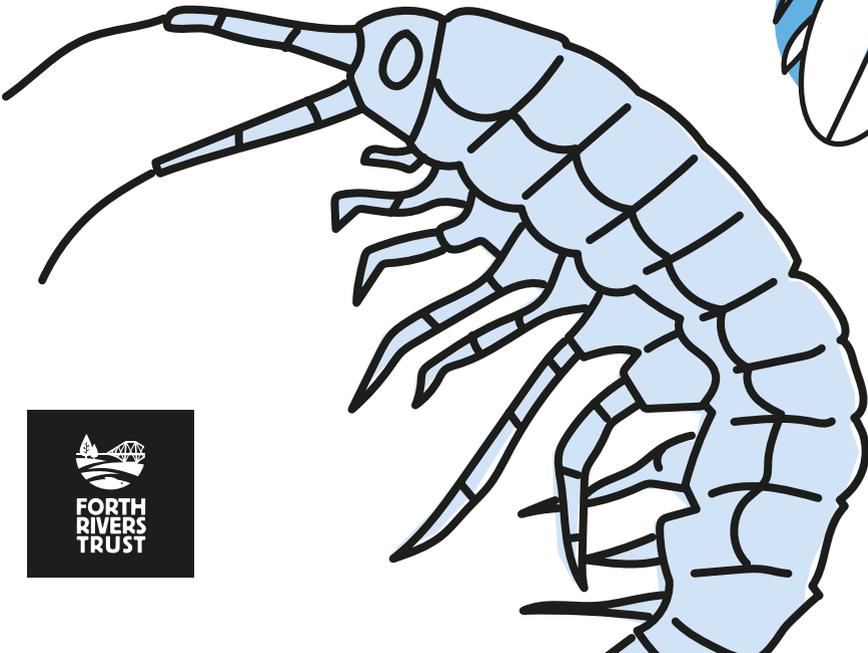
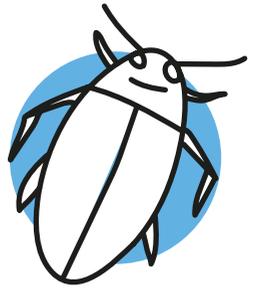


# Beastie Safari

Age 5+

A fun filled activity booklet to inspire the whole family to get on your wellies and explore the beasties & bugs of our wonderfully wild ponds & rivers.



# How to use this booklet

You'll need a net and a container; the best sort of container is a white or light coloured one- so that you can see what you've netted easily. If you don't have one then a piece of transparent food packaging or such will work, with a sheet of paper under.

Fill the tray with water from the river or pond. Be careful to only go into shallow areas of the river, where you can see the bottom and when the water is low. Kick about in the mud or stones of the river bed or pond edge (or just dig about the bottom with a net), place the net near your feet, downstream of where you are kicking. Take the net over to the container of water and turn it inside out in the water.

Use the questionnaire flow chat on page 2 to establish what you've caught. If you're stuck about what you've caught, then there is also guidance on what it might be based on its body shape on page 3.

**Suitable for ages 5+ and needs a minimum of half an hour of bug hunting.**

---

## Top tips for spotting

-  Use a light coloured container.
-  Use a fine mesh net, or a pair of nylon tights stretched over a coat hanger.
-  Bring a spoon or chopstick to search around in what you've caught.
-  Bring a magnifying glass if you have one.

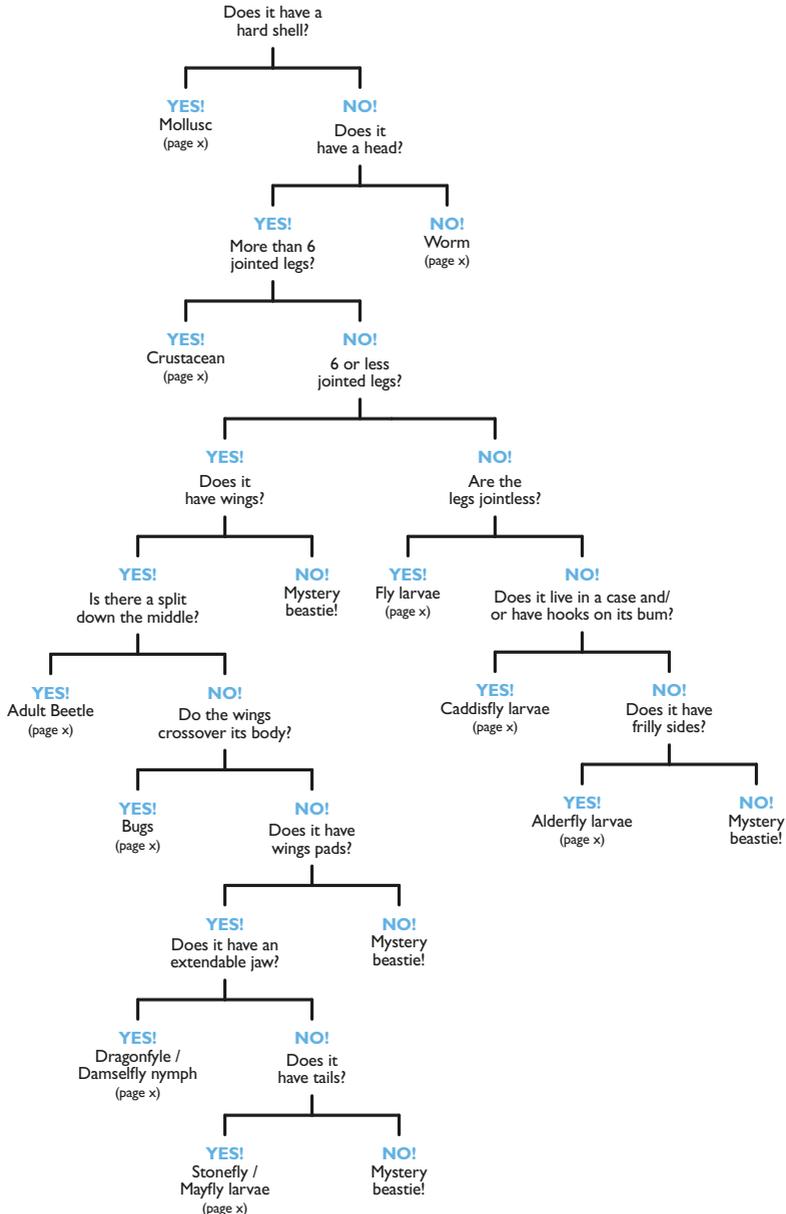
---

## Staying safe next to the river

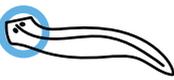
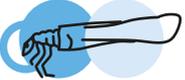
-  Ensure that you are accompanied by an adult
-  Carry a phone or a whistle to call for help if needed
-  Disinfectant hand wipes or sanitiser
-  Let someone know your location and what time you are expected back
-  Stay away from the water's edge when you're not catching your bugs
-  Wear appropriate clothing and footwear, keeping you warm, dry, silent, and camouflaged
-  Remember bugs are living creatures, so treat them as you would like to be treated

# Who have you found in your net?

Use this key to help you decide who you have caught.



# Name that beastie by using its body shape!

Who	Body shape	legs	Tails
Mollusks		0 (but one foot)	Zero
Worm-like		0	n/a
Crustaceans		14	Three prongs
Beetles		6	None
Bugs		6	Zero or one
Dragonfly & Damselfly nymphs		6	Three
Mayfly & Stonefly larvae		6	Two or Three
Other fly larvae		0 (only wee stumps)	Zero or one
Caddis fly larvae		6	Two hooks
Alderfly larvae		6	One

 Head
  Thorax
  Abdomen

# Beastie checklist

- |                                      |   |  |
|--------------------------------------|---|--|
| <input type="checkbox"/> Mollusks    | <input type="checkbox"/> Beetles                      | <input type="checkbox"/> Other fly larvae  |
| <input type="checkbox"/> Worm-like   | <input type="checkbox"/> Bugs                         | <input type="checkbox"/> Caddis fly larvae |
| <input type="checkbox"/> Crustaceans | <input type="checkbox"/> Dragonfly & Damselfly nymphs | <input type="checkbox"/> Alderfly larvae   |
|                                      | <input type="checkbox"/> Mayfly & Stonefly larvae     |  |

## Pollution indicator key

The beasties that live in our water habitats react differently to pollution that is in the water. Some types are very sensitive and where pollution has happened you will likely find none or very few of these types of sensitive ones. Some beasties love dirty and polluted water, in areas where there is lots of pollution then these ones may be all you find!

Each group of beasties has a score of how sensitive to pollution they are. This goes from 1 to 7...

**1 means it's very polluted**



**7 means the water is pristine**



# Mollusks

Tick if you found:  Ramshorn snail  Pond snail  Pea mussel



## Key facts

-  Up to 3cm long
-  Have fleshy feelers
-  Pea mussel has 2 shells
-  Turret/spire shell (pond snail) or a spiral (ramshorn)

## Where to find them?

-  Still water like ponds and canals
-  In the slow moving part of a river
-  Anywhere there is lots of water weed

## Fun fact:

Some snails can breathe from the surface of the water.

Use this space to draw your own Mollusc

Pollution indicator: Snails:   Pea mussel:     

# Worm-like

Tick if you found:  Flatworm  Leech



## Key facts

-  Up to 8cm+ long
-  More active in warm weather
-  Soft and flat body with no segments

## Where to find them?

-  Slower areas of flow
-  Often on the stems of vegetation
-  In a tray flat worms will glide along the surface in a smooth fashion

## Fun fact:

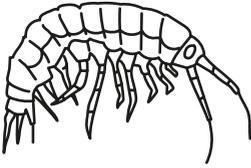
There's only one type of leech that bites humans and it doesn't live in Scotland

Use this space to draw your own Worm

Pollution indicator: Flatworm:     Leech:   

# CRUSTACEANS

Tick if you found:  Water hog-louse  Freshwater shrimp  Crayfish



## Key facts

-  0.5-2.5cm long
-  Freshwater shrimp swim on their sides
-  Hoglouse look a lot like a woodlouse

## Where to find them?

-  They can be found in nearly all rivers and ponds
-  Even in slightly salty water at the end of the river

## Fun fact:

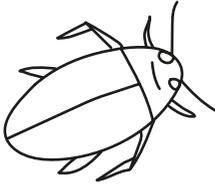
How active they are depends on how warm the water is.

Use this space to draw your own CRUSTACEAN

Pollution indicator: Shrimps:   Crayfish:     

# Beetles

Tick if you found:  Whirligig beetle



## Key facts

-  0.5-1.5cm long
-  Large eyes (whirligigs have 2 pairs)
-  Whirligig beetles are shiny black ovals

## Where to find them?

-  They need stiller waters, so they are very common in ponds and canals
-  Slow moving areas in rivers

## Fun fact:

Many carry a little bubble of air around with them so they can breathe.

Use this space to draw your own Beetle

Pollution indicator:     

# Bugs

Tick if you found:  Pond skater  Lesser water boatman  
 Common backswimmer



## Key facts

-  1-2cm long
-  You can spot them by the ripples they make when skating, usually in large groups
-  Water boatmen use their backlegs like paddles

## Where to find them?

-  They prefer warmer waters, still water or slow flowing rivers
-  Lots of submerged vegetation or partially exposed stones

## Fun fact:

The female pond skater has an 'ovipositor' that she uses to lay eggs on to pond weed and rocks.

Use this space to draw your own Bug

Pollution indicator:   

# Dragonfly & Damselfly nymphs

Tick if you found:  Dragonfly nymph  Damselfly nymph



## Key facts

-  3-7cm long
-  Large eyes, lumps where their wings would be, extending mouth parts
-  Dragonfly nymphs have a prongs on their bums
-  Mayfly nymphs have 3 feather like tails

## Where to find them?

-  Different types (species) of dragonfly prefer different water types
-  Damselflies like boggy ponds and river areas, hanging on vegetation at the edges of rivers or ponds

## Fun fact:

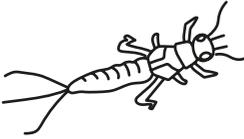
Nymphs have a face that flips out to grab prey!

Use this space to draw your own Dragonfly or Damselfly nymphs

Pollution indicator:       

# Mayfly & Stonefly larvae

Tick if you found:  Flat bodied mayfly  Mayfly  Stonefly



## Key facts

-  Up to 3.5cm long
-  Mayflies have 3 tails, flat-bodied mayfly have flappy gills on the side of the abdomen
-  There are many types of mayflies (look them up if you want to know more!), stoneflies have only 2 tails and mayflies 3

## Where to find them?

-  In slow to medium flowing water
-  Occasionally in ponds
-  Often clinging on to rocks or vegetation

## Fun fact:

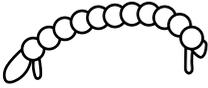
The flat-bodied mayfly are stream-lined (like a racing car) so that they can move about easily in fast flowing water.

Use this space to draw your own Mayfly or Stonefly larvae

Pollution indicator:      

# Other fly larvae

Tick if you found:  Midge larvae  Crane fly larvae



## Key facts

-  Up to 3cm long
-  Crane fly are grey/white tubes with frilly projections on their bums
-  Rat-tailed maggots are white and have a long tail that they use as a snorkel
-  Midge larvae have a distinct small head and are grey/green/brown/red

## Where to find them?

-  They like to live in the mud and sediment in the bottom of the water
-  They are often not fussed about living in a river or pond that is man-made

## Fun fact:

Rat tailed maggots turn into hoverflies, which are important pollinators.

Use this space to draw your own fly larvae

**Pollution indicator:** Crane fly:    Rat-tailed maggot: 

Midge larvae:  

# Caddis fly larvae

Tick if you found:  Cased caddis  Caseless caddis



## Key facts

-  0.5-4cm long
-  They make shells from stuff they find in the river such as twigs and stones
-  Some have no shells and instead look like a worm but with stumpy little legs

## Where to find them?

-  They are common in lots of ponds and rivers
-  They walk along the bottom or cling on to rocks

## Fun fact:

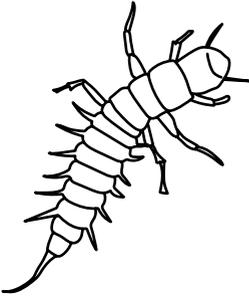
They make silk which they use to tie their shells together with.

Use this space to draw your own Caddis fly larvae

Pollution indicator: 

# Alderfly larvae

Tick if you found:  Alderfly larvae



## Fun fact:

Alderflies hop up to 250m between water bodies but only stay in the nicest ponds!

Use this space to draw your own Alderfly larvae

## Key facts

-  1-2.5cm long
-  Brown body
-  Frilly gills along the sides of their body that wave around

## Where to find them?

-  Like silty areas with low flow
-  Sometimes in fast flowing water but buried in the silt

Pollution indicator:    



Get in touch with us and share your findings and sightings. We love bugs and beasties too! So, we would be excited to answer any questions you might have or see what you caught.

## Share your adventures with us:



The Clubhouse, 106 Biggar Road Edinburgh EH10 7DU  
E: [trust@forthriverstrust.org](mailto:trust@forthriverstrust.org) T: 0131 445 1527

---

## Who are Forth Rivers Trust?

The Forth Rivers Trust aims to engage people with rivers and wildlife that live within the Forth catchment whilst conserving rivers and their important species for future generations. The Trust is involved with many projects ranging from full-scale restoration of rivers to engaging communities through organised events.



This booklet was made possible with funding from National Lottery Heritage Fund and those involved in the RiverLife:Almond & Avon project (2016-2021)