

Marine pathways work continues throughout Great Britain and Ireland. Here are some updates on the subject of non-native species and on Marine Pathways work.

**Marine non-native species monitoring in Orkney Islands**

A comprehensive marine non-native species (NNS) monitoring programme is an integral part of the Ballast Water Management Policy for Scapa Flow and Loch of Stenness (adopted by Orkney Islands Council (OIC) in December 2013)

<https://www.orkneyharbours.com/port-authority/services/ballast-water-management>

The annual monitoring programme started in 2013 and includes eighteen OIC NNS monitoring locations, three marinas and eighteen visiting yacht mooring sites. In addition to these, pier and harbour quay wall sites are visited on an occasional basis, Figure 1.

It is important to monitor different habitats and for that reason the sampling locations include intertidal areas, navigation buoys, pier quay walls, water column (for plankton) and seabed sediments to ensure a good coverage of the diverse habitats present.

The methods used in the surveys include rapid assessments, scrape sampling, sediment grab sampling, plankton net sampling and the use of settlement panels. Water temperature is recorded at each site and salinity samples are collected at all locations.

During the monitoring programme fourteen NNS have been recorded, see Table 1, of which two are new records for Orkney Islands, the compass sea squirt *Asterocarpa humilis* and red seaweed *Neosiphonia harveyi*. To date no marine invasive NNS have been recorded at Orkney Islands.

For more information contact:

[jenni.kakkonen@orkney.gov.uk](mailto:jenni.kakkonen@orkney.gov.uk) or visit: <https://www.orkneyharbours.com/>

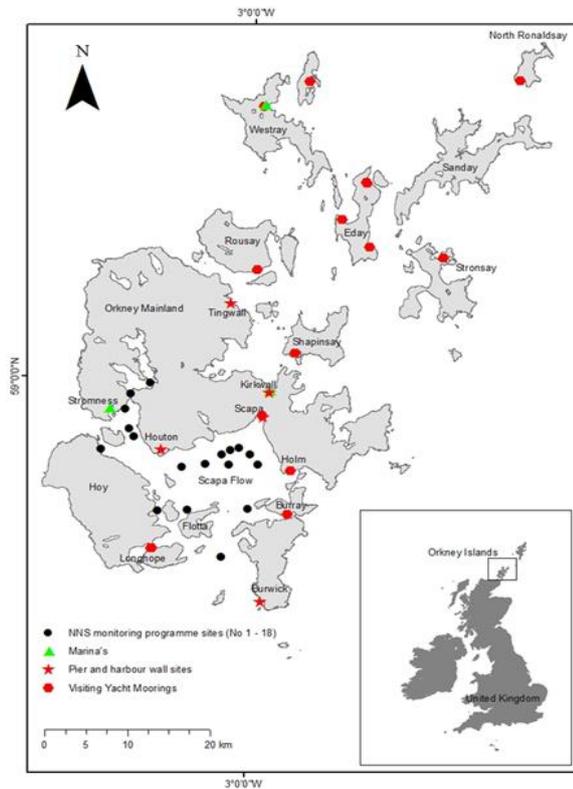


Figure 1. Locations of marine non-native species monitoring sites.

**Table 1. Non-native species recorded during 2013 – 2016 as part of Orkney Island Council marine non-native species monitoring programme. \* indicates a new record**

Common name	Latin name
Harpoon weed	<i>Asparaaopsis armata</i>
Compass sea squirt	<i>Asterocarpa humilis</i> *
Red seaweed	<i>Bonnemaisonia hamifera</i>
A brvozoan	<i>Buaula fulva</i>
A brvozoan	<i>Buaulina simplex</i>
Japanese skeleton shrimp	<i>Caprella mutica</i>
Green sea fingers	<i>Codium fragile</i> subsp.
Ovster thief	<i>Colpomenia peregrina</i>
Orange tipped sea squirt	<i>Corella eumyota</i>
Red seaweed	<i>Dasysiphonia japonica</i>
Red seaweed	<i>Neosiphonia harveyi</i> *
Jenkins spire shell	<i>Potamopvraus</i>
Orange ripple brvozoan	<i>Schizoporella japonica</i>
A brvozoan	<i>Tricellaria inopinata</i>

**Definition:**

Invasive non-native species (INNS):

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

Synonymous term: Invasive non-indigenous species (INIS).

**Case Species:**

Leathery sea squirt (*Styela clava*)



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**Native range:**

Northwest Pacific

**Habitat:**

Attaches to solid surfaces in shallow marine waters.

**Impacts:**

- Can overgrow existing hard substrate communities potentially reducing biodiversity and altering ecosystems.
- Can foul fishing and aquaculture equipment impacting these industries financially.

## The review of pathway regulations in regulatory processes

The Environment Agency (EA) have produced a report investigating the biosecurity risks associated with aquaculture and identifying potential gaps and opportunities in current regulatory processes for improving biosecurity. The document makes some recommendations for the EA and others to improve the management of the INNS pathway associated with aquaculture. The EA hope to work on the recommendations over the next year with the marine pathways group.

## National Marine Plan for Wales

The Welsh Government is working towards a shared vision for clean, healthy, safe, productive, biological diverse and resilient seas in Wales and it has launched a consultation on the first National Marine Plan for Wales, which aims to guide the future use of Welsh seas.

Marine planning provides an overarching framework for managing Welsh seas, helping to ensure marine natural resources are managed and used in a sustainable way. The plan covers the Welsh inshore and offshore marine planning regions, for which the Welsh Ministers are the marine planning authority, and integrates many policies relevant to the marine environment, including a specific policy on INNS (Policy ENV-03 refers).

The consultation runs until the 29th March 2018, and can be found here:  
<https://consultations.gov.wales/consultations/draft-welsh-national-marine-plan>

## RAPID LIFE project

RAPID LIFE is a three year project which started in July 2017 led by the Animal and Plant Health Agency (APHA), with Natural England and Bristol Zoological Society as key partners, that will pilot an innovative approach to INNS management in freshwater aquatic, riparian and coastal environments across England.

Specific objectives are:

1. Establish a regionally-based framework across England to deliver more effective IAS management, facilitating the production of Regional INNS Management Plans.
2. Prevent the introduction of novel IAS to the project's target environments by increasing biosecurity awareness amongst target audiences through a coordinated programme of engagement at England-wide and regional levels.
3. Increase awareness and efficacy of GB-level early warning and rapid response systems within England and establish localised rapid response protocols.
4. Eradicate and control established IAS in high-priority areas whilst demonstrating strategic and best practice approaches.
5. Disseminate the exemplar approach throughout European and international networks.

Current work includes the development of a coastal/marine biosecurity toolkit that will guide managers as to how to encourage the users of their facilities to adopt effective biosecurity measures. This toolkit will include information on the problems caused by INNS, how introduction and spread can be prevented, materials available to adopt biosecurity, examples of infrastructure and good practice. Training packages are also being produced, comprising 'toolbox' talks and supporting materials to provide trainers with everything they would need to run a session with priority user groups tailored to specific audiences. This work is due to be completed in June and will hopefully provide a valuable resource for those working in marine and coastal operations.

For more information please contact  
RAPID LIFE project manager: Alexia Fish  
[Alexia.Fish@apha.gsi.gov.uk](mailto:Alexia.Fish@apha.gsi.gov.uk)



## Of Interest:

The fourth Invasive Species Week 23<sup>rd</sup>-29<sup>th</sup> March 2018

## Agenda:

23<sup>rd</sup> – Launch of invasive species week  
26<sup>th</sup> – Ornamental plants  
27<sup>th</sup> – Hitchhikers  
28<sup>th</sup> – Exotic pets  
29<sup>th</sup> – #getINNSvolved

See the link below for more information:

<http://www.nonnative-species.org/index.cfm?sectionid=132>

contact:

[nnss@apha.gsi.gov.uk](mailto:nnss@apha.gsi.gov.uk)



For further information on the Marine Pathways Project please following the link to our web pages hosted on the Non-Native Species Secretariat website:  
<http://www.nonnative-species.org/index.cfm?sectionid=4>

## Contact us:

Please contact Marine Pathways on:  
[rachel.parks@cefas.co.uk](mailto:rachel.parks@cefas.co.uk)  
[paul.stebbing@cefas.co.uk](mailto:paul.stebbing@cefas.co.uk)