Examples of invasive species that could become a serious problem in our waterways:

## **FISH DISEASES**

Diseases such as Koi
Herpes Virus (picture of
infected fish), Salmon fluke
(Gyrodactylus salaris) and the
Crayfish plague
(Aphanomyces astaci)
kill fish and can close
fisheries.





## INVASIVE AQUATIC PLANTS AND SEAWEEDS

Freshwater plants like
African curly waterweed
(Lagarosiphon major)
and seaweeds like
Wakame (Undaria pinnatifida)
block waterways and
outcompete with native
wildlife. If they spread further
in Ireland, they could cost
€millions to manage.





## INVASIVE AQUATIC ANIMALS

The Chinese Mitten Crab (Eriocheir sinensis) moves between freshwaters rivers and marine estuaries, damaging banks, preying on and outcompeting our native wildlife. The Slipper limpet can form chains and stacks of up to 15 individuals in marine environments. They can starve and smother native shellfish and be a serious pest of oyster and mussel beds.







Find out more about this biosecurity campaign and how you can report sightings to help stop the spread at:

invasives.ie/biosecurity/check-clean-dry **★** #CheckCleanDryIrl

























Photos from Trevor Renals, the Environment Agency,
Satu Viljamaa-Dirks (FFA, OIE reference laboratory for crayfish plague)
and Jan-Robert Baars.

## Calling all water users Help stop the Invasion!



Invasive species harm wildlife and our environment

Don't spread them to new waterways



Invasive plants and animals from all over the world have been introduced accidentally to Irish waters. Many different species have already been found in our lakes, rivers, seas, and other waterways, and the number of new arrivals is increasing rapidly.

They cause serious environmental problems that can be irreversible – outcompeting native wildlife, damaging ecosystems, and spreading disease. They can block waterways and riverbanks, interfere with fishing, and damage boats and propellers. Contaminated gear (e.g. equipment, boats, footwear, and clothing) is one of the most common causes of their spread to new waterways.

They can be small and hard to spot so are easily spread on damp equipment and clothing. Protect the environment and sport you enjoy by keeping your boat and kit free from invasive plants and animals.



**Check** your equipment, boat, and clothing 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 areas that are damp and hard to inspect. Use hot water (at least 45°C) or a high-pressure spray.



**Dry** everything until it is dry for at least 48 hours before using elsewhere as some invasive plants and animals can survive for weeks in damp conditions.

**Disinfect** everything if complete drying is not possible. Items can be soaked, thoroughly sprayed, or wiped down with a disinfectant approved for use near waterbodies (e.g. Virkon Aquatic, Virasure).



Anything that comes into contact with the water has the potential to spread invasive species elsewhere.

Following the **Check Clean Dry** biosecurity campaign can help protect our aquatic environment.















You can download free Check Clean Dry awareness-raising materials for your club from

invasives.ie/biosecurity/check-clean-dry