



What are other sectors doing about INNS?

The battle against the spread of marine INNS is a challenging one. Responses across the world vary widely in scale. There are intergovernmental strategic actions such as the Ballast Water Convention right through to volunteers physically removing invasive starfish in New Zealand.

When a marine invasive INNS is found in an area it is easy for an individual, organisation or sector to feel like they have been singled out for a difficult time. In truth these outbreaks could happen to any of us and it is only through comprehensive biosecurity by all of us who use the marine environment that we can significantly reduce the risk.

Below is a summary of some of the actions being taken by sectors, governments and organisations across England and further afield.

UK Organisations

[Marine Pathway Programme Group](#) consists of members from across Scottish, Welsh, Irish and English governments, the group works to coordinate and enhance activities being undertaken under a range of relevant INNS legislation, conventions and directives. The group publishes a [regular newsletter](#) and although funding for a specific work programme ended in 2015 the group still meets regularly and coordinates activities throughout the UK.

A number of reports, template biosecurity plans and other guidance have been produced by this group. They are referred to throughout these webpages and can all be downloaded [here](#).

[RAPID LIFE](#) – Reducing And Preventing Invasive alien species Dispersal is a three-year project (2017-2020) piloting innovative approaches to Invasive Non-Native Species (INNS) management in freshwater aquatic, riparian and coastal environments across England. The project has two strands: one strand engages regional stakeholders in the production and implementation of five Regional INNS Management Plans (RIMPS) delivering consistent, regionally tailored prevention, early warning, rapid response, eradication and control of INNS throughout England. A second phase

will produce awareness raising materials and training toolkits for water resource managers and user groups along with materials to improve uptake of biosecurity to slow the spread and prevent introduction of new INNS in regions.

RAPID LIFE is led by the Animal and Plant Health Agency (APHA) in partnership with Natural England and Bristol Zoological Society and supported by a number of further technical partners. For further information see [the RAPID website](#).

[Natural England](#) - Promoting biosecurity planning across sectors through training opportunities and facilitated workshops, coordinating regional control programmes with volunteers to reduce the impact on protected sites from species such as the Pacific Oyster in Kent and South West England.

[GB Non-Native Species Secretariat](#) – Development of GB wide Pathway Action Plans for managing introduction and spread of INNS including a plan for recreational boating.

[CEFAS](#) – Leading the development of a monitoring programme for marine INNS and reporting under the Marine Strategy Framework Directive, chair the Marine Pathway Group, INNS support for the Inshore Fishery and Conservation Authorities.

[CoCoast](#) – Citizen Science programme

Mariculture

Finfish operators, in particular, have a very keen sense of the importance of biosecurity in its widest meaning. Working with the Fish Health Inspectorate and other relevant authorities they work to high hygiene and biosecurity standards to reduce the risk from diseases and pathogens and this has the added benefit of reducing the risk from non-native species. [Aquaculture\Finfish biosecurity measures plan.pdf](#)

Shellfish sites are also alert to the issues regarding marine INNS and have reacted with a range of awareness raising tools relevant to their operations. Supported by the [GB Non-Native Species Secretariat](#) and [CEFAS](#) they follow a similar process to the fin fish sector scrutinising supply chain biosecurity as well as examining the stock on a regular basis for any INNS.

Marine recreation

The wide range of marine recreation, from diving to sailing, means that advice to these groups needs to be as specific as possible. Many groups have taken this on board and produced useful advice for their members. [The Green Blue](#), the environment programme for the Royal Yachting Association and British Marine, produce a range of activity specific literature and do a range of awareness raising activities.

The Royal Yachting Association (RYA) have a [dedicated section](#) on their website, and have worked, in partnership with the European Boating Alliance and the European Council to create the [European Code of Conduct on Recreational Boating and Invasive](#)

[Alien Species](#). The Code gives a useful outline of the practical actions and best practice recommended for the marine leisure sector.

A number of marina operators including Quay Marinas, MDL Marinas, Dean and Reddyhoff and the Yacht Haven Group have also developed their own marine biosecurity plans which outline the risks, actions, and monitoring regimes they have in place to ensure they are alert to marine INNS. Some of these are available on the [GB Non-Native Species Secretariat](#) website.

Likewise, [British Canoeing](#) and [British Rowing](#) both actively promote the 'Check, Clean, Dry' campaign and produce targeted advice for their members and are involved with the Pathway Action Plan. And the same can be said of diving, both BSAC and PADI who also run '[Project Aware](#)' which includes the invasive Lion fish tracker programme and promotes invasive species removal dive trips in Florida. The BSAC have been involved with the development, in partnership, of a [sealife tracker](#) app for mobile devices which supports the identification and reporting of invasive, and climate change related, species.

Ports and Shipping

A good example of how ports and shipping are responding to the threats of marine INNS comes from [Associated British Ports](#) (ABP). Group-wide they have developed their own biosecurity protocol which covers both marine and terrestrial INNS and supports the creation of port specific biosecurity plans. In the Humber estuary, where ABP have four ports, and in the Tamar estuary, they have developed an estuary wide approach which involves all the ports as well as tenants and adjacent landowners. They recently [teamed up with local schools and colleges](#) for a series of INNS surveys across the area which boosted their survey capabilities as well as raised awareness of the threats from INNS.

Commercial Fishing

In England the Inshore Fisheries Conservation Authorities (IFCA's) take marine INNS seriously and have developed a range of responses to improve biosecurity. For example, in 2014 the north west IFCA published their regional [Biosecurity Plan](#). The aims of the Plan are to **reduce** the risk of introduction and spread of marine INNS and shellfish disease, **promote** suitable detection, monitoring and rapid response systems and **develop** effective control programmes. The Plan focuses on high risk species and ties in with other local relevant plans and strategies which support the aims. The Plan will be comprehensively reviewed in 2019, however sections on species and diseases are updated as required.

The Association of IFCA's take a lead on producing relevant INNS information to their members. Their [fact sheet](#) on non-native crabs and lobsters is a good example of this.

CEFAS also produce a [range of useful documents](#) and provide advice to encourage and support best practice amongst the commercial fishing sector.

Angling

Amongst the angling community most work has been done in the river systems and this good practice can be extended to activities at the coast and in the marine environment. Both the [Angling Trust](#) and the Rivers Trust, for example the [Ribble Rivers Trust](#), actively promote good biosecurity. The [River and Fisheries Trust for Scotland](#) (RAFTS) have a comprehensive set of riverine biosecurity plans for their 20 members.

Under The Bern Convention, a specialised group of experts on invasive alien species was convened, and they worked with the angling sector to produce [best practice guidance](#) as they did with the recreational boating sector mentioned above.

New Zealand and Australia

The antipodes have possibly the most strictly adhered to biosecurity planning of any country or region. Due to their remote locations they have the ability to control boat movements more effectively than other areas, including the UK, and have a well-established network of survey, monitoring and treatment facilities.

Before the Ballast Water Convention was ratified by the International Maritime Organisation (IMO), Australia had their own [ballast water management requirements](#). Their [Government advice](#) is sector specific and carries the full weight of law should it be needed.

In New Zealand the [Ministry of Primary Industries](#) has the remit to manage the threat from INNS. Their advice is wide ranging covering all the major marine sectors, and like Australia, is backed up by significant legal powers. Their video about [boat hull cleaning](#) is worth a watch!

Massachusetts

Laws governing INNS vary across the United States but in Massachusetts, in particular, they have adopted some effective boat cleaning measures. Boaters are required to have a clean [boat certificate](#) every time they launch, with the aim of halting the spread of invasive fish and plants across their waterways. Their boat management [handbook](#) also makes interesting reading.