

# White-clawed Crayfish Survey Information

White-clawed crayfish are important to consider as part of planning applications which may impact a watercourse both directly and indirectly as a change in the biology of the watercourse may have a drastic effect on a crayfish population. White-clawed crayfish are also under threat from the spread of the invasive signal crayfish which out-compete out native species and carry a disease called the 'crayfish plague'.

## Survey Methodology

### Manual Searching

This survey technique is suited to low flowing watercourses. In clear water, rock turning and netting is the most efficient technique, however in deeper or murky water, sweep netting beneath stones and rocks, marginal vegetation and amongst tree roots is the best form of methodology. The crayfish found are sexed and measured before being returned. Such surveys can only be carried out between July and September (inclusively).



Native White-clawed Crayfish

### Trapping

This method may be used to survey deep lakes or canals where manual searching is not possible. Several mesh traps are baited and secured with a throw rope before placing in the water. Traps are left over several nights, however are checked each morning and the catch recorded and released. A limitation to this technique is that just a small percentage of the population is surveyed as small and juvenile crayfish can escape through the mesh holes.



Male (left) & Female (right) caught in trap

### Torching Survey

Crayfish are more active under the cover of darkness and therefore a night search with a torch is a good method of confirming the presence of crayfish. This method provides a count of the number of crayfish observed, however lacks details of population structure provided by manual searching.



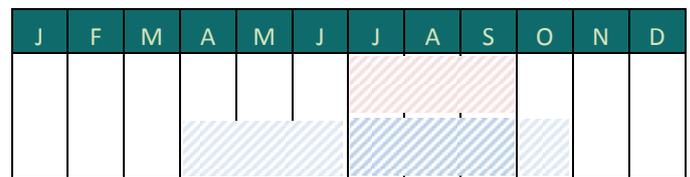
Invasive Signal Crayfish

### Bio-Security & Licensing

To avoid the spread of crayfish plague between sites, all equipment used to carry out a survey is disinfected and allowed to dry before use on another site. Any survey method involving the "taking" of white-clawed crayfish will require a surveyor holding a crayfish survey license.

### Survey Timings

Female white-clawed crayfish hold eggs beneath their abdomen over the winter during which activity is very low. Their eggs hatch in the late spring / early summer but juveniles cling to their mother before their tail fans develop fully. To avoid disturbing a female with eggs / young manual searching and trapping should only be conducted between **July and September**. Torching can take place outside this window; however activity is lower, so results should be treated with caution.



Manual Searching & Trapping      Torching

Sub-Optimal Torching Period

Further information is available on our website at [www.emec-ecology.co.uk](http://www.emec-ecology.co.uk).



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