

GB Non-Native Species Pathway Action Plan: Angling

Background to action planning

Reducing the risk posed by pathways of introduction and spread is a key way of tackling invasive non-native species (INNS). The GB INNS Strategy calls for the development of Pathway Action Plans (PAPs) and they are a requirement under the EU IAS Regulation. They can also form an element of the programme of measures under the Marine Strategy Framework Directive.

This Pathway Action Plan is one of a series of plans intended to address pathways of introduction or spread of non-native species in Great Britain. The plan outlines the general policy and approaches as well as deliverables by government and other actors in relation to this issue.

Scope

This plan is aimed at the angling pathway, covering marine, brackish and freshwater environments, coarse and game fishing, including both wild and stocked fisheries but excludes aquaculture. The geographical scope of the PAP is GB but will also make reference where relevant to Northern Ireland, the Republic of Ireland and further afield (particularly Continental Europe). There is a corresponding Scottish PAP to sit alongside the GB PAP to help guide implementation in Scotland.

This PAP has a significant number of actions in common with the forthcoming Recreational Boating PAP and stakeholders should be aware of this other document too.

This plan was prepared by a working group (the GB Angling PAP Working Group) reporting to the GB Non-native Species Programme Board (see Annex 1 for membership).

Rationale

There are currently around 200 non-native aquatic species established in GB and aquatic species are particularly likely to be invasive. In recent decades the rate of arrival has accelerated – e.g. in the brackish and freshwater environments one new Ponto-Caspian species invades Britain every 2-3 years compared to one every 100 years before 1992. These include the killer and demon shrimps and quagga mussel. There are also many further aquatic species poised to invade the UK, a range of fish diseases that pose a threat to fish in the UK and several invasive fish like topmouth gudgeon that pose a threat to angling.

Good biosecurity is key and Government has, since 2011, been developing the *Check Clean Dry* (CCD) public awareness campaign aimed at improving biosecurity amongst water users. This has included a border campaign which started in 2016 and which has grown annually since. In 2018 CCD was expanded to Ireland, the Isle of Man and Channel Islands.

There is a European Code of Practice for Angling that has been developed under the Bern Convention and this area is also covered by a number of relevant Acts in domestic legislation – most importantly the Wildlife and Countryside Act (1981) which provides a general prohibition on the release of most non-native species of animal and many plants in England and Wales, and all non-native species in Scotland. Other relevant Acts include:

- The Keeping and Introduction of Fish (England and River Esk Catchment Area) Regulations 2015
- The Keeping and Introduction of Fish (Wales) Regulations 2014
- Import of Live Fish (England and Wales) Act 1980
 - The Prohibition of Keeping or Release of Live Fish (Specified Species) (England) Order 2014
 - The Prohibition of Keeping or Release of Live Fish (Specified Species) (Wales) Order 2015
 - The Prohibition of Keeping of Live Fish (Crayfish) Order 1996.
- The Import of Live Fish (Scotland) Act 1978(1)
 - The Prohibition of Keeping of Live Fish (Crayfish) (Scotland) Order 1996
 - The Prohibition of Keeping or Release of Live Fish (Specified Species) (Scotland) Order 2003
- The Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003 (as amended)
- The Salmon and Freshwater Fisheries Act 1975
- The Aquatic Animal Health (England and Wales) Regulations 2009
- Aquatic Animal Health (Scotland) Regulations 2009
- The Marine Strategy Regulations 2010.

However, legislation alone is not sufficient to manage and lower the risk associated with introducing or spreading of INNS. It requires cooperation and collaboration from all concerned, each sector is part of the solution and plays an important role in INNS management and implementing best biosecurity practice. This plan sets out additional actions to help to minimise the risk of introduction and movement of non-native species caused by anglers.

The Angling PAP working group has adapted the Bern Convention code of conduct to tailor it to the needs of GB (Annex 4) and developed agreed guidance for fisheries owners (Annex 5). Its primary output, however, has been to agree a series of measures to raise awareness among key actors in the angling sector and strengthen existing biosecurity mechanisms. These actions are outlined below and they form the main body of the action plan.

Aims and objectives

The overall aim of the PAP is to reduce the risk of introduction and spread of invasive non-native species by anglers based on international good practice.

Specific objectives are to:

- Facilitate the uptake of good biosecurity practice by the angling community.
- Raise awareness of the non-native species issue amongst anglers.
- Raise awareness of non-native species amongst fisheries managers, riparian owners and other relevant operators/users.
- Raise awareness of non-native species amongst traders and the media.
- Encourage all stakeholders to report novel NNS to the EA, NE, NRW and SEPA for freshwater environments and MMO, IFCA, NRW, WG or Marine Scotland for marine and brackish environments.
- Promote partnership working.

Actions

Key general actions are outlined below while a more detailed set of actions are to be found in Annex 3.

Action 1

NNSS will oversee the running of a CCD border biosecurity campaign concentrating on the high risk routes of entry to GB – mainly ferries from England to the near Continent.

Action 2

Scottish Government will run a CCD campaign at relevant airports used by anglers in Scotland.

Action 3

Welsh Government will run a CCD campaign at Welsh ports connecting to the Irish Republic.

Action 4

NNSS (and BIC Secretariat) will establish and run a BIC Aquatic Biosecurity group to agree co-ordinated measures, including action at ports, airports and on ferries and planes.

Action 5

The Environment Agency will continue to display the CCD logo on all their angling licenses.

Action 6

NNSS will lead on liaison with the European Commission and relevant EU Member States to agree a programme of action related to aquatic biosecurity (see Annex 6 for priority species whose arrival we aim to prevent). This will target:

- Continental anglers coming to GB
- GB/UK anglers returning from the continent.

Action 7

The Angling Trust and Angling Cymru (liaising with other competition bodies as appropriate) will annually compile a prioritised list of competitions (based on risk - related to both introduction and spread of INNS) to be targeted for heightened awareness-raising such as biosecurity demonstrations etc. This will be agreed by the working group.

Action 7A

Relevant organisers/owners will implement the heightened awareness-raising activities at the prioritised sites/events.

Action 8

Water Companies, CRT, Scottish Canals, EA, NE, SNH, The Crown Estate and NRW will put a reference to carrying out biosecurity into all lease and management agreements related to angling (as they come up for renewal).

Action 9

The Angling Trust will encourage all angling clubs to add the biosecurity clause (Annex 7) to their constitutions.

Action 10

The working group will compile and maintain a list of sites/waterways which contain critical INNS (at GB and National levels) that are a priority to contain/slow the spread (see Annex 8 for GB critical species list) and where angling occurs.

Action 10A

Owners and managers of these sites and where angling occurs will install facilities and signage to promote very high biosecurity. This may include:

- Suitable hard standing
- Cold water wash down facilities
- Large prominent signage
- Hot water wash down facilities where possible
- In addition, enacting biosecurity by-laws where possible.

Action 10B

Organisers of angling events will implement heightened awareness-raising activities and ensure strict biosecurity at the prioritised sites.

Action 11

The Angling Trust will promote the EU Code of Conduct and encourage other EU member states angling organisations to adopt CCD via the European Anglers Alliance.

Action 12

Fish Health Inspectorates will circulate the fisheries biosecurity guidance (Annex 5) to fisheries as appropriate.

Action 13

EA, NE, NRW, WG, MMO, IFCA's and SEPA will provide a reporting route for novel NNS. On confirmation of a species these agencies will take action as appropriate.

Action 14

Cefas will carry out a comprehensive assessment of the risk posed by moving bait associated with marine angling for (i) introducing INNS to GB and (ii) moving INNS to new areas in GB and report back to the working group.

Monitoring and updating

The working group will be re-convened at least annually to assess progress with achieving the actions and also to agree the prioritised list of competitions (Action 7) and to maintain the list of sites with critical INNS (Action 10).

For assessing overall progress with delivery of the PAP the group will consider all relevant information including the following:

- Number of organisations/clubs/sites signed up to promote CCD.
- Baseline uptake of biosecurity among anglers – then future measurement of improvements to uptake. Particularly important for anglers travelling abroad and for foreign anglers visiting GB from abroad.
- Number of angling events organised by each relevant key actor which have provided cleaning facilities each year to demonstrate increasing trend.
- Number of water assets/access points that provide cleaning facilities for anglers permanently or temporarily e.g. during peak season (and within that how many promote/police use of them).

Annex 1: Working Group members.

The following organisations were represented on the Angling PAP working Group:

Angling Trust (Chair)

NNSS (Secretary)

Anglian Water

Canal & River Trust

Cefas

Defra

Environment Agency

Fisheries Management Scotland

Natural England

Natural Resources Wales

Scottish Environment Protection Agency

Scottish Government

Scottish Natural Heritage

South West Water

Welsh Government

Corresponding members:

DAERA – Northern Ireland

Annex 2: Key Actors related to the PAP.

- Angling clubs
- Angling coaches
- Angling tour organisers
- Angling Trade Association
- Angling Trust and other Angling Organisations
- Canal & River Trust/Glandwr Cymru and Scottish Canals
- Cefas
- Defra, Welsh Government, Scottish Government and NNSS
- Environment Agency, Natural Resources Wales and Scottish Environment Protection Agency
- Fish Health Inspectorates
- Fisheries Colleges and institutes of higher education
- Inshore Fisheries and Conservation Authorities
- Fisheries Management Scotland
- Institute of Fisheries Management
- Local Action Groups
- Marine Management Organisation
- Match Angling Organisers
- Natural England
- Port and Harbour Authorities
- Riparian owners
- Rivers Trusts
- River Tweed Commission and Scottish Salmon Boards/Trusts
- Recreational fisheries owners and managers
 - UK, France etc.
- Scottish Natural Heritage
- Water Companies
- Other aquatic asset owners that allow angling
 - Local Authorities, National Trust, National Trust for Scotland, Wildlife Trusts, RSPB, WWT, Forestry Commission, The Crown Estate
- Wild fish conservation organisations

Annex 3: Table of actions for key actors.

	CRT and Scottish Canals	Environment Agency & NRW	Angling Trust and other angling organisations	Water companies and other aquatic asset owners where angling is allowed	Match angling organisers	Angling tour organisers	Recreational fisheries owners - GB, France, etc.	Local & other authorities (who own or manage fisheries)	Angling clubs	Rivers and fisheries trusts
Site biosecurity										
Carry out biosecurity risk assessments on all aquatic assets in relation to angling-mediated risks and develop measures to mitigate the key risks identified for (i) introducing species to a site and (ii) onward spread.				✓	✓ (for all match events)			✓		✓
Raise awareness of <i>Check Clean Dry</i>										
Display <i>Check Clean Dry</i> materials (inc. permanent signage) at all waterbodies or angling access points owned by the organisation, where angling occurs.	✓ (at high priority sites)	✓		✓ (at high risk sites identified in the biosecurity risk assessment)	✓ (at match events)		✓ (by the entrance to waterbodies)	✓ (at sites with public access for angling)	✓ (by the entrance / exit to waterbodies)	✓
Disseminate <i>Check Clean Dry</i> materials to member clubs or clubs that use your assets to be displayed at their club waters or in public areas used by anglers			✓	✓						
Include articles in membership magazines, bulletins and newsletters.	✓	✓ (including rod license newsletter)	✓	✓	✓	✓ (on border biosecurity)	✓		✓	✓
Create social media content educating followers about INNS and promoting <i>Check Clean Dry</i> .	✓	✓	✓	✓	✓	✓	✓		✓	✓
Include links to the <i>Check Clean Dry</i> website on organisation's website.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

The GB Angling Pathway Action Plan

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Disseminate <i>Check Clean Dry</i> materials to anglers	✓	✓	✓	✓	✓	✓		✓	✓	✓ (to members)
Nominate a <i>Check Clean Dry</i> champion to promote biosecurity.			✓	✓ (ideally at each site)	✓ (match events)		✓	✓	✓	✓
Display <i>Check Clean Dry</i> logo on all English and Welsh angling licenses		✓								
Display <i>Check Clean Dry</i> logo on fishing permits				✓						
Give a biosecurity talk to visitors				✓			✓			
Encourage good biosecurity practice										
Limit access to water bodies, where possible to a single point where <i>Check Clean Dry</i> guidance is displayed. Visitors should log in and out, confirming that they have cleaned and inspected their equipment.				✓	✓		✓		✓	
Ask angling clubs to follow good biosecurity practice (see relevant sections below)			✓ (member clubs)	✓						
Promote relevant guidance to asset managers in GB and abroad.				✓		✓				
Install cleaning facilities at access points.				✓ (on all high risk sites)	✓		✓	✓	✓	✓
Employ biosecurity measures (e.g. dry net policy).				✓	✓		✓	✓	✓	✓
Provide equipment that can be borrowed and used instead of personal equipment				✓	✓		✓		✓	

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Put waterproof <i>Check Clean Dry</i> stickers on club-owned equipment to remind users to follow biosecurity.				✓	✓		✓		✓	
Consider additional biosecurity measures for events / competitions				✓	✓				✓	✓
Ensure additional biosecurity measures are in place for high-risk events / competitions - those with many competitors bringing their own equipment from overseas.			✓	✓	✓		✓			
Train staff, angling coaches, wardens, biosecurity champions and volunteers in biosecurity.			✓	✓	✓		✓			
Encourage members to take biosecurity training			✓	✓					✓	
Integrate biosecurity into training			✓	✓						
Integrate biosecurity into bylaws				✓						
Assist with development and dissemination of tailored messaging for sub-sectors as required.			✓							

Pre-consultation Draft

Annex 5: Agreed biosecurity guidance/plan for fisheries owners in GB.

Pre-consultation Draft

Annex 6: List of priority species that we want to keep out (most are not yet present in GB but some are present and we do not want them being brought in again) and for which there is a risk of introduction via angling. [Impact scores are from: Gallardo, Belinda & Aldridge, David. (2013). Review of the ecological impact and invasion potential of Ponto Caspian invaders in Great Britain.]

Freshwater and Brackish species

Priority	Latin name	Common name	Impact	Year of introduction to GB	Widespread?
V high	<i>Neogobius melanostomus</i>	Round goby	5		
	<i>Proterorhinus semiluaris</i>	Freshwater tubenose goby	5		
	<i>Proterorhinus marmoratus</i>	Tubenose goby	5		
High	<i>Neogobius gymnotrachelus</i>	Racer goby	4		
	<i>Dreissena r. bugensis</i>	Quagga mussel	5	2014	very localised
	<i>Dikerogammarus villosus</i>	Killer shrimp	4	2010	very localised
	<i>Myriophyllum heterophyllum</i>	VL Water Milfoil	-	2015	Very localised
	<i>Ludwigia peploides</i>	Water primrose	-		
Med	<i>Echinogammarus ischnus</i>		3		
	<i>Echinogammarus trichiatus</i>		3		
	<i>Dikerogammarus bispinosus</i>		3		
	<i>Limnomysis benedeni</i>		3		
	<i>Obesogammarus crassus</i>		3		
	<i>Pontogammarus robustoides</i>		3		
	<i>Hypania invalida</i>		3	2008	localised
	<i>Chelicorophium robustum</i>		3		
	<i>Chelicorophium sowinskyi</i>		3		
	<i>Alternaterna philoxeroides</i>		-		

Marine species

Priority	Latin name	Common name
High and Very High	<i>Amphibalanus reticulatus</i>	Barnacle
	<i>Caulerpa racemose</i>	Sea grapes
	<i>Dyspanopeus sayi</i>	Say mud crab
	<i>Megabalanus coccopoma</i>	Titan acorn barnacle
	<i>Megabalanus zebra</i>	Barnacle
	<i>Polysiphonia subtilissima</i>	Red algae
	<i>Pseudochattonella verruculosa</i>	Alga
Medium	<i>Alexandrium catenella</i>	A dinoflagellate
	<i>Asterias amurensis</i>	Flat bottom sea star
	<i>Rapana venosa</i>	Veined rapana whelk
	<i>Rhopilema nomadica</i>	Nomad jellyfish

Annex 7: The Angling Trust biosecurity clause for inclusion in Angling Club constitutions.

To provide *Check, Clean, Dry* materials to their members. This could include signage and materials being displayed at the club waters or access points, guidance on the organisation's website, features in newsletters and sending materials to new members when they sign up.

BIOSECURITY

Members of the Club are asked to undertake good biosecurity practice whilst they are using the club's fishing waters. This includes:

Making sure that their equipment is dry and free of mud and plant material prior to arriving at the site.

After every fishing trip, cleaning their equipment and boots in accordance with the *Check, Clean, Dry* guidance. Particular care should be given to the seams of boots and waders and the rims of nets.

Day ticket users visiting the club are asked to follow the same *Check, Clean, Dry* guidance.

Pre-consultation Draft

Annex 8: List of critical GB-restricted species that we want, as a priority, to contain or slow their spread and for which there is a risk of spread via angling.

Freshwater and brackish

<i>Dikerogammarus villosus</i>	Killer shrimp
<i>Dreissena bugensis</i>	Quagga mussel
<i>Myriophyllum heterophyllum</i>	Variable-leaved water milfoil
<i>Pseudorasbora parva</i>	Topmouth gudgeon

Marine

<i>Asterocarpa humilis</i>	Compass sea squirt
<i>Crepidula fornicata</i>	Slipper limpet
<i>Didemnum vexillum</i>	Carpet sea squirt
<i>Eriocheir sinensis</i>	Chinese mitten crab
<i>Hemigrapsus takanoi</i> and <i>sanguineus</i>	Asian shore crabs

Pre-consultation Draft