







<b>Recorder name:</b>	<b>Stream name:</b>
<b>Date:</b>	<b>GPS/location:</b>

The **Citizen Science Stream Index (CSSI)** is based on the presence or absence of six key aquatic invertebrates. Three pollution-sensitive invertebrates ('good guys') are commonly found in clean streams and three pollution-tolerant invertebrates ('bad guys') are commonly found in polluted streams.

Citizens use a pond net to take three 30-second kick-samples (the three samples should be a few metres apart) from a shallow (<20cm), gravelly, fast-flowing part of the stream. The invertebrates captured in each sample are examined in a white tray on the bankside. The six key invertebrates are easily spotted amongst the many other species in the tray, by their characteristic shape, colour or movement.

The citizen will score each sample depending on which, if any, of the six key invertebrates occur in the tray. The three **'good guys' have a score of +1** each and the three **'bad guys' have a score of -1 each**. The score for each kick-sample can range from +3 (all three good guys and no bad guys) to -3 (all three bad guys and no good guys). When the scores from all three samples are added together, the CSSI ranges from +9 to -9. Check out this your tube video on how to take a kick-sample. <https://youtu.be/HsDZ0siO6Ds>

Send your results to [info@lawaters.ie](mailto:info@lawaters.ie) and don't forget to attach a clear photograph of your sample and of a copy/photograph of this filled in sampling sheet.

	Sample 1	Sample 2	Sample 3
<b>Stonefly (+1)</b> 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Flattened mayfly (+1)</b> 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Green caddisfly (+1)</b> 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Snail (-1)</b> 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Leech (-1)</b> 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Waterlouse (-1)</b> 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Sum of scores 1</b>	<b>Sum of scores 2</b>	<b>Sum of scores 3</b>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Take a clear photograph of your sample to let us check and verify your sample

Take a good, clear photo of all of the six key invertebrates that were found in the 3 samples, placed in a small white-bottom dish (eg jam jar lid) including a label, with information on the date, stream name, location and recorder.



River: \_\_\_\_\_ Site: \_\_\_\_\_  
Sample no. \_\_\_\_\_ Recorder: \_\_\_\_\_

CSSI Scores can be a 'traffic light' for water quality

CSSI score -9 to -5

**Heavily polluted**

CSSI Score -4 to +4

**Moderately polluted**

CSSI Score +5 to +9

**Clean**



+  +  =  **Total score for the 3 samples = CSSI Score**

**Any observations** (eg. excessive algae or fine sediment, cattle access nearby, surface foam, presence of trout/salmon etc):

Send your results to [info@lawaters.ie](mailto:info@lawaters.ie) and don't forget to attach a clear photograph of your sample and of your filled in sampling sheet.

## The 'good guys'



### Stonefly

2 thin filamentous tails at end of abdomen



### Flattened mayfly

3 thin filamentous tails, wide head with large eyes on top and flattened body



### Green caddisfly

Green caterpillar-like larva. Gills along abdomen give it a 'spiky' appearance

## The 'bad guys'



### Leech

Suckers at both ends & moves by stretching out body



### Snail

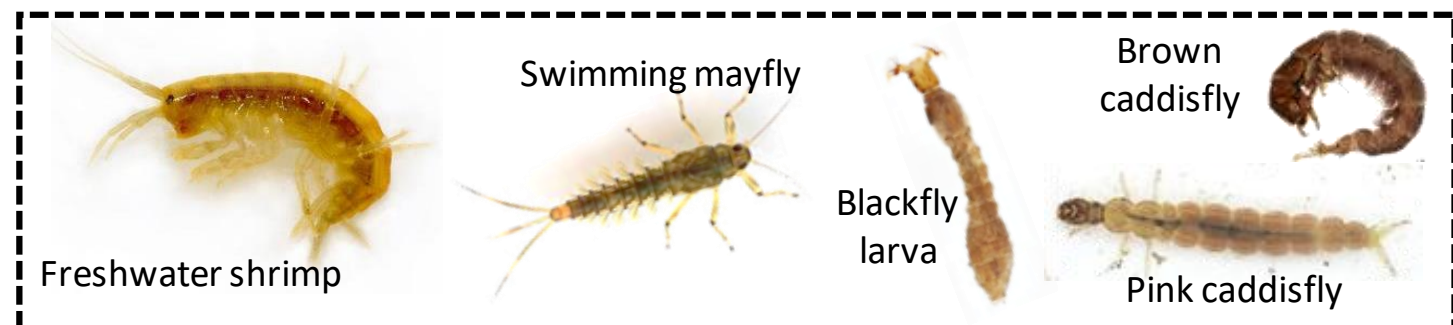
Hard pointed or coiled shell covering body



### Waterlouse

Looks like a woodlouse, crawls slowly along bottom

These invertebrates are found in most streams and are NOT scored for the CSSI



Freshwater shrimp

Swimming mayfly

Blackfly larva

Brown caddisfly

Pink caddisfly