

Hello AQUILAnauts, and welcome to our glorious **GREEN ISSUE!** We promised you a veritable garden of delights, and here it is.

Here at AQUILA HQ we feel much safer knowing that across the world, a HUGE number of scientists are working to combat the effects of **climate change**. Let's check out just a couple of brilliant large-scale projects that are happening right now:

The Great Green Wall is a plan to prevent the Sahara desert from expanding southwards. Participant countries aim to plant millions of trees on a long, thin strip of land, crossing the African continent from Senegal to Djibouti – that's almost as long as the route from Paris, France to Beijing in China! When it's complete, it won't just stop the Sahara from spreading – it will also capture 250 million tonnes of carbon dioxide (CO₂) and provide a corridor for all kinds of wildlife. Amazing!

In last month's issue we talked a little bit about how truly brilliant mushrooms are. Now a mission is underway to map the planet's enormous fungal networks that help to transfer nutrients between plants and lock up CO₂ in the soil. These mycological networks are sometimes referred to as the Wood Wide Web. Using machine learning, scientists will build a picture of these networks so they can be learned from and protected.

What exceptional and imaginative eco projects are happening where you are? Why not find out all about them, then write and tell us? As always, we'll share as many of your letters as we can.

Freya Hardy, ed

We hope you have a marvellous month of May. Don't forget to slap on some factor 50 and join us back here in June for our sun-worshipping Solar Science issue.

PAGE 4

Talk about a garden rescue
Forget Hulk, Groot and Poison Ivy, *this* is what we call plant power. Meet some genuine horticultural heroes and verdant villains, here!

PAGE 6

It's not all bad news. No. Really. Climate change can feel like a scary subject, but did you know that the answers are already here? That's right. Low cost solar, wind and battery technology can provide everything we need to reduce emissions by two thirds. It's still all to play for. Here's our accessible and very much non-scary introduction to climate change.

PAGE 8

Here we go again
Our ancient ancestors may not have had metal straws and food waste collection campaigns but they definitely knew a thing or two about recycling. (I for one have been wheeling out the same jokes since at least 1996.) Check out our history of reuse and refuse, here.

PAGE 10

They're big, they're bright. They grow both day and night.
Harvey's exploring the ultimate STEM project: sunflowers. How do they get so tall and so strong so fast? Find out here.

PAGE 12

It's all going to plann
This month Polly's making a brilliant basket from plastic yarn. Made from old/broken plastic bags and used cereal boxes, it's a masterclass in make-do-and-mend.

PAGE 26

AQUILAnews

and Ian!

PAGE 14

This might sting a bit
Can you clamber through Cleopatra's tomb, dodging dangerous glow-in-the-dark deathstalker scorpions to retrieve the enchanting emeralds? Find out in this month's a-maze-ing **Brainfeeders**.

PAGE 20

Roll with it
Play our brilliant Go Green board game. To emerge the victor, all you have to do is make sure your street is the greenest place in the world for an entire day – it's bound to be absolute chaos. We love it!

PAGE 24

Glow up
With the last firefly caught in her jar, Elvi faces a difficult choice. Should she stick to the plan and sacrifice her special place in order to save her and Pa from a life of hardship, or is there another, braver way? Find out in this month's moving short story, *The Last Firefly*, by **Amy Sparkes**.

PAGE 16

Tree-hugging heroes
I bet you thought standing up for the planet was a totally new thing, right? WRONG! **Aquila** meets some ancient eco activists.

PAGE 18

As far as the eye can see
Is my green the same as your green? **Harvey's** taking a look at colour science!

PAGE 22

Where've you bin all my life?
It may sound stinky, but composting is fun and great for the environment! We're breaking it down for you here. (Still sounds a bit gross! Ed)



Illustration: Takayo Akiyama