

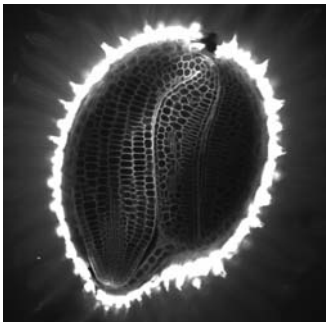
biology

week
2012

The first ever Biology Week is being held on 13-19 October, organised by the Society of Biology.

Biology Week will inspire people of all ages and backgrounds with the fascinating science of biology, and give everyone the chance to get involved with life science events. These are taking place around the UK, including an attempt to set the world record for the largest memory game, and a debate on whether we should save the panda.

Biology Week will become an annual celebration of biology, and its launch is being celebrated in the House of Commons, organised by the Society of Biology, in partnership with the Biotechnology and Biological Sciences Research Council (BBSRC). MPs and Peers have been invited to the Churchill Room on 17 October from 7pm-9pm.



Arabidopsis embryo ©Ricardo Randall

SHOULD WE SAVE THE PANDA?

As one of the world's most charismatic species, the panda is arguably one of conservation's greatest success stories. After years of decline the panda population is thought to be increasing. New reserves have been created, poaching and illegal logging have been reduced, and conservation projects have helped people and pandas coexist.

But at what price? Could the resources used to protect pandas be put to better use elsewhere? Insects and plants attract less attention, but often have a far greater impact on the health of humans and ecosystems.

In a special debate during

Biology Week invited panellists and members of the public will discuss whether the panda's extinction is inevitable or whether we should continue the fight to save it.

You can have your say about whether ploughing resources into the panda is taking resources away from more worthy causes, or if the attention the panda receives, and the reserves it lives on, benefit global conservation. [Cast your vote at www.societyofbiology.org/panda](http://www.societyofbiology.org/panda)

HOW BIOLOGY CAN SAVE THE WORLD

Biology is at the heart of many challenges we now face, from food security, to species extinction, and from climate change to an ageing population. The Society of Biology's 2012 photography competition was themed 'how biology can save the world', and received thought-provoking photos of biological problems and solutions. The winner will be announced in an awards ceremony during Biology Week and the other shortlisted entries will be on display at the Parliamentary launch and can also be seen at www.societyofbiology.org/newsandevents/photocomp/2012winners

Water shortages and contamination are set to be huge problems globally, and biological research to reduce the



Microbial Ecology lab ©Mohammad Moniruzzaman

impact includes development of drought-resistant crops and research into water-borne diseases. Khalid Rayhan Shawon's photo from Gabura, Bangladesh shows the villagers' solution to drinking water: rain. The village was submerged in Cyclone Aila, 2009, and since then salt has left the water undrinkable.

FLYING ANT SURVEY

Flying ant day is one of the greatest spectacles of the British summer, and for many people brings back memories of sunny afternoons during the school holidays. To turn people's anecdotes into a scientific study, the Society of Biology launched a flying ant survey, and the



Black Garden Ants, ©Philip Gould

"After such a wet summer it was wonderful to see so many flying ant reports coming in, interestingly starting at a very similar time to last year. We expect flying ant day to be different around the country, and we're really interested to learn more about this."

Despite its size, the black garden ant has a huge impact on our countryside, from improving soil fertility to pollination and pest control. Ants are also important as food for wildlife; many people are alerted to the presence of flying ants by the sound of feasting gulls and swifts.

Dr Mark Downs, CEO of the Society, commented: "The support we have had from scientists and members of the public has been amazing and we've had over 6,000 records of flying ants. We could never collect this kind of data without the help of amateur recorders."

WORLD RECORD ATTEMPT

At 2.30pm on Friday 19 October, the Society of Biology is aiming to set the record for the world's largest memory game. At venues around the UK and beyond children and adults will spend 10 minutes testing their memories, and will learn about the intricate science of the brain. In order to claim the title, the Society needs over 1,000 people from at least 10 venues to take part.

Alongside the game, resources for adults and school pupils are available on the Society of Biology's website. To learn more about how the memory works you are invited to visit www.societyofbiology.org/memorygame

REGIONAL EVENTS

Charities, learned societies, science centres, schools and universities have partnered with the Society of Biology to run their own Biology Week events. Here are three snapshots of what is going on.

In Scotland, researchers from Glasgow University and Strathclyde University will be demonstrating their exciting research at the Glasgow Science Centre. This will include interactive activities, objects to handle and the opportunity to ask lots of questions.

At the Society of Biology's offices in London, scientists and policy officers will discuss the future of research careers at an event organised with the Biochemical Society and the British Ecological Society.

Throughout the week the Marine conservation charity ORCA will be organising workshops for schools about British whales and dolphins.

To find out what is happening in your constituency please visit <http://www.societyofbiology.org/newsandevents/events>



Gabura, Bangladesh ©Md. Khalid Rayhan Shawon

As biologists tackle the challenge of feeding a growing population, basic research is needed into plant genetics and physiology. Ricardo Randall used fluorescence confocal microscopy to photograph an embryo of an Arabidopsis plant – a species widely used for laboratory research. Imaging seeds this way reveals information about the cellular structure of embryos lacking certain genes. This can help identify genes used to make bigger seeds, and can tell us why germination times are different in plants lacking particular genes. Germination of seeds can lead to farmers having to throw away produce.

Microbial ecology provides valuable information about the role of microorganisms in climate change, and research contributes important information to help mitigate the effects of climate change. Mohammad Moniruzzaman's photo shows a graduate student studying algae in a Microbial Ecology laboratory.

results from 2012 will be presented during Biology Week.

Most ant swarms seen in the UK are the black garden ant. Throughout the year it is common to see the workers, sterile females collecting food for the nest, but each summer there is a spectacular emergence of flying ants. These are males and young queens leaving the nest for their mating flight. Having mated, the new queens will drop their wings and found their own colony.

The survey has been designed to reveal whether flying ant day is the same across the UK, and study how it is connected to the weather. It is important that the mating flights are synchronised between nests because the ants need to maximise the chances of meeting ants from other colonies with which to mate.

Dr Adam Hart, an ecologist and insect expert at the University of Gloucestershire, is working with the Society of Biology on the survey. He says:



Student with dolphin skull. ©ORCA