



**Cumbria Freshwater
Invasive Non-Native
Species Initiative**

**POCKET
IDGUIDE**

Protect Cumbria From The Invasion

This pocket field guide has been designed to assist you in being able to identify certain freshwater and riparian invasive non-native species. It will enable you to become part of the crucial early warning and reporting network in Cumbria.

If you do come across any of these species, it is vital that you report them to the CFINNS Initiative as soon as possible along with the following information:

- **WHAT** - Name of the species.
- **WHERE** - Coordinates of the location.
- **WHEN** - Date of the record.
- **WHO** - Name of the recorder.

Please send your records to:

bekka@scrt.co.uk, report them via our website at **www.scrt.co.uk/cfinns**, or send them to **SCRT Plumgarths, Crook Road, Kendal, Cumbria LA8 8LX.**



Cumbria Freshwater Biosecurity

We in Cumbria love spending time in and on the water. Protecting our freshwaters from invasive non-native species is something that we must all address as it is our responsibility. Invasive non-native species can hitchhike on our equipment, footwear, clothing and boats. When we move to a new river, tarn or lake, the species are released and may become established and alter our waters dramatically. We can all help to prevent the spread of freshwater hitchhikers by following **a simple three step process every time we leave any river, tarn or lake.**



Check your equipment and clothing for living organisms. Pay particular attention to areas that are damp or hard to inspect.



Clean and wash all equipment, footwear and clothes thoroughly. If you do come across any organisms, leave them at the water body where you found them.



Dry all equipment and clothing – some species can live for many days in moist conditions.

Japanese Knotweed



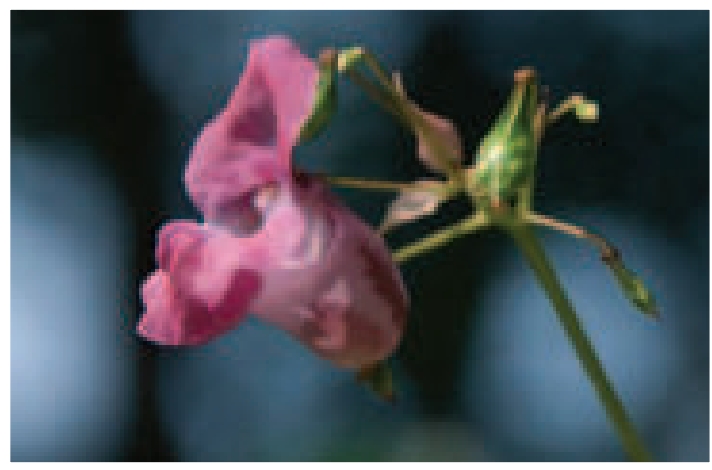
Habitat

Common in urban areas, particularly on waste land, railways road sides and river banks.

Key ID Features

- Often grows into dense thickets.
- A mature stand can grow up to 3m in height.
- Bamboo-like stems with purple speckles.
- Zig zag stems.
- Lush green colour.
- Purple speckled stems.
- Shield shaped leaves with flat base and between 10-15cm long.

Himalayan Balsam



Habitat

Found mostly on river banks and in damp woodlands.

Key ID Features

- Grows in dense stands and mature plants can be up to 2m tall.
- Trumpet shaped pink/white flower.
- Explosive seed capsule approx 2.5cm long.
- Leaves opposite or in whorls.
- Leaf has finely serrated edges slender to elliptical in shape.

Giant Hogweed



Habitat

Commonly found on river banks.

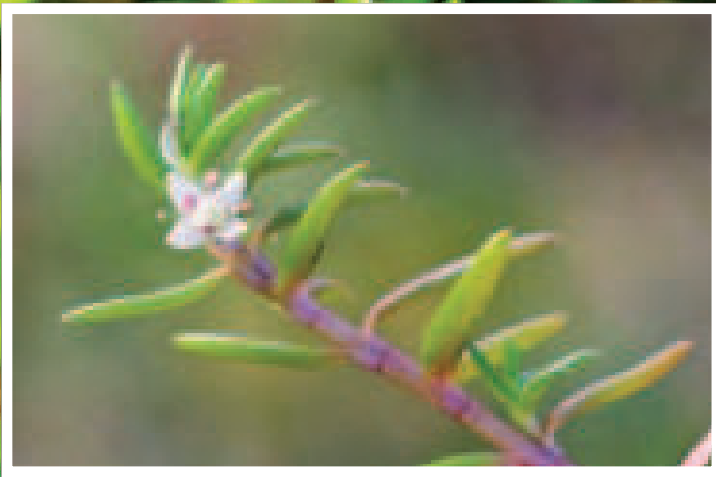
Key ID Features

- Sharply serrated leaves.
- Stems with sharp bristles.
- Up to 5m tall, flower head up to 80cm wide.

Can look similar to native Hogweed.

WARNING: Contact with any part of this plant must be avoided as it can cause a severe skin reaction.

New Zealand Pigmyweed



Habitat

Aquatic up to 3m deep in still or slow moving waterbodies or terrestrial around pond or lake margins.

Key ID Features

- Can form thick mats underwater, emerging and terrestrially.
- Leaves in pairs and up to 2cm long.
- Leaf bases joined around stem to form a collar.
- Round stem.
- Leaves fleshy when emergent, more flattened when a submerged form.

Can look similar to Starwort or Blinks.

Canadian Waterweed

Nuttall's Waterweed



Habitat

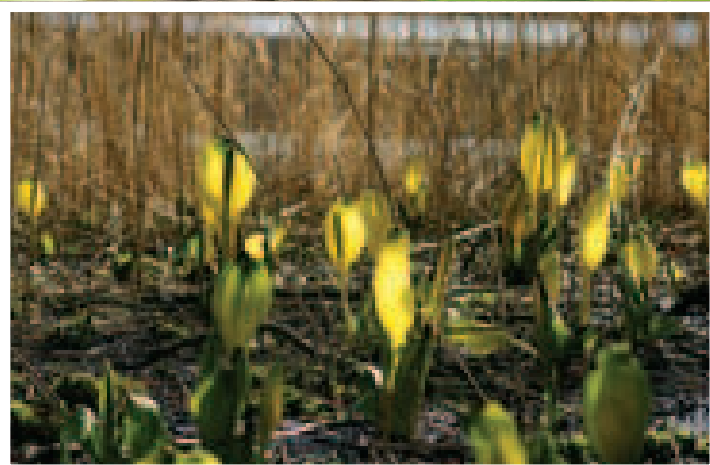
Still or slow flowing, shallow or deep water.

Key ID Features

- Grows completely submerged under water.
- Leaves in whorls of three.
- Canadian – widest part of leaf at middle and either pointed or rounded at end.
- Nuttall's – widest at base and tapering to a pointed end.

Can look similar to Curly Waterweed.

American Skunk Cabbage



Habitat

Wet woodlands, stream sides and muddy pond margins.

Key ID Features

- Bright yellow flowers up to 45cm tall.
- Bright green leathery leaves with light sheen.
- Leaves between 40cm – 1.5m tall.

Can look similar to Lords and Ladies or Asian Skunk Cabbage.

Parrot's Feather



Habitat

Still or slow flowing water.

Key ID Features

- Plants are emergent.
- Leaves bright to blue-grey green.
- Brown roots present around nodes.
- Leaves form in whorls of 4-6.
- Finely divided leaves – feather like.

Can look similar to Water Milfoil or Carolina Water-Shield.

Zebra Mussel



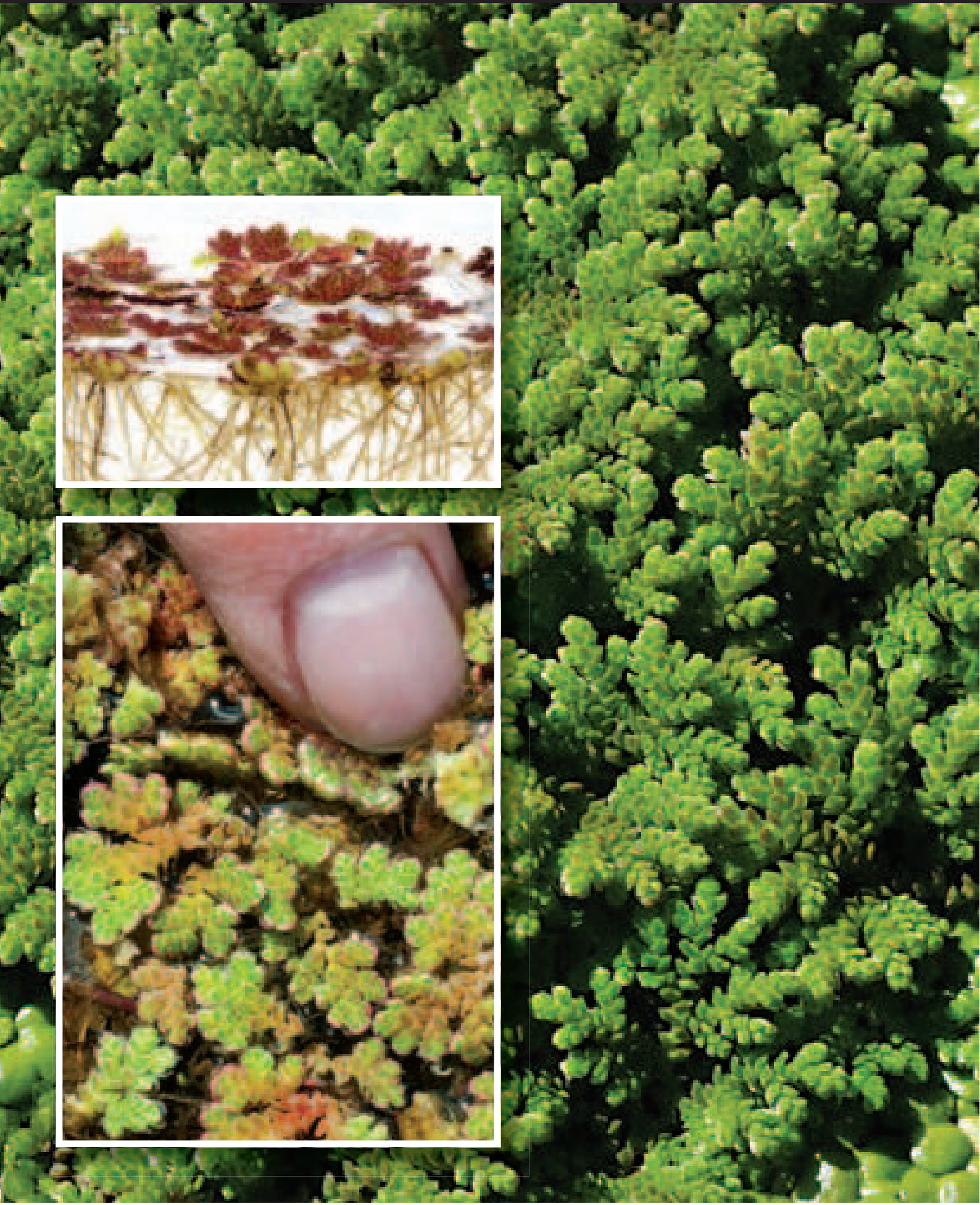
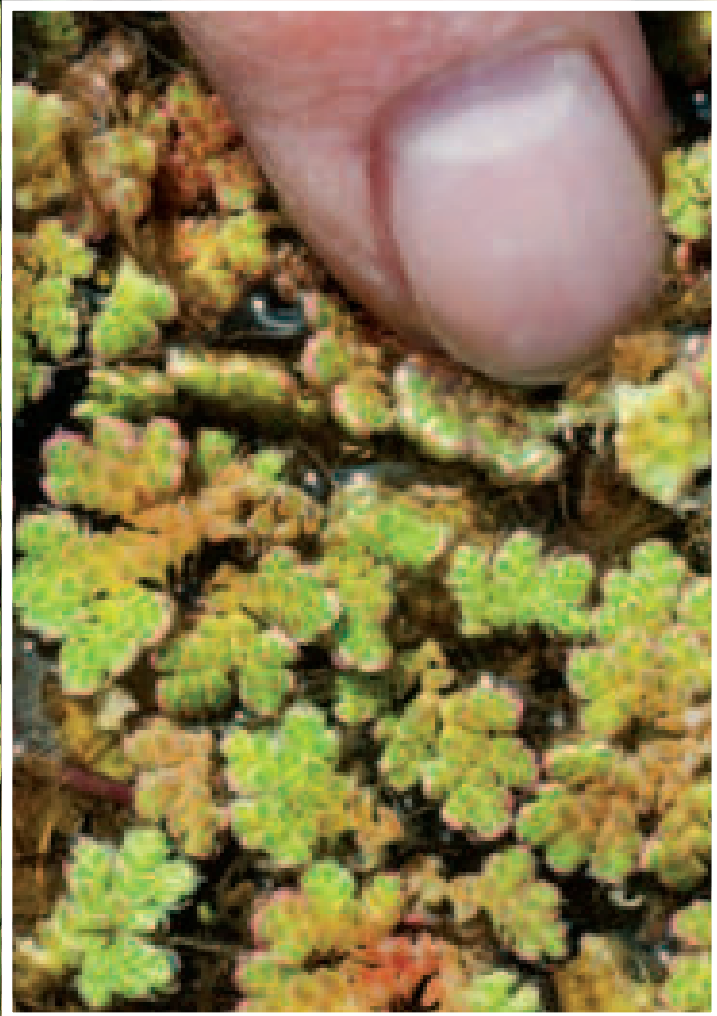
Habitat

Slow rivers, canals, docks, lakes, reservoirs and sometimes water pipes and cooling systems.

Key ID Features

- Attaches, usually in groups, to anything solid underwater.
- Light and dark bands of colour.
- Up to 3cm in length.
- Distinctive 'D' shaped shell.

Water Fern



Habitat

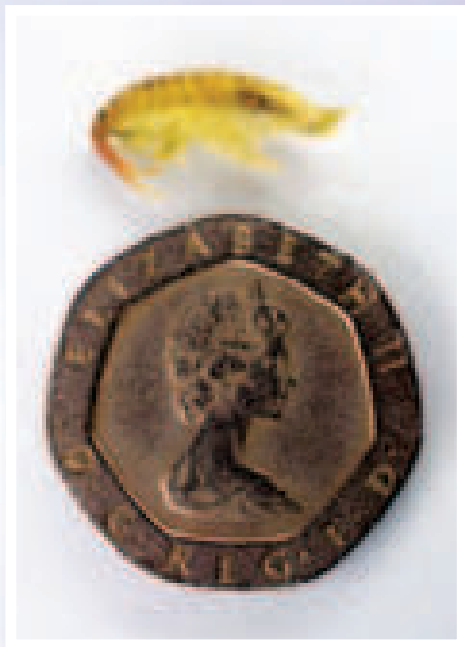
Still and slow flowing water bodies (e.g. ponds, drainage channels, ditches, canals etc).

Key ID Features

- Very small free-floating water plant that forms dense mats.
- Black/brown roots hang beneath floating leaves, easily break off.
- Tiny leaves, up to 2.5cm long & fern like.
- Leaves have a rough granular appearance with a non-wettable surface.
- Usually green but has reddish tinge when stressed.

Can look similar to Duck Weed.

Killer Shrimp



Habitat

Still or flowing freshwater and brackish water, often among hard surfaces or vegetation.

Key ID Features

- Larger than native shrimps.
- Adults grow to between 10-30mm from tip of tail to tip of head.
- Usually has striped back, but can be more uniform in colour.
- Tail with distinctive cones.

Curly Waterweed



Habitat

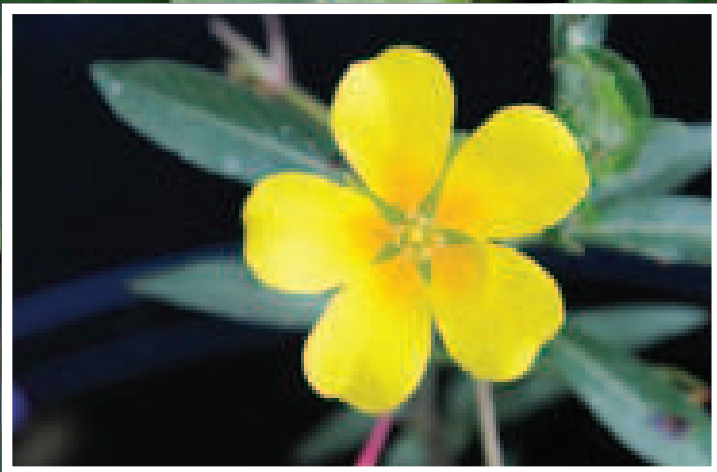
Standing waters such as lakes.

Key ID Features

- Grows completely submerged under water.
- Stems can reach 3m long.
- Strongly curved leaves.
- Lower leaves always spiral, upper either spiral or whorled.

Can look similar to Canadian or Nuttall's Waterweed.

Creeping Water Primrose



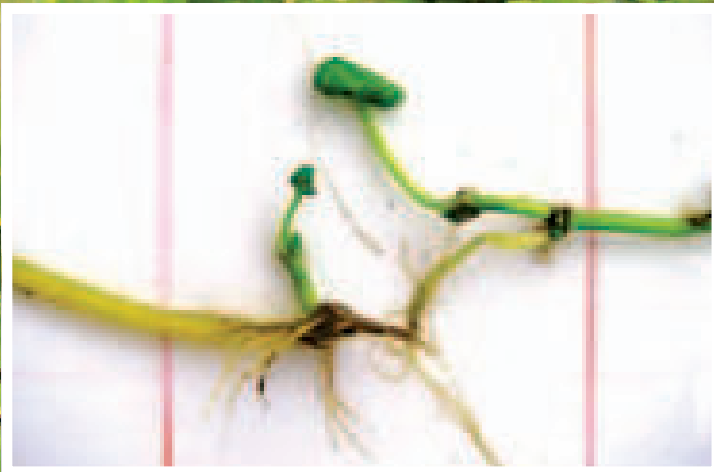
Habitat

Still or slow moving water.

Key ID Features

- Found floating or growing in the margins of water bodies.
- Bright yellow flowers with 5 petals approx 3cm.
- Alternate leaves up to 9cm long.
- Leaves can either be floating (round egg shape) or emergent (long and slender).
- Dark green leaves with a lighter green midrib.

Floating Pennywort



Habitat

Emergent or floating on the surface of still or slowly moving freshwater.

Key ID Features

- Forms bright green, shiny, dense mats emerging from the water.
- Fleshy stalks and fine roots.
- Shiny kidney-shaped leaves with crinkled edge, frequently broader than long.
- Leaves up to 7cm long.

Can look similar to Marsh Pennywort.

American Signal Crayfish



Habitat

Most freshwater habitats.

Key ID Features

- White or turquoise 'blotch' on hinge of claw.
- Claws large in relation to body, particularly in males.
- Top of crayfish red/brown colouration
- Undersides of claws red.

Can look similar to White-Clawed Crayfish.

Carolina Water-Shield



Habitat

Lakes, ponds and fast and slow flowing rivers.

Key ID Features

- Grows completely submerged under water.
- Submerged leaves are finely divided.
- Leaves in pairs – not whorls.

Can look similar to Parrot's Feather or Water Milfoil.

Chinese Mitten Crab



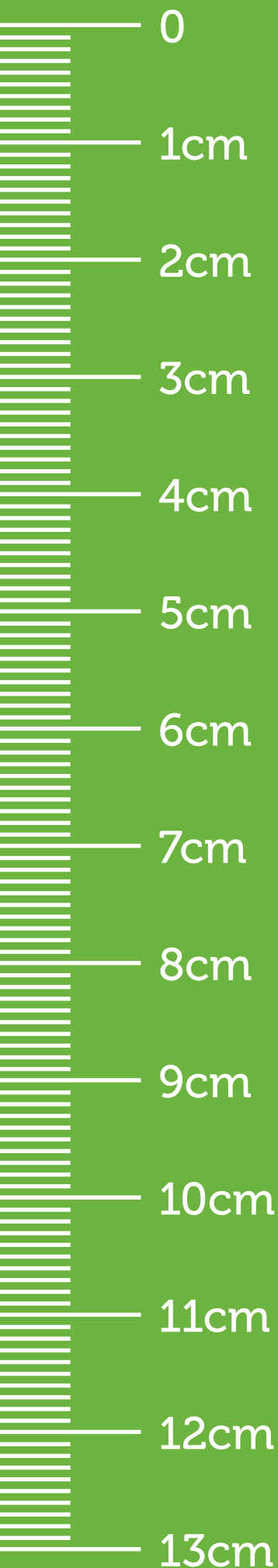
Habitat

Tidal streams, rivers and estuaries. Adults migrate to estuaries and the sea to breed.

Key ID Features

- Body (carapace) olive/green brown, up to 8cm wide.
- Pincers covered in a mat of fine hair.
- Legs very long and hairy.

Can look similar to Shore Crab.



For more detailed information about each of these species and for the species that can look similar, please go to:
www.scrt.co.uk/tool-kit/identification-guides

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