



BUG BUDDIES

TAKE PART
in the
Buglife and
RHS pollinator
survey

Learn
how to
identify the
creatures
of the pond

Make your
own: pond
dipping kit



Find
out
inside

*who can see above and below the
water at the same time*

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BUG WORD



A big hello to all my Bug Buddies!

Sorry I can't write more,

I'm presently up in the Himalayas filming.

There aren't many bugs here, as it's too high and cold, but did you know that flies occur up to 6300m in the Himalayas. Anyway, closer to home the bug life is much more interesting.

This issue will show you that there's a lot more to ants than just a nibbly nuisance that ruins your picnics! You also get to see that there are predatory goings on in your local pond to match any undersea mega-drama.

All the very best to my buddies in bugs...

STEVE BACKSHALL

Wildlife presenter and Buglife Vice President

A BIG THANK YOU

Buglife would like to thank Ecover for their support towards this issue of Bug Buddies. A special thank you goes to our members for their continued support.

ECOVER

Here, in the UK, Ecover are committed to protecting our water supplies - which is why our products contain no harmful nasties. They biodegrade quickly and easily with minimum impact on water animal and plant life, and use less water to neutralize. We do all we can to ensure we keep our waterways clean and safe for you and for the bugs! Ecover is happy to support Buglife and in particular our water-based bug buddies: Water is life - clean freshwater provides water for drinking, growing crops, making things, energy and transport - as well as keeping things clean, and natural protection from flooding.

ECOVER

Ecover Brand Manager

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BUG SPOTLIGHT

Narrow-headed ant



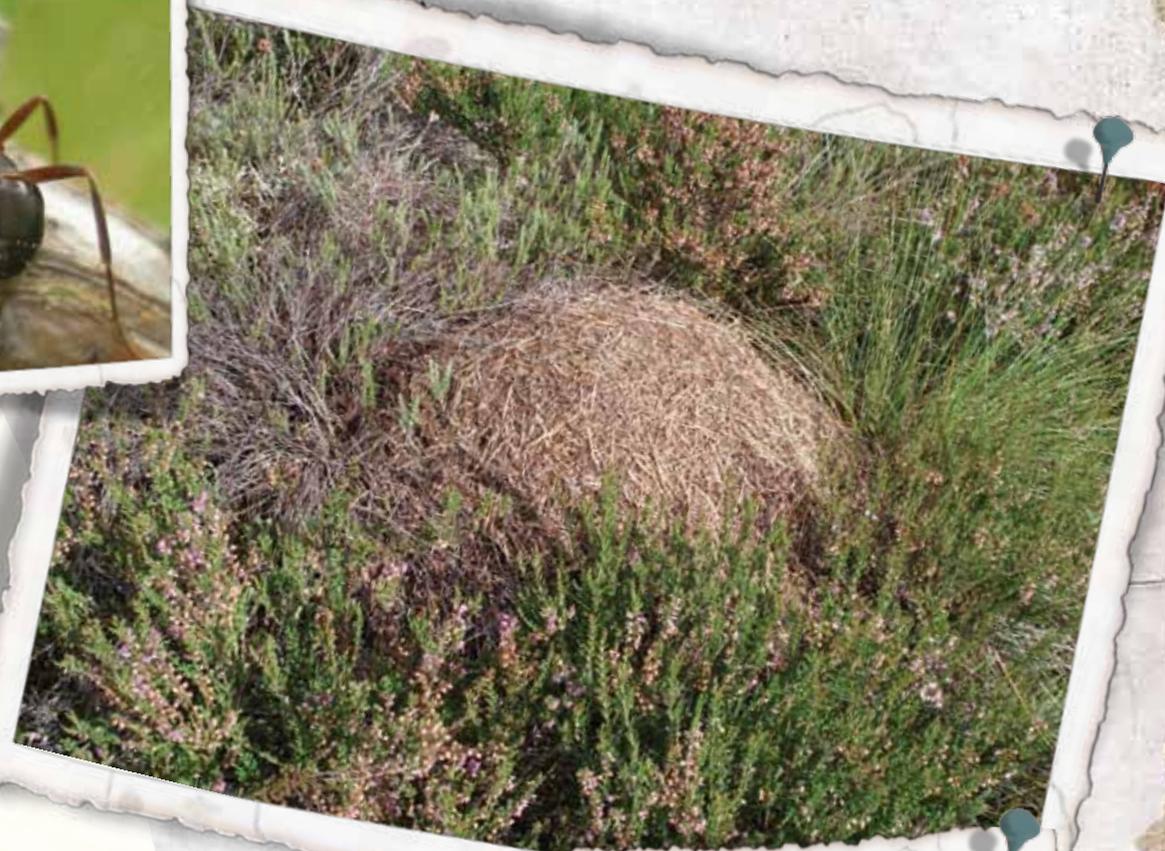
The Narrow-headed ant (*Formica exsecta*) is a rare wood ant that is only found in the Scottish Highlands and one site in Devon. There are five wood ant species but you can identify the Narrow-headed ant by the deep notch at the back of its head.

Narrow-headed ants are top woodland predators, stalking other invertebrates, and working together to take down larger prey. When they attack they reveal their secret weapon – acid! Spraying acid from their abdomen, they have deadly accurate aim.

Narrow-headed ants live in clearings and woodland edges, where they make nests which are about the size of a football and may contain 1,000 workers. They are also master builders! The nest is built around a clump of grass or something similar which a strong base and warmth from decaying plant matter.

The Narrow-headed ant has declined due to the loss of lowland heathland in England, by habitat loss and break up and disturbance by people.

Come along to a 'Wonderful Wood Ants' event or find out more about these animals at www.woodants.org.uk.



Rare-O-meter

COMMON

RARE

BUG MAKES

Do it yourself: pond dipping



Garden ponds are perfect for freshwater bug life including dragonflies, whirligig beetles and pond skaters. Bugs in ponds need freshwater to survive. Some freshwater bugs have gills for breathing under water, others have snorkels and some are like scuba divers carrying air bubbles underwater with them. Pond dipping is a great way to see lots of different types of freshwater bugs.

WHAT YOU WILL NEED:

For the net – a kitchen sieve

For the sorting tray – a large white ice cream tub, or a baking tray lined with white paper

Tea spoons – white plastic ones are the best

Identification chart - Beginners guide to creatures of the pond (see page 6)

Camera



HOW TO MAKE IT:

- 1** Kneel down when pond dipping and make sure you have an adult with you.
- 2** Half fill your sorting tray with pond water. Get an adult to help if you need.
- 3** Use your sieve to sweep a figure of eight pattern for about 10 seconds. Avoid the muddy bottom of the pond but sweep past plants as bugs might be hiding in there!
- 4** Bring the sieve out of the water and turn the sieve inside out into the sorting tray. Swish your sieve in the sorting tray until the sieve is mostly empty and put the sieve to one side.
- 5** Begin looking at the bugs using the spoon to scoop them for closer inspection.
- 6** Gently return the bugs to the pond, rinse out your sorting tray and sieve.



GET INVOLVED

Join the pollinator survey

Pollinating insects such as butterflies, bees and beetles are under threat. We need pollinating insects because they help plants to make lots of the food that we eat, including chocolate, strawberries and tomatoes. Pollinating insects need wildflowers for the pollen and nectar food they provide, and for homes and shelter. Pollinating insects are under threat from the loss of wildflowers in the countryside.

You can get involved by taking part in the pollinator survey. Watch the different flowers in your garden and see which insects visit them. Visit www.buglife.org.uk/pollinatorsurvey for more information.



Moths are the pollinator night shift, visiting flowers such as evening primrose and honeysuckle. 66% of larger moths have declined in the last 40 years.



There are 24 species of bumblebee in Britain, 6 are endangered and one species recently became extinct.



Beetles pollinated the first flowers that emerged at the time of the dinosaurs – more than 140 million years ago.



Chocolate production relies upon tropical flies to pollinate cocoa.



SNAIL MAIL BOX



Francis (age 9) has drawn this picture of a Lunar moth (*Actias luna*) for Bug Buddies. This is one of the largest moths in North America with a wingspan of up to 11.5cm.



Saul, aged 9, sent us this beautiful Swallowtail butterfly photo. This butterfly is very rare and can only be found in the Norfolk Broads where it lays its eggs on milk parsley.

Thank you to Noah in grade 1 for his question about insects.

Q. BIRDS HAVE FEATHERS, REPTILES HAVE SCALES, BUT WHAT IS AN INSECT'S SKIN CALLED?

A. Insects have a skeleton on the outside of their bodies called an exoskeleton. This hard casing helps to protect them and control the amount of water in their bodies.



Vicky Nall sent Buglife this photo of a bee and a beetle

looking very strange and asked us what was going on! We think the beetle may have been feeding on pollen and nectar on the flower when a bee came along poking its large tongue around, and the beetle bit it in defence!

Special snail mail



We received this photo from a grandparent and his grandchild. They found it in their garden and looked in lots of bug identification books but couldn't find out what it was. They emailed Buglife to find out - it is a Green shield bug nymph.



This is what an adult Green shield bug looks like.

BEGINNERS GUIDE TO BUGS

Creatures Of the Pond

A pond can be an amazing home for freshwater bugs including pond snails, whirligig beetles, pond skaters and dragonflies.

Pond snails

There are around 40 different species of pond snails in Britain including the Wandering snail and the Ramshorn snail. Pond snails have only two tentacles unlike land snails which have four. Ponds snails can vary in size from the large (7cm) Greater pond snail to the tiny (7mm) Dwarf pond snail. Snail shells come in different shapes from pointed spires to tightly-coiled.



Gastropoda

Pond skaters

There are 10 species of pond skaters in Britain. Pond skaters are predatory bugs that feed on creatures that fall on the water's surface and become trapped. They skate on the water's surface; they have four long skating legs and two short legs at the front for catching their prey and a pair of antennae.



Hemiptera

Whirligig beetles

There are around 350 different species of water beetles in Britain. The whirligig beetle gets its name from the way it swims in circles on the water's surface. They are black, oval shaped beetles with shiny wing cases covering their body. Whirligig beetles have excellent vision and two pairs of eyes allowing them to see both above and below the water surface at the same time.



Coleoptera

Dragonfly nymphs

There are around 30 species of dragonflies in Britain and they spend part of their life as ferocious underwater predators. The nymph is the life stage before becoming a winged adult. The nymph has an angular head, with an extendable jaw which it uses to catch live prey. They can shoot water out of their bum to escape predators!



Odonata

Mayfly larvae

There are 51 mayfly species in Britain. The name mayfly comes from a Greek word meaning 'living a day' because the winged adults have very short lives, usually between one and four days. The nymphs have three long tails and swim in short darting movements.



Ephemeroptera

Caddisfly larvae

There are 199 species of caddisfly in Britain. They spend part of their life as an underwater larva and the rest of their life as a winged, moth-like insect. Caddisfly larvae can look like a crawling stick or twig because they live inside a case made of leaves, twigs, sand or stones that is glued together with silk.

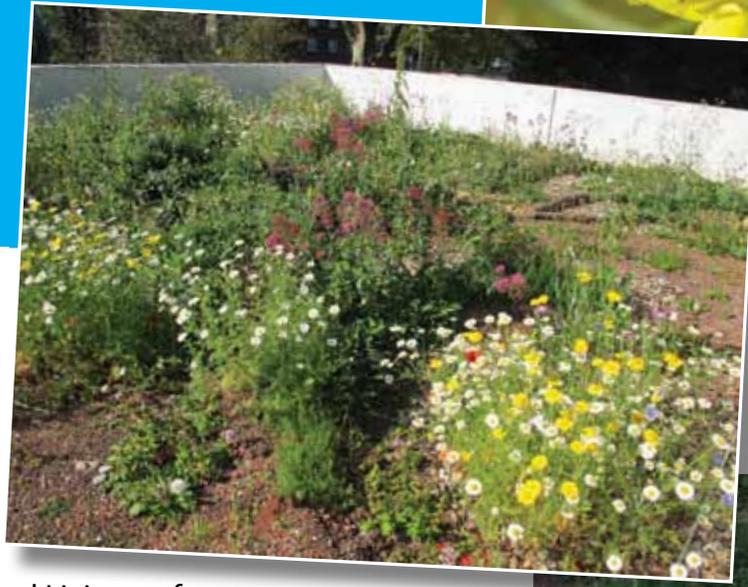


Trichoptera

Buglife NEWS

Living Roofs for London's Wildlife

As part of the Living Roofs for London's Wildlife project, funded by SITA Trust, Buglife and Livingroofs.org have built six roofs for wildlife in central London. The roofs were seeded and planted with wildflowers and grasses, which are full of pollen and nectar for insects such as butterflies, bees and beetles. Log piles and sandy bee banks were created on the roofs to provide extra homes for bugs. The bugs and creatures that visit these new roofs are being recorded to help with design improvements for future roofs.



Oil beetles survey results

Last spring Buglife, the National Trust and Oxford University Museum of Natural History (with support from Natural England) hosted an Oil beetle survey, asking people to send photos and records of their Oil beetle sightings. We received over 1,300 records, which we have used to create a distribution map, and a management plan that can target conservation efforts.



One of the amazing oil beetle photos submitted to our Buglife oil beetle Flickr group.

BUG BRAINERS

Can you work out what these bugs are?

A



B



C

