



PondNet: Identifying Tadpole Shrimp



Tadpole shrimp

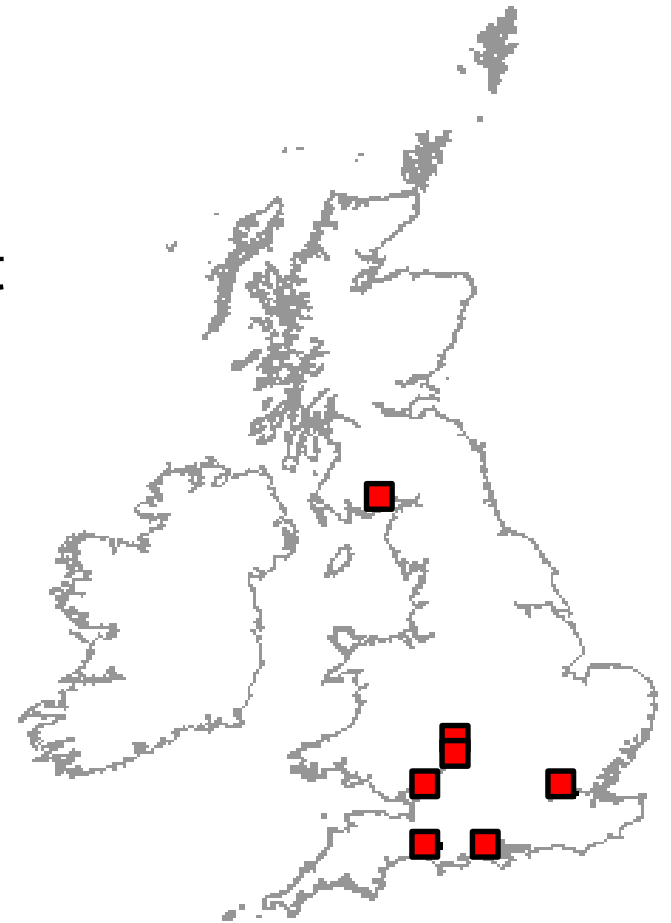
Triops cancriformis



Tadpole Shrimp are a specialist of temporary pond habitats - so well adapted to their environment that their body shape has remained almost unchanged for 200 million years!

Distribution of Tadpole Shrimp in the UK

- 7 confirmed records in the 19th Century
- Thought lost from all but one – in the New Forest, Hampshire
- Losses due to changes in land management and loss of temporary ponds
- Long gaps between population records

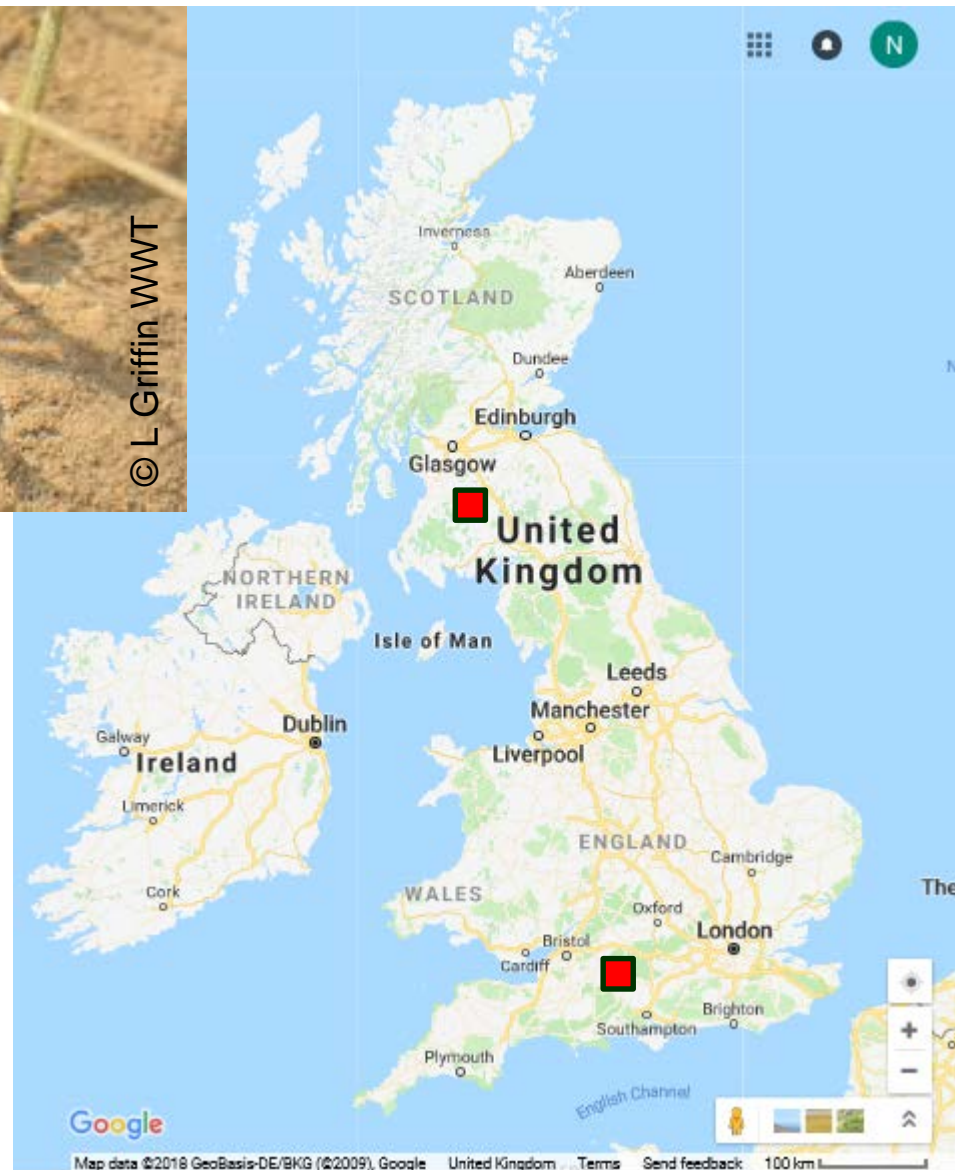


Rediscovered in 2004



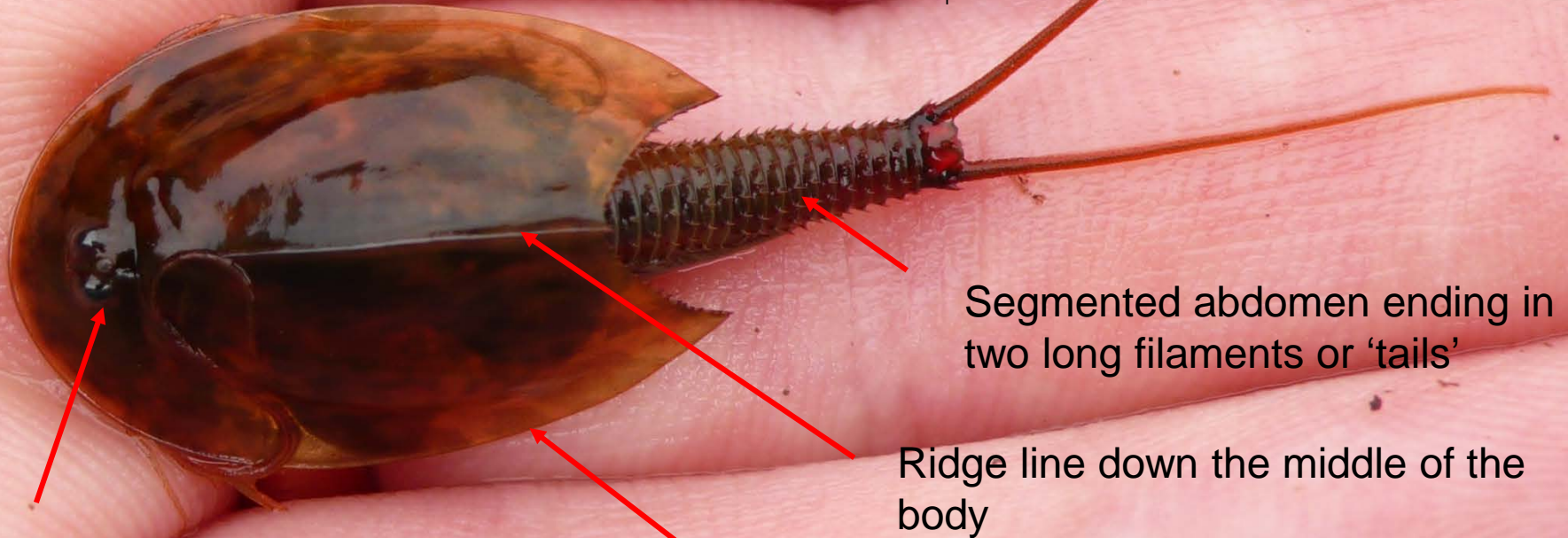
Being in the right place at the right time and a huge dose of luck resulted in a rediscovery at the Scottish site in 2004.

There are now multiple ponds at each of the two locations with records for Tadpole Shrimp but no new sightings outside these areas.



Identifying Tadpole Shrimp

Typical body length 3-4cm, although large individuals may grow up to 5cm (10cm including the 'tails')



Triops can be translated as 3-eyed, i.e. two compound eyes and a central primitive light sensing organ (their third eye).

A hardened carapace which makes them look like a miniature Horseshoe Crab

Segmented abdomen ending in two long filaments or 'tails'

Ridge line down the middle of the body

Identifying Tadpole Shrimp



The carapace shield protects multiple pairs of joined 'legs' – the legs are multi-purpose helping the animals to walk, gather food, breath, and to hold the eggs.

Modified front legs are used as feelers to rummage about in the muddy pond base (see inset)

Can I mistake anything else for Tadpole Shrimp?

In short – no!, but if you have any doubts or this is a new site we need you to take a confirmatory photograph to be sure.



Michal Grabowski (Own work) [CC-BY-SA-3.0]
(<http://creativecommons.org/licenses/by-sa/3.0/>)



Keisotoyo (Own work) CC BY-SA 4.0
(<https://creativecommons.org/licenses/by-sa/4.0/>)

People have commented that the fish lice (*Argulus sp*) look superficially the same shape as young Tadpole Shrimp. But, there is no ridge line down the body, the eyes are not the same configuration, they have fewer 'legs' and fish lice have no tail filaments. There is also no chance of finding Tadpole Shrimp in ponds which have fish.

What is their habitat type?

- Always associated with circum-neutral temporary ponds but tolerant of some brackish water (i.e. coastal temporary ponds).
- They need natural nutrient enrichment i.e. from animal dung, to underpin their food chain (algae and microcrustaceans).
- Poaching of the ground to create muddy edges may be important for suppressing vegetation or helping to bury and uncover Tadpole Shrimp eggs.
- Ponds are shallow and free from shade – important in providing high temperatures which Tadpole Shrimp need to hatch (15°C – 25°C).
- New sites are almost certainly waiting to be discovered.





