

# Signal crayfish

*Pacifastacus leniusculus*

**Potential invader:  
High impact**

## Species profile

- Habitat:** Freshwater.
- Distribution in Ireland:** Not currently recorded in Ireland.
- Status:** Not yet known to occur in Ireland. Widespread in England and Wales, actively spreading into Scotland by human transfers.
- Family name:** Astacidae.
- Reproduction:** Mating occurs in autumn at 2-3 years old. Eggs are held over the winter attached to the underneath of the females tail, when hatched the young are still attached to their mother. Young are released in May-June.

## Identifying features

- Size:** Can reach 15 cm in body length which is larger than native white-clawed crayfish (11 cm). Claws are large compared to body size.
- Colour:** Dark red/brown in colour, underside of claw is also red, unlike its native counterpart.
- Claw:** Large red claws with white/turquoise marking at the joint on the upper side.



Female signal crayfish with eggs attached to the underside of the tail - Matt Brazier Environmental Agency GBNNSS



Signal crayfish, darker shell colour showing white-turquoise marking at the joint - Shutterstock



Signal crayfish showing white marking at the joint - Trevor Renals



# Signal Crayfish

## Threats

Builds up high populations, much denser than native crayfish. If introduced it may also cause infection of our native crayfish with *Aphanomyces astaci* which causes the crayfish plague.

Crayfish plague is a contagious fungal-type disease from North America which has devastating effects on native crayfish species. The fungus ramifies under the skeleton, producing spores at joints. Plague spores may survive damp conditions for several days, e.g. on wet fishing gear, wet boots and boats which may aid spread of the disease without the presence of an invasive crayfish species.

Signal crayfish can undermine river banks through burrowing.

Signal crayfish can predate the eggs and young of native salmon and trout as well as aquatic invertebrates.

## Seasonal activity

**Summer:** Species is at its most active during this time, time when the young are released.

**Autumn:** Mating takes place into early winter.

**Winter:** Less active, in a state of torpor, females carry developing eggs on the underside of their tail.

## Similar species

White clawed crayfish (*Austropotamobius pallipes*) has white underside to its claws. The white clawed crayfish is also native and protected under the Habitats Directive.

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Signal crayfish have red undersides of their claws, unlike the native crayfish which has white undersides - GBNNSS Crown Copyright 2009



Signal crayfish showing white marking at the claw joint - GBNNSS Crown Copyright



White clawed crayfish showing similarly coloured claws but without the white marking at the joint - D. Gerke



Front detail Signal crayfish

