

ENTO-CLUB



Meet Natasha, the travelling entomologist! She loves insects, and would like to share her wisdom with you!



Ento-Club is funded by the Royal Entomological Society

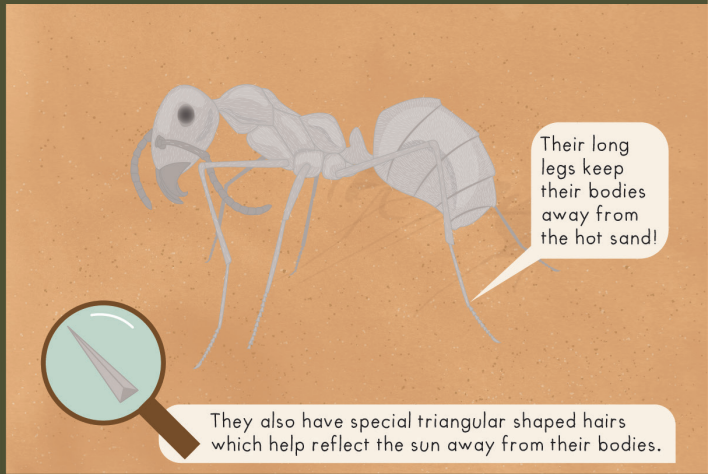
SOMEWHERE IN THE SAHARA DESERT...



Wow! 40°C. Even the lizards have taken cover. Perfect timing to spot the Saharan Silver Ant!

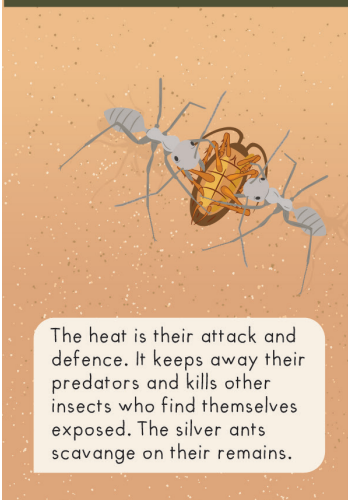


Ah! Found a nest of Saharan Silver Ants. Just what I was looking for. They come out during the hottest time of day.



Their long legs keep their bodies away from the hot sand!

They also have special triangular shaped hairs which help reflect the sun away from their bodies.



The heat is their attack and defence. It keeps away their predators and kills other insects who find themselves exposed. The silver ants scavenge on their remains.



Ah! It's getting too hot now. Even for the Silver Ants!



These ants are pretty cool, but I'm getting pretty hot! Time to go!

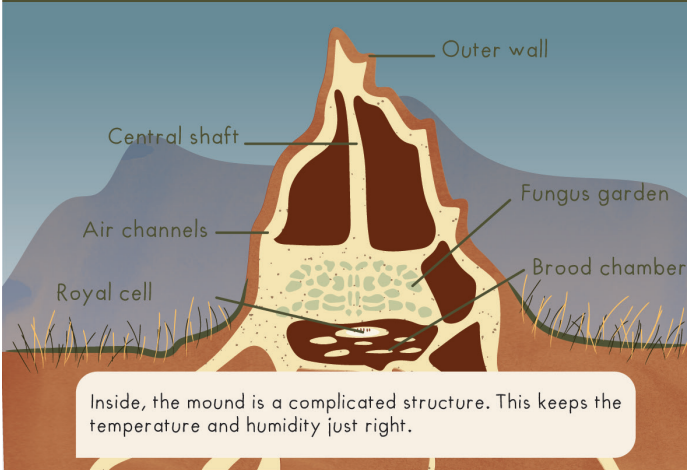
SOMEWHERE IN THE AFRICAN SAYANNA...



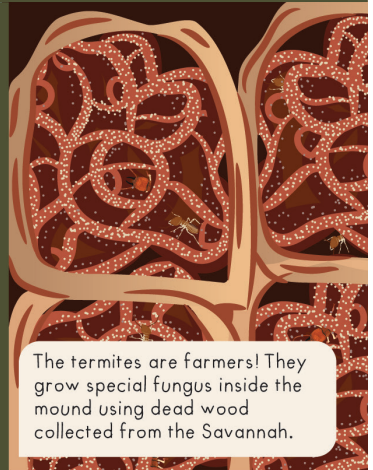
Look how tall this *Macrotermes* termite mound is! They can build them up to 5m tall.



Here are the defenders of the mound: the soldiers. Check out those jaws! They protect the whole colony.



Inside, the mound is a complicated structure. This keeps the temperature and humidity just right.



The termites are farmers! They grow special fungus inside the mound using dead wood collected from the Savannah.



The queen can live for 20 years and lays 20 000 eggs a day!

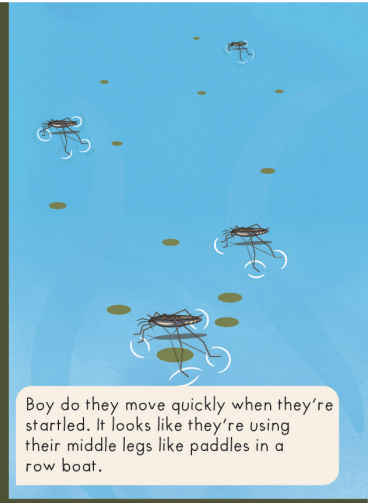


Termites recycle nutrients and minerals across the savanna. This means they are interconnected with everything - from insects to impalas.

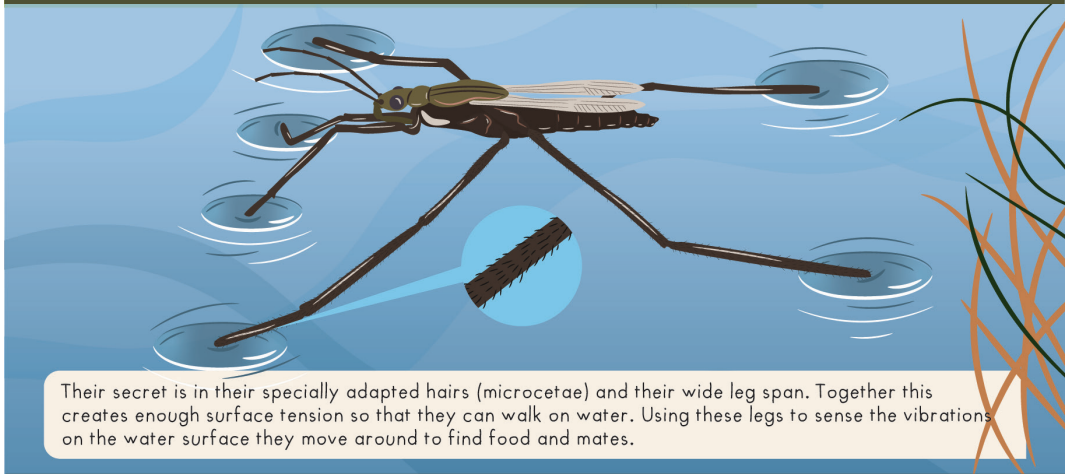
SOMEWHERE IN THE SOMERSET LEVELS...



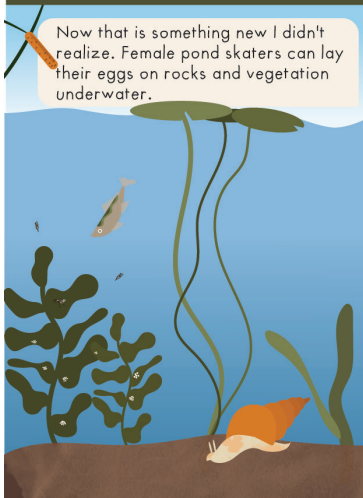
Oh wow! Look at all the pond skaters. It's so amazing how they can walk on water!



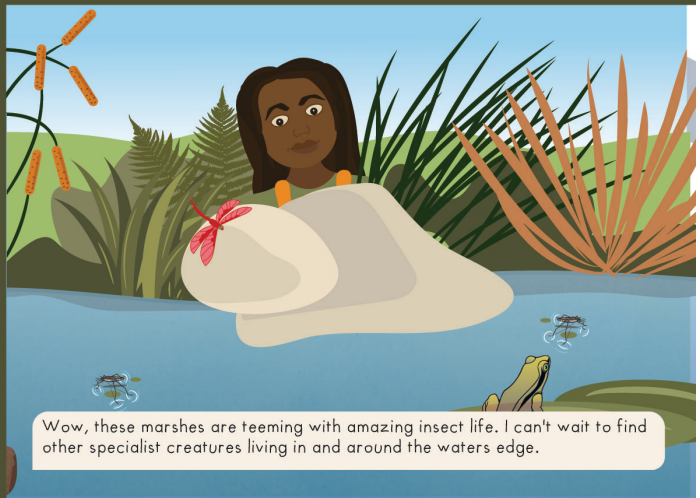
Boy do they move quickly when they're startled. It looks like they're using their middle legs like paddles in a row boat.



Their secret is in their specially adapted hairs (microsetae) and their wide leg span. Together this creates enough surface tension so that they can walk on water. Using these legs to sense the vibrations on the water surface they move around to find food and mates.



Now that is something new I didn't realize. Female pond skaters can lay their eggs on rocks and vegetation underwater.



Wow, these marshes are teeming with amazing insect life. I can't wait to find other specialist creatures living in and around the waters edge.

SOMEWHERE IN A SCOTTISH GLEN...

Oh wow! A red admiral butterfly!
These are some of the UK's largest butterflies!

Now it is basking in the sun, and it is also shivering! This is a really clever behaviour. The butterfly is shivering its wing muscles, just like we might shiver on a cold day. This movement of the muscles, without flapping the wings, generates a lot of heat!

They don't live here the whole year round, they migrate between southern Europe and places further north, like the UK. They lay their eggs here, which hatch and eventually fly south before winter, where the cycle then repeats!

Without shivering, and basking in the sun, these butterflies would simply be too cold to fly at this time of year, and this little guy has a long way to go if he's going to reach southern Europe in time for mating!

Coping with the cold is something that many insects have to deal with. Lots use the shivering technique to warm up quickly!



moths



bumblebees

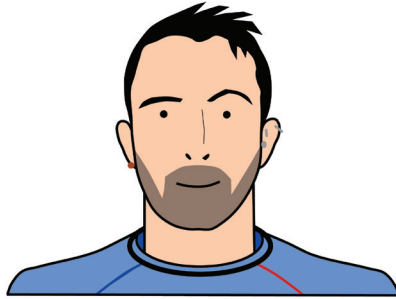


dragonflies



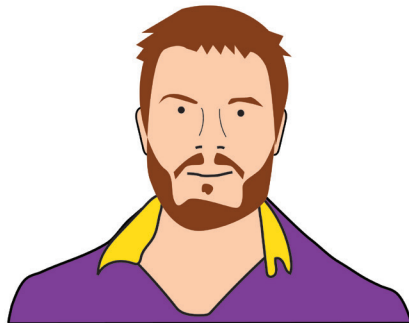
Ento-Club brought to you by:

TOM



I am fascinated by patterns in insect diversity! Most of my research looks at ants. Where I grew up in south Wales, there are only 3 different ant species. In the UK there are over 40! Where I now work, in the Drakensberg Mountains of southern Africa, there are over 90 species in a single valley! My experiments look at how ants cope with different temperatures along mountain ranges so that we can try to understand these big differences in species diversity across the world.

RUDI



The worldwide diversity of insects is astounding and new species are being discovered every year! I am interested in the evolution of new insect species and I use flies to understand the genetic processes that cause one species to split into two. I am also interested in entomophagy, which means studying how people use insects as food. The diversity of insects that are used as food and examining the nutritional quality of different species is a particular focus of my research.

