

Marine Pathways Project News

Issue 2 – April 2014

The aim of the Marine Pathways Project is to:

'protect marine biodiversity in the UK and Ireland by managing key pathways by which marine invasive non-native species are introduced and spread.'

The marine pathways project work continues throughout Great Britain and Ireland. Here are some updates on specific project components:

Volunteer Champions Help Spread The Word About Marine Non-Native Species

Monitoring and management of marine non-native species (NNS) is crucial to reduce their impact. A greater awareness and understanding of NNS will aid their monitoring and management. Workshops for groups of volunteers in North Wales keen to learn about NNS have been taking place. 'Champions' selected from these groups of volunteers, with the help of others, will be raising the profile of NNS and helping to disseminate information about NNS to members of industries affected and the public. Work by these volunteer groups will facilitate the work of the marine pathways project team. This approach is likely to be very effective and may be put into place elsewhere in Great Britain and Ireland. This work has been led by Natural Resources Wales and the North Wales Wildlife Trust.



Definition:

Invasive non-native species (INNS):

'a species which has been introduced outside its natural, past or present distribution and has a negative environmental, economic or social impact.'

Case species:

Devil's Tongue Weed (*Grateloupia turuturu*):



From: Japan, Korea.

Impact:

- Competes with native species for light and space.

Survey in South Wales – The extent of Devil's Tongue Weed

A study was undertaken to identify the location of Devil's Tongue Weed, *Grateloupia turuturu* within Neyland Marina and the surrounding Milford Haven area in South Wales. The aim of the study was to determine the likelihood of being able to eradicate this marine invasive species.

Pontoons and other floating structures were examined for the presence of *G. turuturu*. The results of this study indicate that this species is found throughout the area. The extent to which this

species has spread indicates that eradication will be very difficult.

Ultimately this study highlights that control and eradication of *G. turuturu* and other NNS will be improved by predicting where introductions are likely to occur and acting rapidly following detection of introduction. This work was undertaken by Natural Resources Wales.



The location of sampling points for G. turuturu. Red stars indicate where G. turuturu was detected and black stars indicate where G. turuturu was not detected.

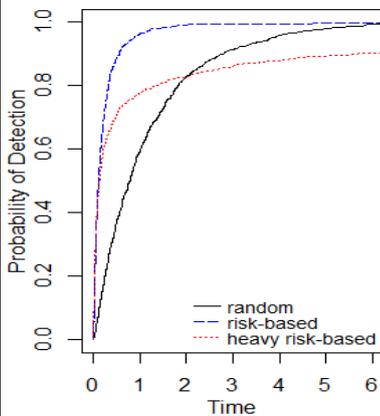
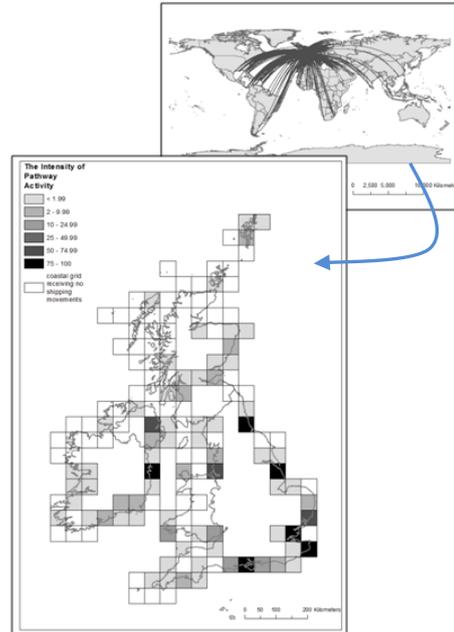
Related Links:

More information regarding the control marine NNS in Wales can be found by visiting the [North Wales Wildlife Trust website](http://www.northwaleswildlife.org.uk).

Towards a Monitoring Programme for Non-Native Species

Predicting introduction of NNS

Much of the work undertaken under the marine pathways project is to aid the development and implementation of a monitoring strategy. Monitoring will enable the early detection of NNS providing a better chance of preventing their spread and therefore minimizing their impact. Predicting where NNS are most likely to be introduced will help focus monitoring efforts and reduce the time taken to detect an introduction. NNS introduction pathways include; commercial shipping, recreational boating, aquaculture imports and natural dispersal. Cefas have conducted a study which includes determining the coastal regions where activity relating to these introduction pathways is high. High introduction pathway activity could increase the likelihood of introduction of NNS. Focusing monitoring for NNS where introduction pathway is high may therefore increase the chance of detecting a NNS.

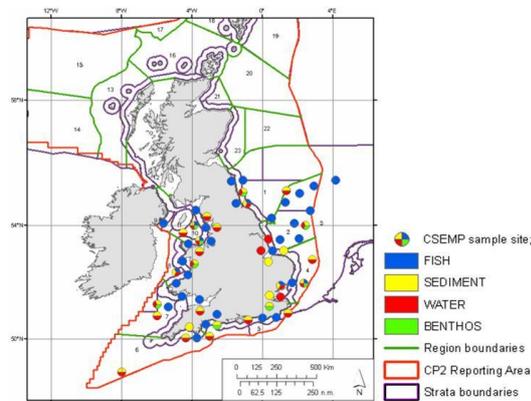


Risk Based Monitoring – Good or Bad?

Cefas have also used mathematical simulations to show that focusing monitoring efforts in areas predicted to be at high risk of introduction may be beneficial but focusing too heavily on those areas at high risk may not be the best strategy.

Adapting Monitoring which is Already Taking Place

The marine environment is heavily monitored, however, detection of NNS is often not included as part of the monitoring. Rather than developing new monitoring strategies for NNS, adaptation of existing programmes may be a cost effective option. Cefas have undertaken a project to review where existing monitoring is being undertaken and how appropriate this monitoring may be for the detection of NNS. By making recommendations of where adaptations and amendments to current monitoring programmes can be made to include NNS, this work will contribute to the development and implementation of a monitoring strategy.



Coming up:

- ‘Progress in the fight against the invasive Carpet Sea Squirt, *Didemnum vexillum*, along the west coast of Ireland.’ This work is being lead by the Irish Sea Fisheries Board or Bord Iascaigh Mhara.
- The battle to keep invasive non-native marine species under control is stepping up a notch with the soon to be published ground-breaking marine biosecurity planning guidance; the first of its kind for the UK. Its aim is to give site operators easy to follow procedures for creating a biosecurity plan. This guidance has been created by The Firth of Clyde Forum, in partnership with Scottish Natural Heritage (SNH) commissioned by SAMS Research Services Ltd (SRSL).

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