

Clyde Marine Region Topic Sheet Series

Marine Invasive Non-Native Species



CONCERNS
SOME CONCERNS



TREND
DETERIORATING

What are Invasive Non Native Species?

Non-native species (NNS) are those that have been, intentionally or unintentionally, introduced outside their native range as a consequence of human activity. Once established, if these species then threaten biodiversity and/or cause economic damage they are referred to as 'invasive' (INNS). We know that at least 17 marine NNS have become established in Scottish waters and approximately 15% go on to become INNS.

Background

The Clyde Marine Planning Partnership (CMPP) has developed this set of Topic Sheets to help communicate the findings of the Clyde Marine Region Assessment which is available on our website www.clydemarineplan.scot. The Assessment is used to inform and prioritise the development of policies for the Clyde Marine Plan. If you would like to be kept up-to-date about the development of the marine plan please visit the website and sign up to receive our e-newsletter.

Why does it matter?

If NNS become invasive they can be very destructive to both the natural and manmade environment. In the correct conditions, INNS can overwhelm, out-compete, consume or destroy indigenous wildlife. They can also clog, smother, damage and disable machinery, water intakes and other structures, such as lock gates, pontoons and boat hulls.

The estimated cost of INNS to the Scottish economy is £245 million, with £7 million attributed to the marine sector. This is likely to be an underestimate.

Didemnum vexillum, THE CARPET SEA-SQUIRT © S BROWN



SEPA water body INNS information

Type of INNS	Water bodies colonised
Leathery sea squirt	Clyde Estuary Outer – Gare Loch East Arran Firth of Clyde Inner – Dunoon and Wemyss Bay Firth of Clyde Inner – Cumbraes Irvine Bay Kyles of Bute Largs Channel (Fairlie Roads) Loch Striven Rothesay Sound of Bute South Arran Loch Riddon Kilbrannan Sound Loch Fyne Middle Loch Fyne Outer Loch Fyne Upper
Carpet sea squirt	Clyde Estuary Outer – Gare Loch East Arran Firth of Clyde Inner – Dunoon and Wemyss Bay Firth of Clyde inner – Cumbraes Irvine Bay Kyles of Bute Largs Channel (Fairlie Roads) Loch Striven Rothesay Seamill and Ardrossan
Common cord grass	Seamill and Ardrossan

What is being done about it?

In Scotland, amendments to the Wildlife and Countryside Act, and the accompanying Code of Practice on Non-Native Species, have significantly strengthened the law in relation to NNS.

The Environmental Liability (Scotland) Regulations also mean that there is the ‘polluter pays’ principle, so any costs associated with an eradication or clean up, could be charged to the person or organisation who caused the problem.

Following the identified needs of marine industries, particularly marine tourism and recreation businesses, Scottish Natural Heritage published guidance in 2014 on how to develop a marine biosecurity plan for a site or operation based on the Code of Practice see www.snh.gov.uk/docs/A1294630.pdf. A biosecurity plan identifies high risk issues, species and activities and develops actions to reduce those risks.

The Scottish Environment Protection Agency (SEPA) has stated that it will take a zero tolerance approach to actions that could result in introductions of NNS and will encourage the development of further biosecurity plans where appropriate.

NNS in the Clyde Marine Region

In 2015, SEPA identified 18 water bodies around Scotland which were not achieving ‘good’ status because of INNS. None of the Clyde Marine Region (CMR) water bodies failed, however SEPA highlighted 12 areas which are at risk. Ten INNS, including the leathery sea squirt (*Styela clava*) and the carpet sea squirt (*Didemnum vexillum*), have been identified in the CMR. The arrival of other species already present in England, Wales and/or Ireland is likely.

The Firth of Clyde Forum produced a Biosecurity Plan for the Clyde area in 2011. The Biosecurity Plan provides a platform for local action to address the issue of INNS. The Plan will be reviewed and, where appropriate, incorporated into the Clyde Marine Plan.

Nineteen water bodies within the CMR have recorded the presence of NNS. These are listed in the table. To date, the impact of NNS and INNS in the CMR has not been as catastrophic as once feared. For example, wireweed (*Sargassum muticum*), a high impact species in other places, is widespread in the CMR, but impacts on biodiversity have not been as negative as expected.

What is being done to help?

Marine Scotland hosts a marine NNS working group to co-ordinate work around Scotland. At a UK level the Marine Pathways project aims to manage key pathways by which marine NNS are introduced and spread. Formal funding for the project ended in April 2015, however the steering group remains in place and strategic work continues. The GB Secretariat for Non-Native Species is the co-ordinating body for action and policy on terrestrial, aquatic and marine NNS. The Firth of Clyde Forum (the precursor to the CMPP) wrote a biosecurity plan for the CMR and undertook significant awareness-raising projects, including printed literature and events.

Reporting

If you see any species which you know to be non-native or you see something which concerns you please contact 08452 302050 or email info@sears.scotland.org.uk

Where can I find out more?

Firth of Clyde Biosecurity Plan www.clydemarineplan.scot/marine-planning/marine-planning-projects/#inns

GBNNS Secretariat www.nonnativespecies.org