

Help us find these aliens in Norfolk

Humans are increasingly moving species outside their natural range, sometimes deliberately and sometimes accidentally. In the absence of their natural enemies, some species can spread rapidly and cause problems. These species are termed “invasive”.

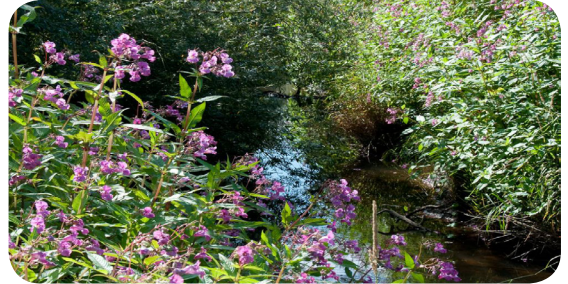
Invasive non-native species are considered to be one of the most important causes of biodiversity loss worldwide, second only to habitat destruction. They can also have significant economic impacts. In 2011, the total cost of invasive non-native species on the British economy was £1.7 Billion.

Himalayan Balsam (*Impatiens glandulifera*)

Description: An annual herb up to 2m in height with pink / purple, slipper shaped flowers, a fleshy stem and explosive seed heads.

Where to look: Prefers to grow in damp areas, and is particularly abundant on river banks where it out-competes native vegetation.

Why is it a problem? Fast growing, quickly becomes the dominant species in an area. Die back in winter leaves river banks bare and susceptible to erosion.



Australian Swamp Stonecrop (*Crassula helmsii*)

Description: Can be aquatic and terrestrial. Small round fleshy leaves arranged along the stem in opposite pairs. White flowers with small petals.

Where to look: Found in a variety of habitats, have be submerged, emergent and terrestrial forms.

Why is it a problem? Forms dense impenetrable mats, can grow 200 times faster than native pond plants and can easily smother and out compete other species.

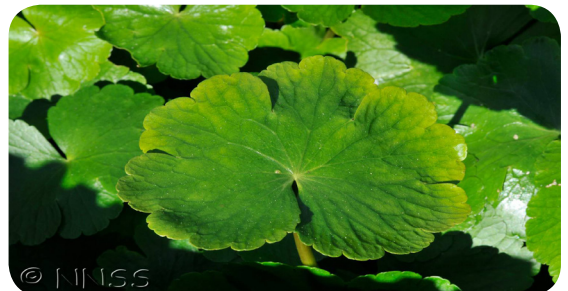


Floating pennywort (*Hydrocotyle ranunculoides*)

Description: This aquatic plant has characteristic kidney shaped leaves which can be free floating or emergent. It has fleshy stems and fine, white roots.

Where to look: Emergent or floating on the surface of still or slowly moving freshwater.

Why is it a problem? With a peak growth rate of 20cm per day, floating pennywort can rapidly dominate a water body!



Killer shrimp (*Dikerogammarus villosus*)

Description: Up to 30mm in length, body curled and semi-transparent, may have striped pattern. Two cone shape projections on its tail are key distinguishing features.

Where to look: Likes to live within colonies of zebra mussels, on wood, concrete, gravel and rope. Attracted to man made structures.

Why is it a problem? A voracious predator, it kills a range of native species, including young fish, mayfly and caddisfly larvae. Has the potential to seriously alter ecosystems it invades.



Please tell us if you find any of these invasive alien species.

Records should contain information about: **What** you saw (photos are a great help); **When** you saw it; **Where** you saw it (a grid reference if possible); and **Who** you are. For more information and to submit your records online, go to www.norfolkbiobiodiversity.org/nonnativespecies

Or you can send and email to michael.sutton-croft@norfolk.gov.uk, get in touch by phone 01603 228977.