

Some non-native species to watch out for!



What are Invasive Non-native Species?

An invasive non-native species is any plant or animal that has been moved outside of its natural range and is causing environmental or economic damage in its new, introduced range.

The introduction of these species is considered to be one of the greatest threats to biodiversity worldwide, second only to habitat destruction. A recent study by the European Environment Agency (EEA) estimated that the cost of invasive non-native species across Europe is at least 12 billion Euros a year.

ALIENS ARE AMONG US

"AFTER HAVING CONQUERED MANY TERRITORIES, INVASIVE NON-NATIVE SPECIES HAVE SETTLED ON OURS..."



Why should we control these species?

- Our biodiversity is under threat. Invasive species often out compete native species. They may also predate directly on them, transmit diseases or render their habitat unsuitable.
- Some invasive species can prevent us from enjoying recreational activities such as fishing and boating. One such species is floating pennywort, which is capable of growing up to 20 cm a day and forms a dense mat of vegetation across the surface of a water body. This also has economic consequences, by increasing the risk of flooding and reducing amenity value of a site.
- Some species cause harm to human health. For example, the sap of giant hogweed can cause severe blistering. Following exposure to sunlight, these blisters can become second-degree burns!



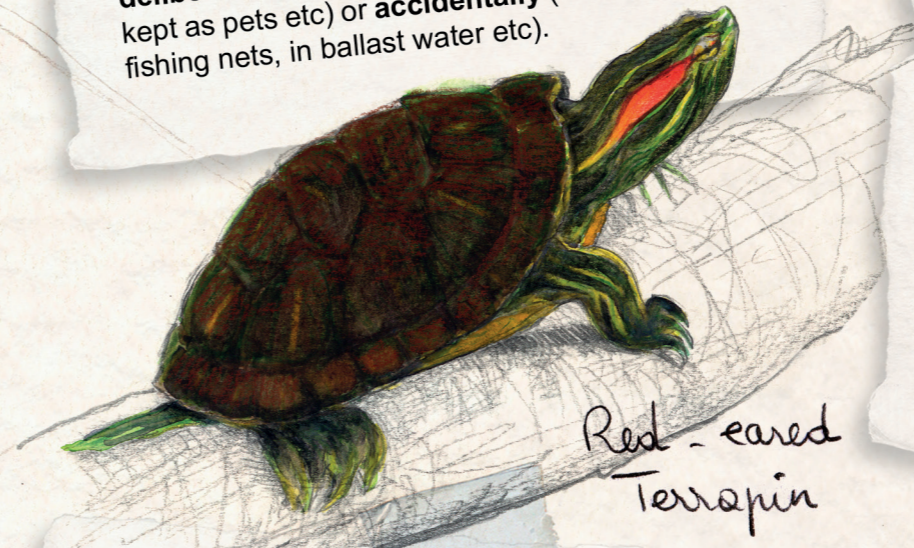
WHO TURNED OUT THE LIGHTS?



American mink

How did they get here?

Invasive species can be introduced in two ways: deliberately (for ornamental cultivation, to be kept as pets etc) or accidentally ("hitch hiking" on fishing nets, in ballast water etc).



Red-eared Terrapin

How can you help prevent the introduction of invasive non-native species?

- If you see any of the species on this poster in shops, **do not buy them!**
- If you have any these plants in your garden please refer to the Norfolk Non-native Species Initiative's advice on their removal (available here: www.norfolkbiodiversity.org/nonnativespecies)
- If you notice that these plants are grown by others, inform them of the risks of spread into the wild.
- **Pets should never be released in to the wild.**

Why are some species invasive?

Invasive non-native species often share certain traits, which give them an advantage over native species:

- They originate from areas where the climate is more or less the same as here
- Their growth is often faster than our local species
- They have a high reproductive capacity (natural propagation by cuttings, produce many seeds etc)
- They have been freed from their natural predators (insects, parasites, diseases etc).



How can you remove invasive non-native species?

Each invasive species has a different suite of methods for control. Sometimes individuals can actually exacerbate the spread of a species by using unsuitable control methods. This frequently happens with Japanese knotweed, where a new plant can grow from a tiny fragment of the root rhizome.

We recommend that you always follow the experts' management advice when removing invasive non-native species. If you require such advice please contact the Norfolk Non-native Species Initiative, using the details at the bottom of this poster.



How can you help us stop their spread?

Accurate and up to date information on the distribution of these species is essential to devise effective control and eradication campaigns. You can help us by reporting any sightings of these species either directly or through our free smartphone App - 'That's Invasive!' - available for both Android and the iPhone!

We also organise events to get volunteers involved in the removal of invasive species.

Please visit the NNNSI website to find out more: www.norfolkbiodiversity.org/nonnativespecies

If you have any questions... feel free to contact us

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LOOK, THEY'VE SUITED UP!
WE MUST REALLY BE IMPORTANT...

Techniques to manage some of the most common species:

- **Giant hogweed**: protect your whole body (impermeable gloves, overalls etc) then cut the root at a depth of 10 to 15 cm using a spade, cut and burn the umbels and the seeds (or place them in a garbage bag for household waste). It is recommended that you consult the Norfolk Non-native Species Initiative for advice on avoiding contact with the plant's toxic sap.
- **Himalayan balsam**: hand pull before flowering, ensuring roots are also removed.
- **Japanese knotweed**: injecting a glyphosate based herbicide directly in to the stem of the plant is highly effective.
- **Aquatic plants**: Plants should be removed very carefully. If the plant breaks, these fragments can cause the plant to spread. We suggest you ask for advice before starting any large-scale eradication project.

