

KIT CLUB NEWS!

New Life in Life Cycles

If you don't want your kit, someone will
Kit couriers out & about

We have felt for some time that our Life Cycle kits have lacked real opportunities for practical work, until now that is .. thanks to a generous donation from SAPS (www.saps.org.uk) we have added 2 light-banks for the growth of 'fast-plants'. The kit has been successfully trialled both in our lab (growing peas, radishes and fast-growing Brassicas - *Arabidopsis* spp.) and at Hockering Primary School.

Some of their results are shown on the right and feedback from the school was really positive. Headteacher Mike Long highlighted just how easy the kit was to use and how it engaged his pupils (Yrs. 3-6). The light-bank means you can grow healthy plants all year round, with the fast-growing Brassicas, the workhorse of plant science, completing their life cycle, seed to seed, inside 7 weeks no matter what the weather.



Many people book kits in advance which is fine just so long as YOU REMEMBER to collect the kit! Ringing us to tell us you can't get here till next week is fine but if we've heard nothing 14 days after your booking was due to start it might not be here, rather than disappoint another school, we will reallocate the kit.

Have you been disappointed when you can't get hold of the kit you want? - well we do listen and have started to duplicate our most popular kits, so fingers crossed next time you call ...



Full kit information www.tsn.org.uk,
under Kit Club,
or contact tsn.kits@bbsrc.ac.uk -
email is our preferred method
of kit booking.
Alternatively, telephone Carol Hince on
01603 450619,
Wednesday - Friday inc.

Left: The first kit to be couriered returns to JIC in Brian McKenzie's safe hands - Brian is one of 6 couriers helping TSN

Primary Science cpd

In the coming months TSN is hosting a 2 day course on behalf of the Science Learning Centre entitled 'Leading Science in the Primary School.' Day 1 of the course will be held on 28th February, at the John Innes Centre, with the second date following at the end of April (29th). Links to the SLC webpage for full details and registration for this course can be found on the TSN-website (www.tsn.org.uk). The course has been developed by Rosemary Feasey and will be run by her.

Although not responsible for course content we will ensure there is a good lunch for all attendees!



The annual Holt & District Farmers Club, Student Day takes place on 3rd July 2008 at Wickmere and provides 6th formers with a cross-curricular look at the Business of Farming. Contact Rob Brown (01553 770771) for more information.

New Members - Welcome

Teachers

Ms. Angie Tuck, Kirkley Middle School
Mrs. Nici Bragger, Lodge Lane Infant School
Mr. James Beales, County Upper School, Bury St. Ed
Mrs. Carla Hall, Sacred Heart Convent School
Mrs. Liz Hawkes, Robert Kett Junior School
Mrs. Alison Kerr, Ethel Tipple Special School
Ms. Hilary Bushell, City of Norwich High School
Miss. Joanne Wright, St. Nicholas Junior School

Scientists

Miss Pauline Radreau, University of East Anglia
Mr. Shantanu Karkare, John Innes Centre
Dr. Iain Searle, Sainsbury Laboratory, JIC
Dr. Michael Lenhard, John Innes Centre
Dr. Sara Tucker, John Innes Centre
Mr. John Williams, The Babraham Institute
Mr. Jon Wright, John Innes Centre
Dr. Jan Kaiser, University of East Anglia
Dr. Jelena Gavrilovic, University of East Anglia
Miss Emma Meader, John Innes Centre
Miss Hayley Jeffries, John Innes Centre
Dr. Tim Osborn, University of East Anglia

Dates for your diary more on the website

- 28th February - Primary Science course - Part 1, JIC
- 4th March - STEM workshop, Duxford
- 11th March - CarboSchools event (see front page)
- 12th March - NSEW event, JIC (p.3)
- 29th April - Primary Science course, Part 2, JIC
- 17th Sept. - Microscopy Day at JIC (more in next newsletter)



Teacher Scientist Network (TSN)

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Email ts.network@bbsrc.ac.uk,
Chairman: Prof. Keith Roberts

www.tsn.org.uk

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TSN News

TSN a shining beacon across Europe 2 recent grant awards help secure TSN future



beacons for public engagement

A recent bid by the University of East Anglia (UEA) to the Beacons for Public Engagement initiative, with TSN as a major partner, has been successful, securing £1.2M to help UEA and its partners engage with the local community of parents, teachers and pupils.

Through our partnership scheme we have provided a route for scientists to engage with teachers and schools for 14 years. This involvement has never been more important and the Beacons scheme, jointly funded by the UK higher education funding councils (HEFCE), Research

Councils UK and the Wellcome Trust, is designed to establish a coordinated approach to recognising, rewarding and building capacity for greater public engagement.

This award will further help TSN support scientists who want to work with schools and we hope encourage more to take part in our activities. We also feel strongly that our model can be applied across to other disciplines and hope others can learn positively from our experiences.

UEA is one of only six beacons across the UK, the others being focussed on the universities in Manchester, Newcastle, University College London, Cardiff and Edinburgh, with a national coordinating centre in Bristol. You'll be sure to hear more about our local Beacon, Community University Engagement East (CUE East), over the next 4 years and see a permanent physical presence for the University in The Forum, Norwich later in year. These are indeed exciting times ...



CarboSchools



TSN will host the kick-off meeting and training session for partners in the CarboSchools project funded as part of a bid to the EU Framework 7 Science in Society programme.

The Carbon science community across Europe is keen to work with schools and our best practice model was part of the successful project proposal with 7 other partners from across Europe. In line with our 'bottom-up' approach we are building in a Twilight cpd opportunity to this meeting so that local secondary schools can hear about how they might be involved in the project and input some curriculum guidance to those involved but also be updated in some key developments in Carbon science (a mini-Master Class).

Flyers will sent to schools shortly but please mark your diaries: Tuesday 12th March, approx. 5.30 - 7pm, JIC

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Partnership News - Hanneke Luijting (UEA) and Sam Farrington (Tuckswold Community Primary School)

Last year Hanneke took part in a research cruise to Antarctica and kept in touch with her class while on the ship with a web-diary. The aim of the cruise was to deploy 40 drifters (buoys equipped with GPS tags), and the school followed the trip closely, <http://lgmacweb.env.uea.ac.uk/adelie/ADELIEPhotos.html>

“The children were fascinated by Hanneke’s journey to the Antarctic. We followed their progress every couple of days through the on-line journal they had set up” said Sam, “The children were always eager for the next instalment and to keep track of their drifter.”

Hanneke asked all the children in her class to decorate a polystyrene cup with a waterproof marker before she left, flying to the Antarctic with her hand luggage full of polystyrene cups and flying back with a load of crushed cups! The cups were attached to one of the instruments on the ship and were lowered to the ocean bottom (up to 4000m deep!). The cups were crushed by the water pressure at such depths, and returned to the surface as miniature versions of what they were before.



Both the trip and Hanneke’s visits to the school have been a valuable experience for the pupils “They learnt so much from Hanneke about different aspects of the trip, from the animals they saw to life on the ship. The class found the cup experiment particularly exciting and could not wait to take them home and show them off.”



Shackleton the cruise mascot with before & after cups

So what does Hanneke think about her partnership, “It was great fun, and I enjoyed talking to the children. The partnership has been very rewarding for me, though I do have to disappoint the children sometimes. The first time I came to the school, one boy asked me what the meaning of life is. He was truly disappointed that I couldn’t give him the answer – he thought scientists knew everything...!”

Sam was similarly enthusiastic “It was fantastic for the children to have a working scientist come in and explain some of the ideas behind these topics. They learnt much more than my subject knowledge would have allowed.”

IMPORTANT: TSN & STEMNET are both looking for volunteers to offer case studies about their partnership - please email Phil if you are willing to take part

International Polar Year (IPY)

... Annual Meeting 2007 and much more

Our Annual Meeting for this academic year was held back in October, and we were joined by ex. British Antarctic Survey scientist, John Digby, who described beautifully and eloquently life as a research scientist in the frozen depths of Antarctica where the sun fails to appear for 3 months and whiteouts are common. John’s talk was wonderfully illustrated as he developed a keen interest in photography during the trip (see www.johndigby.co.uk). The high standard of the buffet and the giveaways both contributed to another great evening



© John Digby photography

In order to have full and equal coverage of both the Arctic and the Antarctic, IPY 2007-8 covers two full annual cycles from March 2007 to March 2009 and will involve over 200 projects, with thousands of scientists from over 60 nations examining a wide range of physical, biological and social research topics. It is also an unprecedented opportunity to demonstrate, follow, and get involved with, cutting edge science in real-time.

For teachers, there are online resources at www.ipy.org/index.php?/ipy/detail/international_polar_days including the chance to get involved with the next virtual balloon launch on March 12th when the History of the Earth is the specific theme to be addressed.

Evolution - ideas & questions

Evolution Matters is an exciting new television series being produced by Maverick TV (in conjunction with the Wellcome Trust) tackling the issues and concerns that accompany teaching Darwin’s theories. It will showcase inspirational teachers, scientists and educators who excite and engage students with innovative lessons, visual experiments, stimulating workshops and exciting field-trips. The series is aimed at inspiring science teachers to bring those successful methods into their classrooms (more details at www.tsn.org.uk)

Research Councils UK (led by the BBSRC) have just launched a new website, www.darwin.rcuk.ac.uk to find out what you want to know about evolution. The site will highlight topics showing the relevance of modern evolutionary science and ideas, from superbugs and robots, to culture and art. Take a look and tell them and exactly what you want to know about Evolution



Science Week 2008 at the John Innes Centre

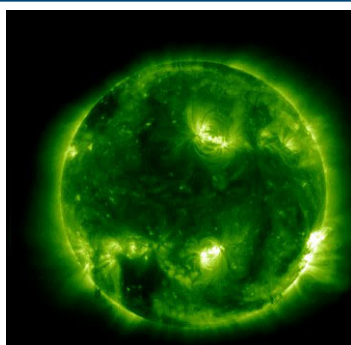
“Breaking the Silence”
Wednesday 12th March 2008

Doors: 18:30 Performance: 19:00

Breaking the Silence is a play in memory of the American ecologist Rachel Carson who wrote “Silent Spring” in 1962 overcoming the opposition of government, industry and her own failing personal health in order to alert the world to the careless use of chemicals in our environment (www.rachelcarson.co.uk)

The performance will last an hour and a quarter and may be followed by a post show debate around some of the issues tackled in the play (tbc)

Tickets are FREE but places must be reserved with Dawn Barrett
Tel: 01603 255328
email: dawn.barrett@bbsrc.ac.uk
(if thinking of bringing pupils we advise Yr11's and above)



It was just over 50 years since the launch of Sputnik, the first artificial satellite, and the dawn of the space age. That was October 1957 and 2 websites mark the occasion - www.space50.net (basic overview) and www.sunearthplan.net/7/ihy goes into more detail.

Competition Time

Science Film Competition - make a 6 minute film about the impact of climate change or human activities on marine ecosystems. The flyer describing this pan-European competition, run by the EUR-OCEANS project can be downloaded from the News & Events pages of the TSN website, www.tsn.org.uk



Upto £5000 is available if you can think of an idea to improve science teaching in your school or college and then enter the Rolls-Royce Science Prize, www.rolls-royce.com/scienceprize

Do you know someone with a fresh and clear way of writing about scientific ideas? If they are aged between 15 and 28 they should think about entering the Daily Telegraph and Bayer Young Science Writer award. See www.science-writer.co.uk for more details

Xperimania

FROM MOLECULES TO MATERIALS

www.xperimania.net

Explores the properties of materials, and aims to understand some of the processes involved in creating materials used in MP3 players, tennis rackets and sports shoes

Disappointed by the lack of a publication marking the event, Prof. Colin Pillinger has produced a sideways look at space exploration and scientific discoveries through the medium of cartoons. Not available in the shops, ‘Space is a Funny Place’ can be purchased direct from the author, colin.pillinger@btinternet.com £17.50 (inc P&P)

Also recently launched is the Suntrek website with lots of teacher generated resources at www.suntrek.org

Dr. Helen Mason from Cambridge University who has worked with TSN several times, including our successful Solar Physics Master Class, is one of the lead scientists on the project.

Help us, to help you

These are clearly exciting times for TSN and in the years to come ongoing guidance from our Steering Group (SG) will help turn these recently funded projects into really useful resources or activities for our teachers. Would you like to help with that process?

Due to recent retirements, we are seeking both a new primary teacher member and a secondary teacher member (with responsibilities for sixth-form).

In joining the Steering group you assume the role of trustee to the charity (TSN is a registered charity, No. 1096208) and choosing new Trustees is an important task.

If you support the aims and objectives of TSN, and would be available to attend upto 4 after-school meetings a year (beginning about 5.30pm) and which never last more than 2 hours, please get in touch with Phil.



SG 10th Anniversary outing, London, 2004

VIth form helpers

The Perrott-Warrick Project on unexplained human abilities is looking for Research Helpers to take part in research programmes on precognition involving text-messages and on the effects of joint attention.

The test procedures are described at www.sheldrake.org at the Online Experiment Portal. Each helper will do one of the tests themselves, and then recruit several other people to serve as subjects.

Upon completion, each helper will receive £50 and a certificate of research experience from the Perrott-Warrick Project. They will also be eligible for taking part in further research projects.

Interested parties should email Rupert Sheldrake (rsheldrake@clara.co.uk) with some brief information about yourself. Put in the subject line of your email the word “precog”.