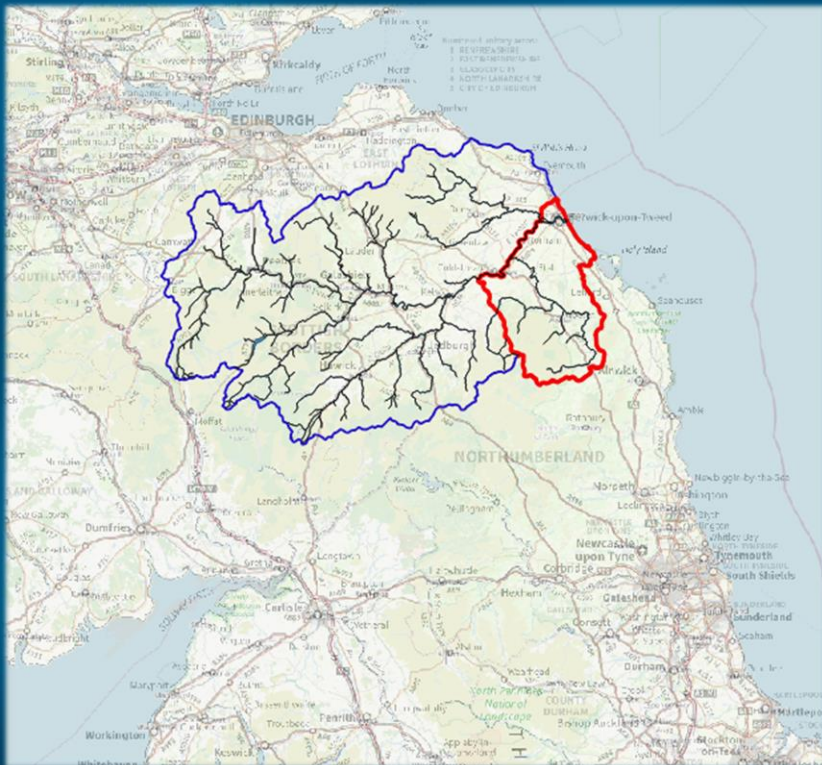




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# Invasive species action in north-east England



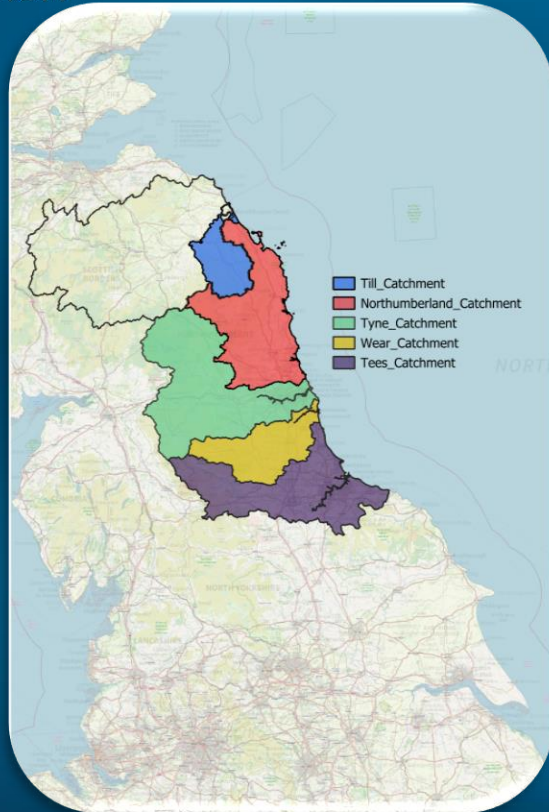
Emily Iles, Tweed Forum  
Jess Ward, Newcastle University

# Tweed Invasives Project 2002 - 2024





# North-east Invasive Non-native Species Strategy and Action Plan 2020-2024



*“Develop and maintain cost-effective strategic approaches to prevent, detect, control and eradicate specified INNS in North-east river catchments through the coordinated action of river catchment partnerships”*



<https://tweedforum.org/our-work/projects/north-east-invasive-non-native-species-strategy-and-action-plan/>

Tyne Rivers Trust



NATURAL ENGLAND



Durham County Council



Tyne Rivers Trust INNS Project

Naturally Native

Coastal Mitigation Service

Northumbrian Water Limited

TOPHOG – Operation Hogweed (Tees River Trust)

Tweed INNS Programme

Kielder Water Vole Re-Introduction

Wear INNS Project (WINNS)

Northumberland Crayfish Strategy

Northumberland National Park Authority

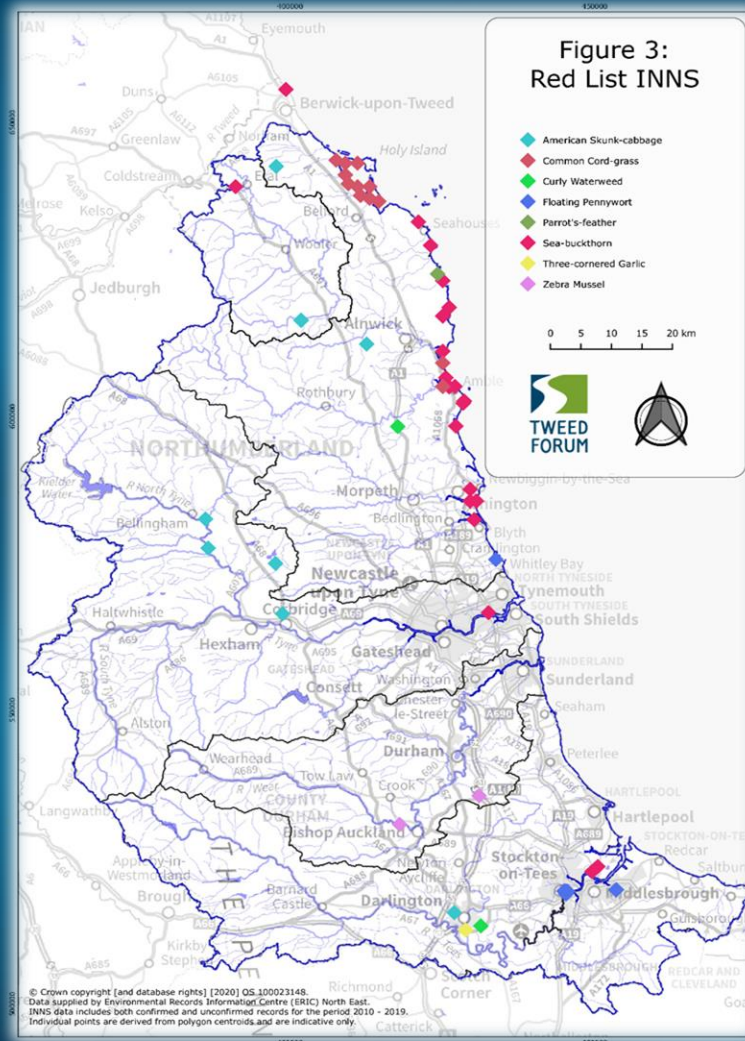
Northumberland Wildlife Trust

Durham Wildlife Trust

Natural England pirri removals

## We produced four main objectives...

1. Increased regional coordination of INNS management
2. Reduce the risk of the introduction and spread of freshwater and riparian INNS in the Northeast through increased awareness and biosecurity
3. Detection and surveillance to ensure appropriate rapid management responses
4. Strategic and sustainable implementation of longer-term local control and eradication programmes



## Blacklist INNS

*Alert species that are not currently present in the region but assessed as a high risk and threat*

## Red List INNS

*High-impact species that are present in a small number of sites but not well-established or abundant*

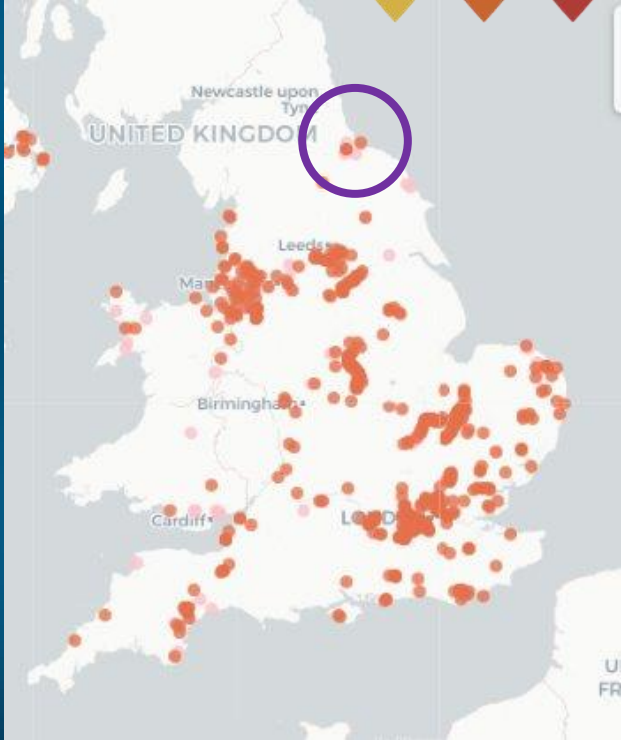
## Amber List INNS

*Well-established species whose eradication is difficult or not feasible, but control is important due to their impact.*

## Green List INNS

*Species present or established in the region, whose eradication is currently not feasible and management is not a priority because of low impact or poor cost-effectiveness.*

# Key outcomes from the strategy







**Environment Agency**



NATURA 2000



**Newcastle University**



**TWEED FORUM**



# WATER QUALITY

Working with farmers to implement catchment sensitive farming initiatives to reduce the levels of nutrients entering waterbodies



# MACROALGAE REMOVAL

River restoration projects, riparian planting and river corridor fencing initiatives aim to improve the riparian zone and reduce the risks of diffuse pollution.



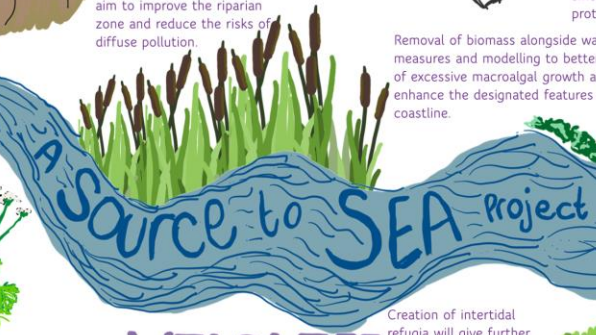
Eutrophication has led to increased macroalgal growth across intertidal areas, dense mats of macroalgae smothering habitat areas are causing degradation of protected ecosystems

Removal of biomass alongside water quality improvement measures and modelling to better understand the causes of excessive macroalgal growth are being implemented to enhance the designated features of the protected coastline.



# INVASIVE SPECIES

Improving the control of Invasive Non-Native Species through enhanced surveillance and detection, novel surveying, and subsequent removal from freshwater, dune and marine ecosystems using non-chemical controls.



# WILDLIFE DISTURBANCE

Creation of intertidal refugia will give further protection to wildlife from disturbance across sites.



Increasing awareness of the importance of the wildlife and habitats such as the breeding shorebirds, seal populations and fragile dune systems in order to minimize the impacts of visitors.





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Freshwater



Dunes



Marine





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# Controlling Dune Invasives

## Bamburgh Dunes

- Ivy
- Sycamore



# Controlling Dune Invasives

## Lindisfarne NNR

- Pirri Pirri Burr



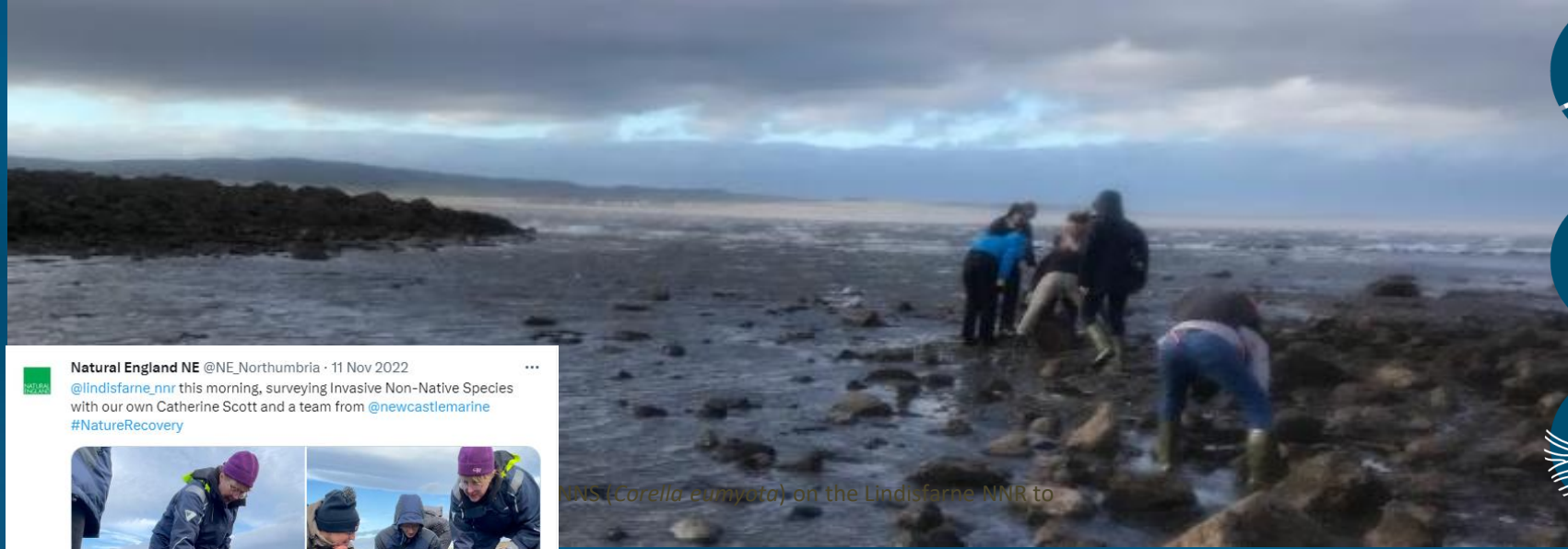
# Rootwave trial



- Trialled new Rootwave system for removing invasives without herbicides.
- Uses up to 5000V of electricity applied by a lance
- Equipment was cumbersome – generator and transformer on the back of a truck
- Wasn't effective on the dunes – possibly due to conductivity issues in sand
- Not going to be the answer to remove invasives in the dunes



# Annual Survey: Holy Island



**Natural England NE** @NE\_Northumbria · 11 Nov 2022

@lindisfarne\_nnr this morning, surveying Invasive Non-Native Species with our own Catherine Scott and a team from @newcastlemarine #NatureRecovery



4 8

... (Corella eumyota) on the Lindisfarne NNR to

# Annual Survey: Holy Island



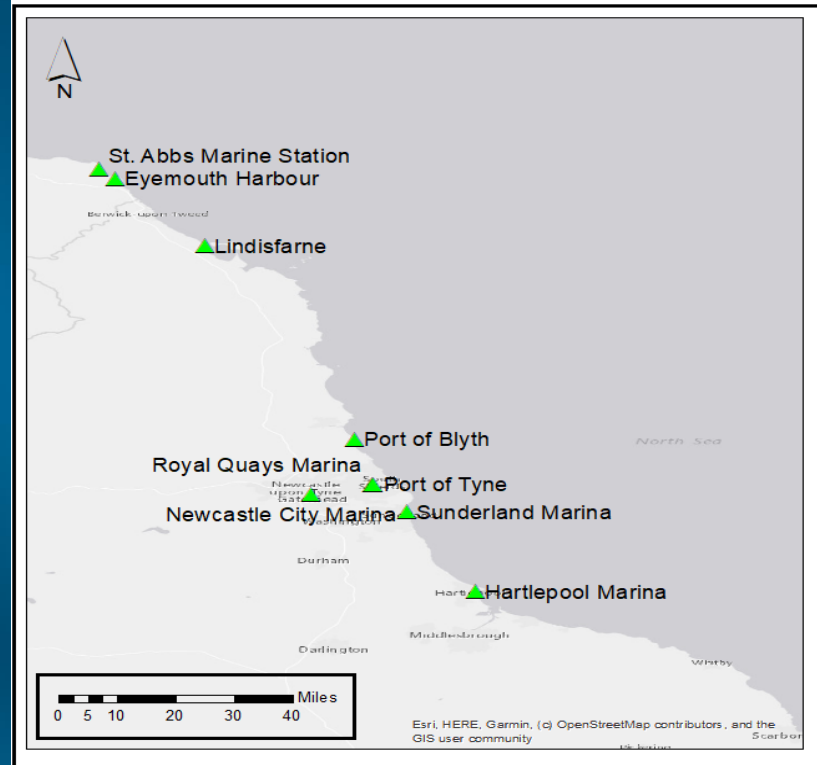
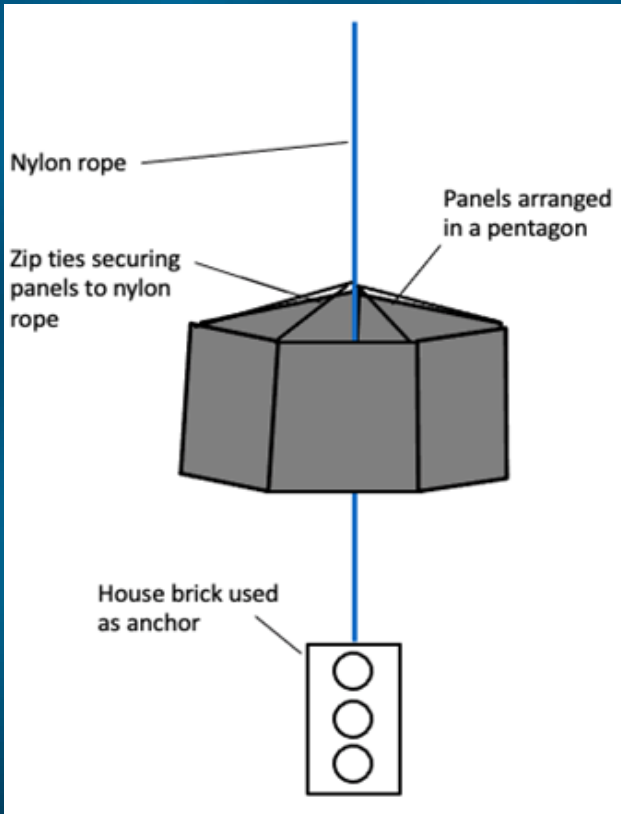
Image: [MBA-NNS-Guide-2020-1.6-MB.pdf \(nonnativespecies.org\)](#)



Figure 5. BIIGLE analysis of community structure of Hartlepool marina July panel.



# Marine Invasives: SETL plates





Tyne Rivers Trust



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Durham County Council



National Trust

