



**ANGLING
TRUST**

Biosecurity at Angling Events

A guide to reducing the risk of spreading invasive non-native species that harm the environment





**Ymddiriedolaeth Natur
Gogledd Cymru**
**North Wales
Wildlife Trust**

This toolkit was written and produced by the North Wales Wildlife Trust on behalf of the Angling Trust. The North Wales Wildlife Trust are dedicated to conserving all habitats and species across North Wales for the enjoyment of people and the benefit of wildlife. We work with many partners to deliver invasive non-native species projects both locally and nationally within Wales. We work in partnership with 45 other Wildlife Trusts as part of the largest UK voluntary organisation dedicated to conserving all of the UK's habitats and species, whether in the countryside, towns, or the sea. The North Wales Wildlife Trust also provides biosecurity training and pop-up washdown stations at local and national watersport events for organisations such as The Angling Trust, Yorkshire Water, and British Canoeing.

Contact us at: info@northwaleswildlifetrust.org.uk

Or visit www.northwaleswildlifetrust.org.uk for more information.

Contents



| | |
|--|----|
| About this pack | 4 |
| What are invasive non-native species? | 5 |
| Participants who fish abroad | 6 |
| What is biosecurity? | 7 |
| Check Clean Dry campaign | 8 |
| How can you get involved? | 9 |
| Step 1. Planning biosecurity at your event | 10 |
| Step 2. Raising awareness | 26 |
| Step 3. Run your event | 28 |
| Step 4. Follow up | 32 |
| Pull-out posters | 33 |
| Fishing Abroad leaflet | 36 |
| References | 37 |
| About us | 38 |



American Signal crayfish



Topmouth gudgeon



Himalayan balsam



Chinese mitten crab

About this pack



What is it for?

The aim of this pack is to help guide you through all the stages of biosecurity at your freshwater angling event, from club level to large international events.

How do I use it?

This pack provides step by step procedures that will enable you to help protect the environment and fish populations against the spread of invasive non-native species without impacting your angling event.

What does it include?

- > Information about what invasive non-native species are and why they are a concern
- > An introduction to biosecurity and Check-Clean-Dry
- > Step-by step planning guide for all stages of your event
- > Useful links to ensure you can easily access all the information you need
- > Pull-out posters for clubs and organisers to use at your events



AMERICAN SIGNAL CRAYFISH

Predate on fish species, and outcompete native White clawed crayfish. They also burrow into the side of river banks which can cause them to collapse. The extra sediment introduced from the burrows into the river system can reduce fish spawning grounds.

INVASIVE SPECIES CAN SPREAD QUICKLY AND OVERTAKE FRESHWATER AND MARINE ENVIRONMENTS ONCE INTRODUCED.



FLOATING PENNYWORT

Can grow up to 20cm a day under the right conditions and can clog entire waterways, making them difficult to navigate through. This can also easily be mistaken for solid ground, which could result in serious harm to people and animals.

What are invasive non-native species?



Invasive non-native species (INNS) are plants, animals and diseases introduced by people to an area outside their natural range, which negatively impact the environment, economy or our health.

Why should we worry?

INNS are a concern because they can:

- > Reduce our ability to access and enjoy waterways for sport and recreation
- > Slow down the flow of rivers and increase flood risk
- > Reduce water quality, impacting the health of the environment and ourselves
- > Negatively affect fish health, reduce fish numbers, and increase fish mortality
- > Be small and hard to see
- > Survive for up to two weeks in damp conditions
- > Cause a significant financial cost through management and loss of fishing income
- > Prompt temporary closures of, or restrict access to waters

Without practicing effective biosecurity methods every time we leave the water, our angling activities can pose a real risk to the natural environment and the sport we love.



©GBNNS



©NWWT

AUSTRALIAN SWAMP STONECROP

Example of this invasive plant found on a net after being cleaned at a washdown station.



©GBNNS

HIMALAYAN BALSAM

forms dense stands that die back during the winter leaving exposed soil that can easily be washed away during rainfall. This excess load of sediment on rivers beds can reduce fish spawning grounds.

*Biosecurity is a term used to describe a set of actions intended to minimise the introduction or spread of INNS. [🔗](#) See p7 for more details.

Participants who fish abroad



Anglers have a high potential to unintentionally carry INNS on their kit if they have fished abroad and have not performed effective biosecurity methods (🔍 see p35) BEFORE they travel to Great Britain.

A survey of British anglers revealed that 44% of respondents travelled abroad fishing, with France being the most popular destination (Smith et al. 2020). The time taken to travel back to Great Britain from France and other parts of Western Europe is well within most INNS survival time, highlighting how important it is to Check, Clean and Dry all clothing and equipment used in water (🔍 see p8).



SALMON FLUKE

Salmon fluke is a parasite that causes high mortality rates in salmonidae species by feeding on their hosts skin, creating in large wounds resulting in fatal infections. If Salmon fluke established in Scotland, it would result in a loss of £34.5 million income to households, a loss of £633 million net economic value as well as 1,966 full time equivalent jobs (Scottish Government).



KOI HERPESVIRUS (KHV)

is a highly infectious viral disease that can affect all common carp species. Introduction into a fishing lake could result in 100% mortality. It can be spread through fish to fish contact but is easily transferred on angling equipment.

🔍 See p34 for GBNNSS's guide on biosecurity when fishing abroad.

What is biosecurity?

Prevention is **ALWAYS** better than cure!

CHECK
CLEAN
DRY



Biosecurity means a set of actions to minimise the introduction or spread of invasive non-native species and diseases.

This includes checking, cleaning, and drying all equipment and clothing that has been in/around water. By proactively preventing the introduction of INNS via biosecurity in the first place, we can save the countless resources it requires to manage them.

Together we can protect our natural environment as well as the sport we love. Carrying out effective biosecurity at angling events will help to reduce the risk of the introduction and spread of INNS on site and anywhere participants may use their equipment afterwards. As well as angler's equipment, this also includes cleaning boots and waders which could be carrying mud and seeds from the bank that may well be taken elsewhere.

Biosecurity should be practised **EVERY TIME** we have been around/in the water, even if there aren't any obvious signs of INNS in the area. For angling events, these measures need to be simple, effective, have minimal impact on the event delivery, and be easily integrated into the day.

CHECK
CLEAN
DRY

HAVING EFFECTIVE BIOSECURITY AT YOUR EVENT WILL HELP TO CREATE A LASTING IMPACT ON THE WAY PARTICIPANTS CARRY OUT THEIR ANGLING ACTIVITIES IN THE FUTURE.

Remember to follow:



CHECK your gear after leaving the water for mud, aquatic animals or plant material. Remove anything you find and leave it at the site.

CLEAN everything thoroughly as soon as you can, paying attention to nets, waders and areas that are damp and hard to access. Use hot water if possible.

DRY everything for as long as possible before using elsewhere as some invasive plants and animals can survive for two weeks in damp conditions.



How can you get involved?



Over 60 volunteers including anglers working on the River Wey to remove large mats of the invasive non-native freshwater plant Floating pennywort to reduce its spread and improve access.

INNS are becoming increasingly present in our waters, compromising the natural environment. To protect this precious resource, there is a growing need for anglers and members within the angling industry to become armed with the knowledge and skills to play a pivotal role in the early detection and management of these environmentally damaging species.

You can get involved by going to anglingtrust.net/invasive-non-native-species/ which will give you access to a range of training aides and webinars as well as guides on best practices and performing adequate risk assessments for your fishery.

See our social media pages for regular updates on up and coming opportunities:

- facebook.com/AnglingTrust
- twitter.com/AnglingTrust
- www.instagram.com/angling_trust/

Step 1 - Planning biosecurity at your event



Get organised

- > How will you communicate with participants on the days leading up to the event?
- > Do you have a website page for participants to visit for information and registration for your event?
- > What budget do you have for biosecurity?
- > Could you appoint a biosecurity officer/volunteer?

Get informed

- > Go to www.nonnativespecies.org/elearning/ for free online training and to access INNS ID sheets

Get to know your site

- > Are there any INNS present on your site, upstream or in the wider catchment?
- > Go to www.nonnativespecies.org or contact your local environmental record centre (www.alerc.org.uk) to help you find out.
- > Speak to the asset manager or landowner about any INNS and/or fish disease on site and if there are any existing biosecurity policies to make sure you align with these.
- > Have you already got a risk assessment for INNS on your site? Go to www.nonnativespecies.org for advice, templates and individual species risk assessments and/or angling on lakes risk assessments.
- > Can you identify any risks of INNS being introduced on to your site e.g. plants or animals further upstream that can travel down to your site?
- > What facilities do you have on site already e.g. dip tanks, boot scrubs?
- > Do you have access to clean running water?
- > Do you have access to electricity?
- > Is there a risk of contaminated water being washed away into a water course, reservoir, drains, storm drains or sensitive habitats?
- > Can you restrict participants to a single entry/exit point?
- > Will there be a briefing with all the participants or the team captains on the day of the event?
- > Is there the possibility of doing equipment inspections as part of the sign in process?
- > Has there been any form of biosecurity performed on site at an event before?

What were the lessons learnt?

Were there risk assessments created?



©Angling Trust



Get to know your discipline:

- > What are the risks of transferring INNS for this type of angling discipline?
- > What kind of facilities do you require?
- > Will participants move from one body of water to another in a single event?
- > What type of bait is likely to be used? Will your anglers bring live bait, and if so, has this been purchased from certified suppliers? Live bait from non-certified suppliers could pose a risk of introducing INNS.



Get to know your participants:

- > How many will be participating?
- > Are they club members, regional, national, or international?
- > If travelling from outside of Great Britain, how will they be travelling? Participants who travel by car have a greater chance of accidentally carrying INNS on their kit if they aren't required to clean it before their journey.
- > What kit are they likely to bring?
- > Can certain kit be banned if there is an increase in transfer risk e.g., felt soled boots which are difficult to dry and fully clean?
- > Can high risk equipment such as site-specific nets or drogues be provided to participants?





Where are your opportunities to communicate biosecurity with participants before they arrive?

- > Add the Check-Clean-Dry campaign message onto your booking forms.
- > Send participants information to encourage them to undertake biosecurity on all the kit they will be using before they arrive on site. Materials in different languages can be found at www.nonnativespecies.org/checkcleandry
- > Use your social media sites and website to inform participants where the biosecurity washdown station will be and what they are expected to do there when they arrive.

What type of equipment do you need?

- > What budget do you have for biosecurity?
- > What facilities do you have on site already?
- > 🔍 See p14-23 for examples of different biosecurity wash-down stations and suggested kit lists depending on your level of risk and the environment your event takes place in.

It is advised that you trial your wash down station setup with commonly used equipment before the day of the event. This will allow you plenty of time for trouble shooting.



Biosecurity risk matrix



Work through each of the biosecurity requirements below. The level of biosecurity you will require will be the highest level you reach on the matrix and will help you to decide the equipment you will need. Guides on biosecurity wash down equipment for your level and environment type can be found on [p14-23](#).

Note: If there is no access on site to clean tap water you could hire a bowser.

| Consideration | | Level of Risk | | |
|---------------|--|--|--|---|
| Site | Are there currently any INNS on site or within the catchment? | No | Unsure | Yes |
| | Are there currently any fish disease and/or pathogens on site or within the catchment? | No | Unsure | Yes |
| | How many access points to the water are there? | 1 | 2* | More than 2 |
| | Are pegs and pathways on site clear of vegetation? | Yes | No, but there are no INNS currently on site | No |
| | Is the site open to the public? | No | Closed during the competition | Yes |
| Equipment | Will boats be used? | No/Used only on one site | Rarely moved, cleaned and dried between sites | Regularly moved between sites with no cleaning process |
| | Where has participants equipment been used prior to your event? | Locally, or upstream of site and within the same catchment | Nationally | Internationally |
| | Will you impose restrictions on kit? | High risk equipment e.g. nets supplied by venue | All participants kit checked before use. Unclean/wet kit banned or cleaned on site | No |
| Participants | Where are participants traveling from? | Locally (< 50 miles) | Nationally | Internationally |
| | How many participants are there? | <10 | 10-50 | >50 |
| | Where will participants park their vehicles? | In a designated car park, well away from the water course on hard standing, gravel, or grass | In a designated car park, on soft ground. | Participants drive down a mud track to park next to the water course on soft ground |
| Biosecurity | What biosecurity facilities are currently on site? | Wash down station | Dip tanks | None |
| | Do biosecurity practices take place on arrival and before departure? | Yes | Just on arrival | No |

Green – Low risk, Amber – Medium risk, Red – high risk

*Can be low risk if you are able to provide more than one washdown station but escalates to high risk if there is only one for the whole site.

Biosecurity equipment guidance



Biosecurity equipment guidance on commercial waters 15-17

Biosecurity equipment guidance on non-commercial waters 18-20

Biosecurity equipment guidance for events using boats Participants who fish abroad 21-23

Guidance on using disinfectants 24



Commercial



Non-Commercial



Boats



Disinfectants

Commercial - Low risk



Example: There are currently no confirmed INNS, fish disease or pathogens on site. The competition comprises of a small number of participants who are local and/or use site specific kit. There is only one point of access to the fishing lake.



©Angling Trust



©NWWT

Suggested equipment shopping list

- ✓ Access to tap water/bowser
- ✓ Flexible tubtrugs
- ✓ Brushes for nets and boots
- ✓ Hose pipe
- ✓ Hose multi spray water gun
- ✓ Hose trolley
- ✓ Outdoor threaded tap connector
- ✓ Wooden racks to dry kit
- ✓ Outdoor rubber mats to prevent slips

Method

Ask participants to scrub any mud/plant matter off their kit with brushes in the first tub and rinse in the second. Empty away from the water course or storm drains and make sure they are clean before the next participant uses them. This approach can also be undertaken using disinfectant.

 See p24 for using disinfectants.

Note: This is a suggested kit list but any form of biosecurity is better than none. If you are unable to provide biosecurity at your venue please promote biosecurity and the Check Clean Dry method at all stages of your event, including making sure participants arrive with clean kit.

Commercial - Medium risk



Example: There are no confirmed INNS on site, however there is Himalayan balsam in the catchment area. The competition is at national level. Participants will be bringing their own kit.



Suggested equipment shopping list

- ✓ Access to tap water/bowser
- ✓ Access to electricity
- ✓ Brushes for nets and boots
- ✓ 110V jet washer
- ✓ Transformer
- ✓ Hose pipe
- ✓ Hose trolley
- ✓ Outdoor threaded tap connector
- ✓ Wooden racks to dry kit
- ✓ Outdoor rubber mats to prevent slips

Method

Use a jet washer on a medium/high setting and brushes to remove any mud/plant matter off kit away from the water course or storm drains.

[🔍](#) See p24 for using disinfectants.

Note: This is a suggested kit list but any form of biosecurity is better than none. If items on the list are not possible for your venue please look at the suggested list and method for a low risk event.

Commercial - High risk



Example: A large event on multiple lakes throughout the site with participants who have travelled from outside of Great Britain via car.



Suggested equipment shopping list

- ✓ Access to hot water
- ✓ Access to electricity
- ✓ Flexible tubtrugs
- ✓ Brushes for nets and boots
- ✓ 110V jet washer
- ✓ Transformer
- ✓ Hose pipe
- ✓ Hose trolley
- ✓ Outdoor threaded tap connector
- ✓ Wooden racks to dry kit
- ✓ Outdoor rubber mats to prevent slips

Method

Use a jet washer on a medium/high setting and brushes to remove any mud/plant matter off kit. Submerge rinsed kit in a tubtrug with tap hot (45°C) water and leave for at least 15 minutes. Make sure the tubtrug is emptied away from the water course or storm drains before using again.

Where hot water is available:

Use the hose to wash down kit, capturing contaminated water in a tub trug. Alternatively collect a team (or assigned group) kit and submerge this in a tub trug with hot water at least 45°C and leave for at least 15 minutes. This kit can then be returned to the team to dry at their peg before the competition starts. The same approach can then be repeated with the next team (groups) kit. Immersing kit in groups/teams will save time Vs undertaking the process individually. Make sure tub trugs are emptied away from the water course or storm drains before using again.

Where only cold water is available:

Use a jet washer on a medium/high setting and brushes to remove any mud/plant matter off kit. Ensure the jet washer is used away from the water course and storm drains to prevent contaminated water entering the site. Water could be contained using tubtrugs to aid containment.

See p24 for using disinfectants.

Note: This is a suggested kit list but any form of biosecurity is better than none. If items on the list are not possible for your venue please look at the suggested list and method for a medium risk event.

Non-commercial - Low risk



Example: There are currently no confirmed INNS in the local area. The competition comprises of a small number of participants who only fish locally. The competition takes place on private land with no public access.



Suggested equipment shopping list

- ✓ Access to tap water/bowser
- ✓ Flexible tubtrugs
- ✓ Brushes for nets and boots
- ✓ Hose pipe
- ✓ Hose trolley
- ✓ Outdoor threaded tap connector
- ✓ Wooden racks to dry kit
- ✓ Outdoor rubber mats to prevent slips

Method

Use two tubtrugs per participant, each filled with clean tap water. Ask participants to scrub any mud/plant matter off their kit with brushes in the first tub and rinse in the second. Empty away from the water course or storm drains and make sure they are clean before the next participant uses them.

[🔗](#) See p24 for using disinfectants.

Note: This is a suggested kit list but any form of biosecurity is better than none. If you are unable to provide biosecurity at your venue please promote biosecurity and the Check Clean Dry method at all stages of your event, including making sure participants arrive with clean kit.

Non-commercial - Medium risk



Example: An event with more than 10 participants coming from across the UK.



Suggested equipment shopping list

- ✓ Access to tap water/bowser
- ✓ Access to electricity
- ✓ Brushes for nets and boots
- ✓ 110V jet washer
- ✓ Transformer
- ✓ Hose pipe
- ✓ Hose trolley
- ✓ Outdoor threaded tap connector
- ✓ Wooden racks to dry kit
- ✓ Outdoor rubber mats to prevent slips

Method

Use a jet washer on a medium/high setting and brushes to remove any mud/plant matter off kit in a contained area away from the water course or storm drains.

[🔍](#) See p24 for using disinfectants.

Note: This is a suggested kit list but any form of biosecurity is better than none. If you have no access to electricity there are nozzle for hoses that that can produce a jet like stream of water. If you are unable to provide biosecurity at your venue please promote biosecurity and the Check Clean Dry method at all stages of your event, including making sure participants arrive with clean kit.

Non-commercial - High risk



Example: A large event with multiple access points and heavy footfall from the general public. Anglers have to move through vegetation to access pegs which aren't well maintained.



Suggested equipment shopping list

- ✓ Access to hot water
- ✓ Access to electricity
- ✓ Flexible tubtrugs
- ✓ Brushes for nets and boots
- ✓ 110V jet washer
- ✓ Transformer
- ✓ Hose pipe
- ✓ Hose trolley
- ✓ Outdoor threaded tap connector
- ✓ Wooden racks to dry kit
- ✓ Outdoor rubber mats to prevent slips

Method

Try to have wash down stations at as many entry/exit points as possible. Use a jet washer on a medium/high setting to wash down kit, capturing contaminated water in a tub trug. Alternatively collect a team (or assigned groups) kit and submerge this in a tub trug with hot water at least 45°C and leave for at least 15 minutes. This kit can then be returned to the team to dry at their peg before the competition starts. The same approach can then be repeated with the next team (groups) kit. Immersing kit in groups/teams will save time compared to undertaking the process individually. Make sure tub trugs are emptied away from the water course or storm drains before using again.

See p24 for using disinfectants.

Note: This is a suggested kit list but any form of biosecurity is better than none. If items on the list are not possible for your venue please look at the suggested list and method for a medium risk event.

Angling by boat

- Low risk



Example: There are currently no confirmed INNS, fish disease or pathogens on site. Boats used for the competitions are kept on site and are regularly maintained and cleaned. Access to the lake is concreted and free of vegetation.



©Angling Trust



©NWWT

Suggested equipment shopping list

- ✓ Access to tap water/bowser
- ✓ Flexible tubtrugs
- ✓ Brushes for nets and boots
- ✓ Hose pipe
- ✓ Hose trolley
- ✓ Outdoor threaded tap connector
- ✓ Wooden racks to dry kit
- ✓ Outdoor rubber mats to prevent slips

Method

Use two tubtrugs per participant, each filled with clean tap water. Ask participants to scrub any mud/plant matter off their kit with brushes in the first tub and rinse in the second. This should be undertaken away from the water's edge to ensure contaminated water does not drain in to the water. Once cleaning has been completed, make sure tubtrugs are emptied away from the water course or storm drains before using again.

Boats do not require cleaning IF they are not being moved off site. However, if they are being moved off site [see p23](#) for high risk biosecurity.

[See p24](#) for using disinfectants.

Note: This is a suggested kit list but any form of biosecurity is better than none. If you are unable to provide biosecurity at your venue please promote biosecurity and the Check Clean Dry method at all stages of your event, including making sure participants arrive with clean kit.

Angling by boat

- Medium risk



Example: Participants have visited multiple fisheries using the same drogues and/or electronic in a short period prior to your competition.



Suggested equipment shopping list

- ✓ Access to hot water
- ✓ Access to electricity
- ✓ Flexible tubtrugs
- ✓ Brushes for nets and boots
- ✓ 110V jet washer
- ✓ Transformer
- ✓ Hose pipe
- ✓ Hose trolley
- ✓ Outdoor threaded tap connector
- ✓ Wooden racks to dry kit
- ✓ Boat trestles/trailer
- ✓ Outdoor rubber mats to prevent slips

Method

Use a jet washer on a medium/high setting (with hot water if possible) and brushes to remove any mud/plant matter off kit and boats. Spray with jet washer in concentrated points, avoiding sweeping actions, to ensure the temperature of the water is hot enough to be effective and/or applied for a sufficient duration on a point to remove mud, plant and other material. Alternatively, kit should be rinsed and submerge in a tubtrug with tap hot (45°C) water and leave for at least 15minutes. Make sure tubtrugs and boats are emptied away from the water course or storm drains to ensure contaminated water does not drain into it. Leave to dry fully before using again. Boats should be turned upside down and left to dry thoroughly in sunlight before next use.

🔍 See p24 for using disinfectants.

Note: This is a suggested kit list but any form of biosecurity is better than none. If items on the list are not possible for your venue please look at the suggested list and method for a medium risk event.

Angling by boat

- High risk



Example: An event using boats from another site that have been used within a fortnight and have not been thoroughly cleaned and dried.



Suggested equipment shopping list

- ✓ Access to hot water
- ✓ Access to electricity
- ✓ Flexible tubtrugs
- ✓ Brushes for nets and boots
- ✓ 110V jet washer
- ✓ Transformer
- ✓ Hose pipe
- ✓ Hose trolley
- ✓ Outdoor threaded tap connector
- ✓ Wooden racks to dry kit
- ✓ Boat trestles/trailer
- ✓ Outdoor rubber mats to prevent slips

Method

Using a jet washer (hot/cold)

Use a jet washer on a medium/high setting (with hot water if possible) and brushes to remove any mud/plant matter off kit and boats. Ensure that spray is directed into hard to reach places where animal and plant matter can easily be missed.

Where hot water is available

Spray with jet washer in concentrated points, avoiding sweeping actions, to ensure the temperature of the water is hot enough to be effective.

Alternatively, submerge rinsed kit in a tubtrug with hot water of at least 45°C and leave for at least 15 minutes. Make sure tubtrugs and boats are emptied away from the water course or storm drains to ensure contaminated water does not drain into it. Leave to dry fully before using again.

Boats should be turned upside down and left to dry in sunlight light for as long as possible before being driven away from the event site.

🔍 See p24 for using disinfectants.

Note: This is a suggested kit list but any form of biosecurity is better than none. If items on the list are not possible for your venue please look at the suggested list and method for a medium risk event.



Using disinfectants

Dip tanks with disinfectants such as Virkon™ Aquatic can be used to help prevent the spread of fish diseases and pathogens.



Example of dip tank that needs disinfectant replacing



Example of a clean dip tank



Dip tanks should ideally be large light-coloured plastic containers with a lid to prevent dilution from rain water, and kept out of direct sunlight. These must be labelled. To meet COSHH Health and Safety regulations; see the link below and COSHH Risk Assessments on p26. The dip tank should be large enough to fully immerse angling equipment. The size and number of dip tanks will depend upon the number of participants and type of fishing competition. The longer equipment can be immersed in disinfectant the better. After immersion the competitors should leave their kit for at least 20 minutes before washing in clean water. This will enable the disinfectant to infiltrate net fibres to help to kill pathogens and INNS.

Disinfectant can also be applied by spraying, using a hand-held spray bottle. This should always be undertaken away from the waters edge on hard standing.

Always follow the manufacturers safety data sheets and keep them on file.

For more information on which disinfectants to use and how to use them see:

ifcc.org.uk/downloads/category/8-general?download=172:cefafishery-biosecurity

Links to COSHH risk assessments can be found on p*



Important points

It is your responsibility to ensure that all health and safety protocols are being followed and that both marshals and participants are kept safe while using the wash down station.

Health and safety

Below are risks you need to consider for your biosecurity station that should be incorporated into your event risk assessment.

Trip/slips hazards

- > Wires and hose pipes should be covered to avoid slips and trips
- > Non-slip outdoor mats should be used on wet surfaces

PPE

- > For marshals running the biosecurity wash down station/dip tanks
 - Hi-Viz jackets
 - Good sturdy waterproof footwear
 - Gloves if working in colder weather
- > Mixing chemicals -
 - Eye protection
 - Gloves
 - Apron
 - Remember to wash hands immediately after handling!
- > Working with noise/vibration
 - Ear protection
 - Anti-vibration gloves

Equipment

All equipment should be checked over for damage and tested prior to use using the latest Provision and Use of Work Equipment Regulations (PUWER).



©Angling Trust



©NWWT

Risk assessment links

COSHH - www.hse.gov.uk/coshh/basics/assessment.htm

HAVs - www.hse.gov.uk/vibration/hav/advicetoemployers/havemployers.pdf

PUWER - www.hse.gov.uk/work-equipment-machinery/puwer.htm


Step 2 - Raise awareness



Through all stages of your event it is important to raise awareness of INNS, pests, pathogens, and fish disease by effectively communicating your planned biosecurity measures to your participants. This will help to make the day run more smoothly for everybody involved.

Before an event

You could:

- > Send information to participating members/clubs explaining how and why biosecurity practices will be taking place at your event, and asking participants to arrive with clothing and equipment that is clean and dry.  See p* for a template.
- > Promote biosecurity on your social media channels.
- > Place leaflets and posters at key points on site.
- > Ask participants to reduce any unnecessary kit.
- > Ensure all those who are involved with the organisation of your event have read and understood this document. They can also get free access to INNS/Biosecurity specific training by going to the GB NNSS website: www.nonnativespecies.org

Free resources

Check Clean Dry and event biosecurity materials including information for visiting anglers can be found at:

www.nonnativespecies.org/checkcleandry



Social media

Use your regular social media channels for promotion and add the following hashtags:

#checkcleandry #INNS #biosecurity

During an event



Prevention is **ALWAYS** better than cure!



You could:

- > Display posters advertising the cleaning station.
🔗 Template on p33
- > Make sure marshals and other event staff are aware of your biosecurity measures so they can inform participants as they arrive.
- > Set up additional signage to direct competitors to the wash down station
- > Post information about the cleaning station on your social media channels.
- > Set up an information stand to raise awareness about biosecurity and increase INNS identification skills

AN EVENT SHELTER IS USEFUL AS AN INFORMATION POINT. DISPLAY A RANGE OF EYECATCHING FEATHER FLAGS, PULL UP BANNERS, A-FRAMES AND LEAFLETS FOR PARTICIPATING TO TAKE AWAY THE KEY MESSAGES.

Step 3 - Run your event



Before an event

Consider suitable locations for the wash down station. Carparks are often the best option as they are typically on hardstanding and are where participants enter and leave the site, allowing for maximum engagement.

Make sure it will be somewhere that is

- > Practical and safe
- > Accessible to clean water/bowsers (if possible)
- > Where run-off of contaminated water will not run back into the waterbody or into drainage/storm drains.

Aim to have at least 3 marshals per wash down station to allow for breaks. Ensure that:

They understand the purpose of the wash down station and can communicate its importance to competitors

- > They have the appropriate training
- > They know how to use equipment safely and effectively
- > They have the correct PPE





During an event

Participant arrival

Allocate points of entry/exit for participants arriving on foot and by car using a designated parking area. Limit access (if possible) to other parts of the site, such as areas with dense vegetation or water courses not included in the event schedule. This can be achieved via designated signage, cordoning off entry points, and placing marshals at key locations.

Make sure marshals explain the purpose of the wash down station to competitors during registration and/or give a tool box talk to all participants before the competition or during the debrief. Inform competitors of any invasive species present on site.

Check each competitor's kit for any plant or animal matter before they are allocated their peg. If their kit doesn't look clean ask the competitor to wash it down with clean water before using it and/or wash kit in dip tanks and leave for at least 20 minutes before using.



Cleaning participants equipment

Only use clean water. Restrict the cleaning of equipment to either gravel, hard standing or grass – don't allow contaminated water to enter the water course or storm drains.

Pay particular attention to hard to reach areas.

Clean all equipment that comes into contact with the water course and the surrounding area (riparian zones) including:

- > Clothing
- > Footwear and waders
- > Mobility scooter/wheelchair wheels
- > Kit bags
- > Seat box
- > Bank/wading sticks
- > Unhooking mats
- > Weighing slings
- > Keep and landing nets
- > Stink bags
- > Drogues and ropes
- > Boats

All of these items have the potential to hide INNS. Clean them all! This will also include boats which will be moved off site.

To help participants understand how and why they should be incorporate cleaning into their normal routine, encourage them to use any non-powered equipment at the wash down station themselves and explain the importance of the Check Clean Dry message.

During an event (continued)



Remember to follow:

Whenever you leave the water, remember to Check Clean Dry



CHECK your gear after leaving the water for mud, aquatic animals or plant material. Remove anything you find and leave it at the site.

CLEAN everything thoroughly as soon as you can, paying attention to nets, waders and areas that are damp and hard to access. Use hot water if possible.

DRY everything for as long as possible before using elsewhere as some invasive plants and animals can survive for two weeks in damp conditions.



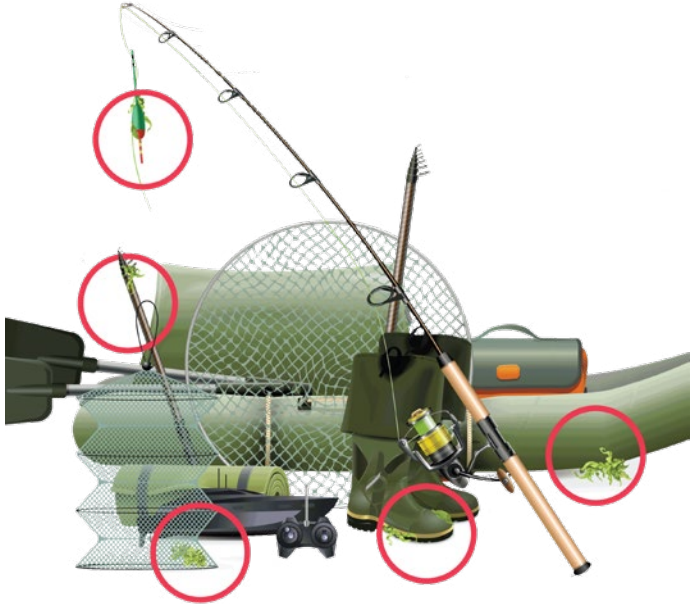


Participants departure

Where possible, follow the cleaning participants equipment process again.

Where a wash down station is available, after cleaning ensure participants are aware that kit needs to be thoroughly dried for at least 48 hours before next use. Some species can live in damp conditions for up to 2 weeks.

Where possible this should be undertaken on site. If facilities are not available it is important to communicate to competitors that they must clean and dry their kit before using it at another water body.



©Angling Trust



©NWWT

Drying rack at Upper Tamar Lake South West Water and South West Lakes ©Angling Trust, SWLT

Drying waders on a washing line ©NWWT

REMEMBER - Once the competition has finished and competitors have cleaned their kit, it is important that all the washdown equipment, marshal clothing and footwear has also been thoroughly checked, cleaned and dried before using again.

Step 4 - Follow up



Reflection

It is a good idea to have a team meeting after your event to discuss what went right and what can be improved next time. The logistics of organising suitable biosecurity protocols for an event will become easier the more they are incorporated, but reflection and communication are key for this to happen. The Angling Trust would welcome hearing your thoughts on how your efforts went. We can use this to help to improve the advice we give to anglers.

If you have any specific feedback then please contact the Angling Trust through our INNS [webpage **anglingtrust.net/invasive-non-native-species**](https://anglingtrust.net/invasive-non-native-species).

Feedback

Input from participants can bring about improvements that you may not have considered. This can be achieved by either asking participants to take part in a short survey on the day, or by using an online survey tool after the event.

Considering a permanent biosecurity solution?

Depending on the level of funding, it is worth considering installing a permanent biosecurity wash down station or purchasing mobile equipment such as jet washers that can be brought on site. Having the facilities readily available will help encourage anglers to incorporate biosecurity practices into their general routine. These could range from wheelie bins with a disinfectant solution, or simple plastic tubs with a supply of fresh water that can be safely disposed of after each use, to a more comprehensive set up with jet washers and/or heated water tanks. Through the Angling Improvement Fund (AIF) the Angling Trust may have funding available to support the installation of wash down stations or for the purchase of biosecurity equipment for events. Keep up to date on the AIF page anglingtrust.net/funding/aif and /or contact the AIF team to find out when a new round of funding will be open.

Pull out - Pre-event information



You could send out the below information to participants before the event so they have a greater understanding of the aim of the wash down station and the importance of their participation. Biosecurity specific rules could also be added as part of your registration process.

PLEASE NOTE: there will be a biosecurity washdown station in place at this competition. The purpose of the station is to remove invasive non-native species from your equipment to help

STOP THE SPREAD

You may come into contact with, and potentially transport, environmentally damaging species and diseases that can attach to your kit and clothing. If they are not removed they could be accidentally transported to another waterway. The impact of invasive non-native species is so significant that they are considered one of the biggest threats to our precious waters. This damage can cause substantial losses to our native species, increase the risk of flooding, block access to waterways, impact on fish mortality and your health!

Invasive non-native species can be easily transferred through drops of water and plant fragments stuck to your kit. Some of these species can even live up to 2 weeks in damp conditions.

Please do your bit to protect our precious waterways, remember:



Before you arrive:

Make sure you use the Check, Clean, and Dry method (explained on the attached poster) on all equipment you will be using BEFORE you come to the competition, especially if you have used it abroad.

It is very important that if you turn up with damp or dirty kit to allow for extra time before competing to visit the wash down station. You may be refused access if you do not comply.

Before you leave:

On completion, where a wash down station is available please clean all equipment and clothing used during the competition. Alternatively, clean your kit using hot water when you get home. After cleaning (either at the wash down station or at home) leave your equipment and clothing to dry in sunlight for at least 48 hours before using again.

**STOP
THE
SPREAD**

ATTENTION COMPETITORS

PROTECT OUR WATERS STOP THE SPREAD OF INVASIVE NON-NATIVE SPECIES!

It is very important that all boats and equipment are brought to the biosecurity wash down station, located at _____ before and after you have finished competing. Invasive non-native species can hitchhike and live in damp conditions on your kit for up to 2 weeks. If you do not apply the Check Clean Dry method every time you go fishing you could unknowingly transfer them between watercourses.

Help us to **Stop the Spread!**

CHECK

CHECK your gear after leaving the water for mud, aquatic animals or plant material. Remove anything you find and leave it at the site.

CLEAN

CLEAN everything thoroughly as soon as you can, paying attention to nets, waders, and areas that are damp and hard to access. Use clean hot water (>45°C) if possible.

DRY

DRY everything for as long as possible (ideally 48hrs minimum) before using elsewhere as some invasive plants and animals can survive for 2 weeks in damp conditions.

You can help to protect the environment and fishing you enjoy by following three simple steps when you leave the water

STEP 1

CHECK

Check equipment and boots after leaving the water for any plant or mud material. Remove anything you find and leave at the water bank.

STEP 2

CLEAN

Clean angling gear and boots. If possible use at least 45°C water for at least 15 minutes. This is roughly the temperature of your hot tap at home, take care when using hot water.

STEP 3

DRY

Dry clothing and equipment for at least 48 hours. If you can, leave your nets and waders to dry out in the sun to kill off any remaining species that may survive the hot water treatment.

AFTER YOUR FISHING TRIP

Wash down facility at the water body/ accommodation

Clean

your equipment to remove any smaller plant fragments, animals and parasites

No facility available to clean equipment

Check

Equipment and boots for plants and mud and remove at the water body

Clean

Equipment, waders and wellies in hot water for at least 15 minutes

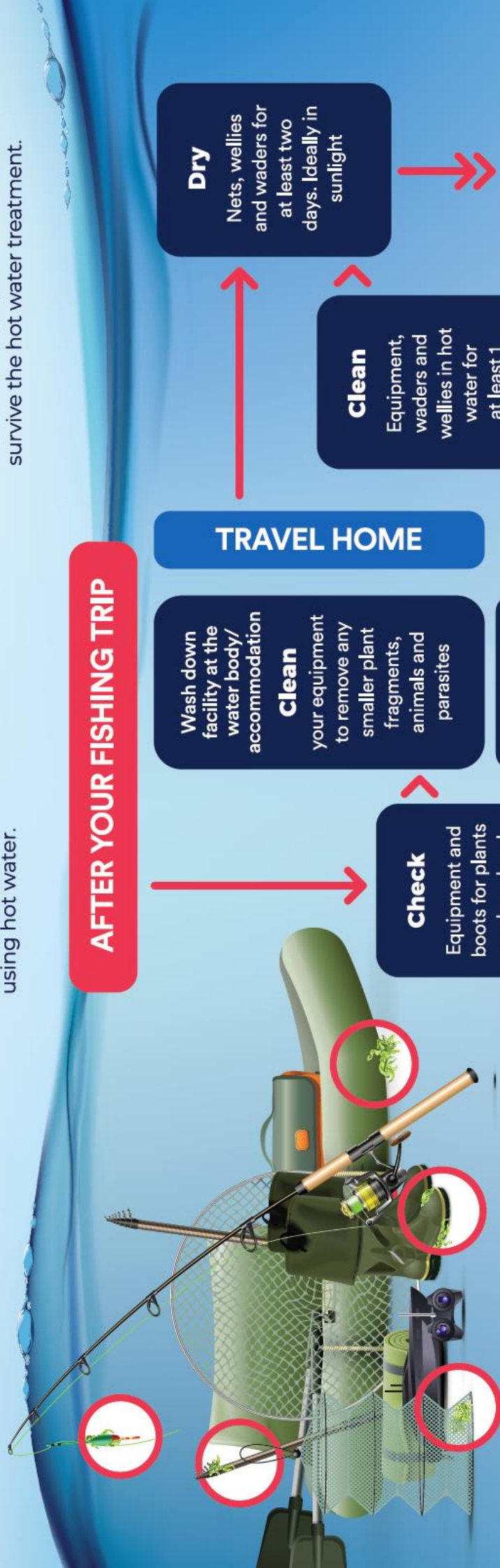
Dry

Nets, wellies and waders for at least two days. Ideally in sunlight

Ready for next fishing trip

TRAVEL HOME

Pay particular attention to the rims of your nets and the tread of your shoes/ waders.



You can help to protect the environment and fishing you enjoy by following three simple steps when you leave the water

STEP 1

CHECK

Check equipment and boots after leaving the water for any plant or mud material. Remove anything you find and leave at the water bank.



Pay particular attention to the rims of your nets and the tread of your shoes/ waders.

STEP 2

CLEAN

Clean angling gear and boots. If possible use at least 45°C water for at least 15 minutes. This is roughly the temperature of your hot tap at home, take care when using hot water.

AFTER YOUR FISHING TRIP

Wash down facility at the water body/ accommodation

Clean

your equipment to remove any smaller plant fragments, animals and parasites

Check

Equipment and boots for plants and mud and remove at the water body

No facility available to clean equipment

STEP 3

DRY

Dry clothing and equipment for at least 48 hours. If you can, leave your nets and waders to dry out in the sun to kill off any remaining species that may survive the hot water treatment.

TRAVEL HOME

Clean

Equipment, waders and wellies in hot water for at least 15 minutes

Dry

Nets, wellies and waders for at least two days. Ideally in sunlight

Ready for next fishing trip

References



Anderson, L.G., Dunn, A. M., Rosewarne, P.J., and Stebbing, (2015) Invaders in hot water: a simple decontamination method to prevent the accidental spread of aquatic invasive non-native species. *Biological Invasions* 17, pp 2287- 2297

Riddington, G., Radford, A., Paffrath, S., Bostock, J., and Shinn, A. (2006) An economic evaluation of the impact of the salmon parasite *Gyrodactylus salaris* (Gs) should it be introduced into Scotland. Report to the Scottish Executive Environment and Rural Affairs Department.

Smith, E.R.C, Bennion, H., Sayer, C.D., Alderidge, D.C, and Owen, M. (2020) Recreational angling as a pathway for invasive non-native species: awareness of biosecurity and the risk of long-distance movement into Great Britain. *Biological Invasions*, 22, pp. 1135-1159.

About us



The Angling Trust are a not-for-profit organisation, representing anglers, fighting for fish, fishing and the environment.

We are recognised by the Government as the National Governing Body for angling in England and partner with Visit Wales and NRW to promote Fishing in Wales.

We are a member-based organisation made up of anglers of all disciplines providing a united front to represent, grow and protect our sport.



Find out more about invasive non-native species and how you can help to stop the spread on the GB Non-native Species Secretariat website www.nonnativespecies.org



**Ymddiriedolaeth Natur
Gogledd Cymru**
**North Wales
Wildlife Trust**

We are a local organisation dedicated to conserving all habitats and species across North Wales for the enjoyment of people and the benefit of wildlife. Our members, staff, and volunteers help us to improve places for wildlife and strengthen the relationship between people and the natural environment of North Wales. Our ultimate aim is to protect and create resilient ecosystems on land and in the sea. To find out more go to: www.northwaleswildlifetrust.org.uk/

Aquatic Biosecurity Partnership

Funded by water
companies

This guide was developed with funding from nine water companies that have contributed to the Aquatic Biosecurity Partnership: Affinity Water, Anglian Water, Northumbrian Water, Severn Trent Water, South East Water, South West Water, Southern Water, Wessex Water, Yorkshire Water.

**CHECK
CLEAN
DRY**



**ANGLING
TRUST**



www.anglingtrust.net

www.nonnativespecies.org

www.northwaleswildlifetrust.org.uk