there are no 'sticks' in place for other marine users) although this would be seen as an additional burden.

Further discussions led to a proposal to adapt of the existing FHI Shellfish and Biosecurity Measures Plan to include best practice biosecurity for INNS because there will be overlap with measures taken to prevent disease as well as INNS so it would be most practical to combine the two documents.

Proposals were presented at a SAGB Mollusc Committee Meeting with a wider number of industry representatives in London in Spring 2014. Further feedback included the following and some key points were reiterated from previous discussions:

- A key aspect that will be needed is guidance on what support is available and who to contact (as CEFAS provide support for disease outbreaks) – this isn't in place yet in England
- There will need to be distinction made between general INNS and 'new' INNS in terms of risk as this will vary across regions
- There needs to be a clear list of species that we propose are an issue and this will be site and activity specific
- A useful option would be to have dedicated web pages (for all sectors) with information about where high risk species are present.
- Monitoring of uptake of INNS aspects in biosecurity plans could be combined with existing inspections by CEFAS for aquaculture businesses.
- There is a need to be consistent across sectors so that one industry does not feel targeted.
- There is an issue that this continues to be voluntary and there is a need for legislation to address the big pathways.
- Any measures need to be simple, low/no cost and effective otherwise will be seen as additional burden to industry
- There is the need to improve clarity on our approach to marine INNS in general and those species which are commercially farmed e.g. Pacific oyster

- Rapid response capability and effectiveness needs to be improved – e.g. currently no eradication is taking place in England.
- Simple information and maps on what species occur where are needed for all sectors as well as support available for when a species is detected.

Further consultation with CEFAS indicated that to include INNS guidance with existing disease guidance would likely be inappropriate because mixing statutory requirements with advisory notes is potentially confusing – as for disease, there would need to be a requirement to notify INNS events, and an official body to report these to that is responsible for implementing action on receipt of notifications which currently isn't in place.

Therefore, an INNS biosecurity leaflet was produced as an alternative option – focussing on species relevant to the industry and consulted on with the Pathways Advisory Group.

Biosecurity for marina operators and boat owners

Original project aims:

- Developing codes of practice for both marina operators and recreational boat owners
- Work with industry to develop an INNS biosecurity modules within the existing training courses
- Develop criteria for the Gold Anchor Award awarded to marina operators by TYHA in order to incorporate specific requirements on biosecurity

At an initial stakeholder meeting we posed the question: What are the barriers to implementation of existing guidance?

- First need to find out the current uptake and success of existing guidance
- There is not a clear message: What exactly do we want this sector to do? What is enough?
- There needs to be clear and decisive agreement made on whether we can promote in water cleaning.
- Whatever is asked of marinas and owners needs to be proportionate to the risk and acceptable to carry out in the long term
- There needs to be an incentive to carrying out action – what are the risks/impacts?
- Best methods for implementation could be apps for easy access to information and videos for training purposes

The Green Blue carried out a short review of existing guidance and outstanding issues which included the following:

- The position on the effectiveness of using disinfectants on INNS as well as any wider environmental impact needs to be confirmed
- The position on the effectiveness of flushing outboard engines to remove shrimp needs to be confirmed.
- The position on in-water cleaning (particularly for larger boats prior to leaving a marina or harbour) needs to be confirmed.

- Real examples of actual impact of INNS rather than potential impact would be more powerful and persuasive.
- Several documents stress the importance of antifouling but deviate into detail on how to apply antifouling and prevent pollution from biocides. It is important that documents on biosecurity and INNS stay on message and do not start introducing other calls to action.
- It is important for messages to differentiate between freshwater and marine environments as boating behaviours and associated best practice will be different.
- It is important to 'sense check' every message.

An action was taken to develop an 'in water cleaning decision tree' to meet one of the key gaps in advice. Issues to consider included:

- The ask needs to be something that boat owners can do with equipment available.
- How do we ensure that the message gets across to those at their home marina only? i.e. we would not want to recommend boats from overseas seeing the message to clean off potential invasives as much as possible before returning.
- How to promote – potentially in terms of a business opportunity and benefits from fuel efficiency

Training

- Biosecurity planning training was produced as part of the Marine Pathways Project and we will work together to look at how this can be incorporated into existing courses by the sector and/or future training.