

IUSSI, British Section (International Union for the Study of Social Insects) Autumn/Winter Newsletter 2007

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Contact him with: information and suggestions for the web site.

Meetings site: <http://www.zi.ku.dk/iussi/meetings.html>

Who's who site: <http://www.zi.ku.dk/iussi/newsletter.html>

Upcoming Meetings

Winter Section Meeting 2007

The 2007 IUSSI British Section Winter meeting will take place at the Natural History Museum, South Kensington, London on Friday 7th December. This venue worked really well last year, and Paul Eggleton at NHM has kindly secured it for us again this year.

We have an exciting line up of talks, and the schedule is now full. We have been inundated with requests to talk at this year's meeting, particularly by students. This is great news, but please do not feel hard done by if you didn't get a slot this year. We hope that those of you who were unable to be squeezed into the talk schedule will instead bring a poster. The poster session is completely open, so anyone can just bring along their poster and stick it up. Our guest speaker this year is Tom Collett from University of Sussex.

A new addition to this year's meeting is that we hope to hold a drinks reception at the end of the day, to give everyone a chance to mingle together, rather than getting lost in the pub-network of South Kensington. This will also be a good time to view posters. Please bear this in mind when making your travel plans. We anticipate the reception to end around 6.30pm (tbc).

Other relevant meetings

ICE 2008 – Celebrating Entomology: Contributions to Modern Science. 6-12 July 2008, Durban, South Africa. See: www.ice2008.org.za

IUSSI European Sections Meeting, 30 August – 4 Sept. 2008. La Roche-en-Ardenne, Belgium. See: www.ulb.ac.be/EU_IUSSI_2008

Remember to check out upcoming meetings on the IUSSI British Section website
<http://www.zi.ku.dk/iussi/meetings.html>

Important Announcements

Student conference grants: We are delighted to announce that the student conference grant has now increased from £100 to £250.

See <http://www.zi.ku.dk/iussi/studentgrants.html> for eligibility and application details.

News for Newsletter: The established method of gathering news for this bi-annual newsletter is to email all IUSI British Section group leaders, asking for a summary of their group's news and activities. This makes it much easier for me to put the newsletter together. However, I am aware that several members have missed out on the opportunity of sharing their news with us, for various reasons. I have now instigated deadlines for the newsletters, and invite any member to email me with their news (concisely!) by 15th April (for the Spring/Summer edition) and 15th October (for the Autumn/Winter edition). These dates are also given on the website. I will still send out reminders to group leaders: if you have not been receiving these requests and think you should be, then please email and I will add you to the list.

Spring/Summer Field trip in Finland

The Helsinki crew organized the IUSI field excursion on June 7th-10th with participants from Ireland, England and Finland. The excursion was organized using Tvärminne Zoological Station, a University of Helsinki field station in Hanko, as a base, and making half to one-day excursions from there. The excursions covered various habitats and their social insect fauna in the area, including the archipelago, sand dunes and beaches, bogs and boreal forests of different kind. The crowd was small but enthusiastic, and the participants seemed to enjoy both the exotic Finnish nature and particularly the bright nights of the north of Europe.



The Buzz from around the Section

Norwich - **Andrew Bourke's** group is growing at the University of East Anglia. **Lucy Friend** has joined him from the University of Sheffield as a NERC-funded Ph.D. student, and will be investigating novel means of testing kin selection theory in the multiple-queen ant *Leptothorax acervorum*. **Nehal Saleh** arrives on 1 November to take up her British Ecological Society Early Career Project Grant. Nehal will be working on the chemical ecology of caste conflict in ants. **Jouni Sorvari** is ending his Academy of Finland fellowship with several months of fieldwork in Australia on the foraging ecology of polydomous ants. While in the field, Jouni is being hosted by the University of New South Wales. Meanwhile, **Lorenzo Zanette** and **Sophie Miller** have been busy conducting observations on bumble bee colonies over the summer in order to quantify rates of egg-laying and egg-eating by queens and workers.

Sheffield - Big changes at University of Sheffield as **Francis Ratnieks** relocates to University of Sussex, where he will once again be Professor of Apiculture. Sussex will have a large group of people working on social insects including Prof. Jeremy Field, Prof. Tom Collett, and Dr. Paul Graham. They also have some keen converts to the study of ant organization and foraging in the form of Profs. David Waxman and Jonathan Bacon. Meanwhile, Francis' lab has said goodbye to 3 PhD students, all of who successfully defended their theses. Many congratulations to all of them. Here are some details of their current activities:

Elva Robinson finished her PhD entitled "Self-Organisation in Ants: A Behavioural & Theoretical Study of Foraging and Nest Excavation", and passed her PhD viva before Christmas last year. She has now joined Nigel Franks' lab in Bristol in January this year, where she is conducting post-doctoral studies using RFID technology to investigate division of labour in ants.

Margaret Couvillon submitted and defended her PhD in July on "Mechanisms of Nestmate Recognition and Guarding in Honey Bees and Stingless Bees." She passed without corrections, which was good because she pretty much immediately had to pack up and move to Tucson, Arizona. She is now a postdoc in a program called PERT (Postdoctoral Excellence in Research and Teaching), which is an NIH fellowship that funds her independently for a 3 yr research program and also allows her to teach one course. Her research is based in Anna Dornhaus' lab at Arizona. Anna is an assistant professor at the UofA; she did her PhD in Germany and her postdoc with Nigel Franks in Bristol.

Antonio Perez Sato also completed his PhD with Francis Ratnieks and is back in his old institute in Mexico (Colegio de Postgraduados, Veracruz) where he will be doing applied research on honey bees and training people.

Leeds – **Bill Hughes** started at University of Leeds last October as a lecturer and has since been busy setting up the lab, accumulating ant colonies and marvelling at the speed of university bureaucracy. His first eight recruits were kindly donated by Koos and Francis, and a brief sojourn to Panama has given them a bunch of friends to play with, in spite of the best efforts of Iberia Airlines. He plans on continuing to use the leaf-cutting ants as his main model system but is enjoying the freedom to start experimenting with some other interesting beasts (his words not mine – Ed). **Crystal Frost** started her PhD with Bill this October and will soon be joined by a postdoc, both studying *Wolbachia* in leaf-cutting ants. In the meantime a succession of students has been preventing the ants (and Bill) getting any peace. **Emily Aron** and **Tim Cockerill** have recently finished their MRes projects working on disease recognition in Pharaoh ants and immunity in the leaf-cutters respectively; **Tom Walker** has completed an impressively productive Nuffield bursary; **Tim Stratton** and **Sara King** now have projects well underway on metapleural gland function and age immunity respectively. Fortunately, **Alan Reynolds** will be joining Bill's lab in the coming months to provide some technical assistance in helping keep everything in line.

London – Chittka - Lars Chittka's group continues to expand at Queen Mary's University London. **Helen Muller** is a new PhD student studying bee behaviour (specifics to be determined). **Sarah Arnold** started her PhD last year. She works on flower colour and pollinator colour perception in bees. She launched an open access database that contains flower reflectance spectra for ecological and evolutionary studies on flower colour and bee perception. This can be found here: <http://www.biology.qmul.ac.uk/research/staff/chittka/chittkalab/index.html>

Ralph Stelzer also started his PhD last year, working on circadian rhythms. Finally, Dr Mathieu Molet has begun his postdoc on a 1 year NERC funded project to study pheromones in bumblebees.

Tom Ings and **Nehal Saleh** both became Dr.s earlier this year. Nehal is currently dividing her time between two postdoctoral positions at Norwich and Lund (Sweden). Tom Ings succeeded on getting a NERC grant to work on bee learning about predation threat. **Elli Leadbeater** is in the final stage of writing up and will start a postdoctoral position with Jeremy Field (Sussex) next year. Finally, many congratulations to postdoc Dr **Nigel Raine** who landed a grant from the BBSRC this year to study trap-lining in bees.

Meanwhile....Chittka continues to sit in his office and writes emails 12 hrs/day.

Belfast - **Rob Paxton's** lab at Queen's University Belfast was recently joined by **Emily Davis**, having completed a degree in biology (1st class honours) at Queen's University Belfast. Her interests are in conservation biology and so one aspect of her thesis work will focus on a rare and declining bee species, *Colletes floralis*, including aspects of its conservation genetics. More microsatellites.

Both **Julia Klee** and **Tomás Murray** successfully defended their PhD theses this early summer 2007 and have now departed Belfast. Julia's thesis examined the biology and genetics of the bumble bee microsporidian parasite *Nosema bombi*, whilst Tom's thesis revolved around Irish bees. For those interested in bees, the collaborative project that funded Tom's thesis (a joint TCD Mark Brown & Úna Fitzpatrick – QUB Tom and Rob project) has a searchable website, 'The Bees of Ireland' at: <http://www.tcd.ie/Zoology/research/bees>

Julia is currently writing up further publications from her thesis work, having had 3 already published or accepted, whilst also looking around for suitable postdocs. Tom jumped straight into a postdoc at Teagasc (Department of Agriculture of the Republic of Ireland) in County Carlow, working on the impact of commercial imports of the bumble bee *Bombus terrestris* on indigenous conspecifics.

Other group members currently in residence at Belfast are Dr **Joachim de Miranda** and PhD student **Orlando Yañez**, both working on an EU funded project, Bee Shop, that aims to map disease resistance traits in the honey bee (FOOD-CT-2006-022568). Its website is at: http://www2.biologie.uni-halle.de/zool/mol_ecol/research_f.html

Antonella Soro, working on the population genetics of the facultatively social sweat bee *Halictus rubicundus*, and **Emma Seale**, working on the conservation biology of the marsh fritillary butterfly, *Euphydryas aurinia*, continue with their PhD studies. Antonella is due to talk at our 7 December 2007 section meeting about some of her work.

Finally, the September 'Applied Ecology' undergraduate field course to Fermanagh caught Rob downing a yard of ale – he was reluctant to provide any photographic evidence! Perhaps we should ask for an encore at the Winter meeting in December.....

Helsinki - Social insect research at University of Helsinki is currently undergoing many changes. **Pekka Pamilo** has moved from Oulu to Helsinki as of August 1st. The latest funding decisions by the Academy of Finland were particularly positive for social insect research in Finland. **Lotta Sundström** and **Pekka Pamilo** both received funding for hiring two researchers (PhD-students or post-docs) and **Heikki Helanterä** received a three-year post-doctoral post. This means that Heikki will at least partly return to Helsinki.

However, some group members are also leaving to take up jobs elsewhere: **Katja Bargum** who defended her PhD thesis in March is now the acting Chief Editor of Trends in Ecology and Evolution, and living in London. **Martin Lukac** who is successfully doing a "post-master's" project on reproductive competition in *Formica fusca* queens will leave to take up a PhD-position in Austria. **Anton Chernenko** is planning to stay in Helsinki and continue with his project for a PhD. The new Nordic network on social evolution has provided opportunities for research exchange between the network labs. **Snaebjörn Pálsson** spent almost three weeks in Helsinki working on the behaviour of Fst-values. **Jelle van Zweden** also spent a couple of weeks in Tvärminne to collect samples for chemical analysis. **Hannele Luhtasela** and **Jonna Saapunki** took part in a course on the evolution of recognition, organized by the Copenhagen crew. **Jonna Saapunki** has also visited Helsinki several times, whereas **Lumi Viljakainen** and **David Hughes** have exchanged visits between Oulu and Copenhagen.

At the edge of the network **Steve Martin, Falko Drijfhout, Heikki Helanterä, and Ed Jenner** stayed in Tvärminne during early summer doing field work. This has now resulted in a network workshop on kin recognition in Copenhagen. The network will end its first year of activity with a symposium on “Social insect biology” in Tartu on Nov 30th – Dec 2nd. **Marika Mänd and Ants Martin** are the principal organizers, and we look forward to a crew of over 20 network members. The symposium is especially designed for PhD-students, to provide them an opportunity to practice scientific communication.

London – Sumner - At the Institute of Zoology (IoZ), **Seirian Sumner** was recently joined by technician **George Busby**, who is conducting gene expression studies on *Polistes* and halictid bees. This work is funded by a L’Oreal Women in Science fellowship, awarded to Seirian in July, making George the L’Oreal Technician. George is busy growing his hair for the role. **Gabriela Peniche** completed her MSc project at IoZ on the red-listed ant *Formica rufibarbis*, in which she studied the ecology of nesting sites and breeding behaviour. Lottery funding has enabled her to stay on at the Institute to conduct some genetic structure studies on Scilly Isle populations of this species.

Seirian caused mayhem for the Royal Parks Commission in London by bringing leaf-cutting ants into Kensington Gardens in order to hold a live public experiment as part of the Serpentine Gallery Pavilion’s Experiment Marathon, in October. Humans and ants competed in a foraging experiment. Even the director of the Serpentine took part, wandering round with a paper bag over her pristine coiffure head, foraging ‘ant-style’. Needless to say, the humans did abysmally! Moreover, a few twilight leaf-nibbling escapees caused much drama for gallery staff....



Job Vacancies

Web-maestro David Nash is keeping an excellent record of vacancies in the social insect world on the IUSSI British Section webpage <http://www.zi.ku.dk/iussi/vacancies.html>. Please check it for jobs you might be interested in, and also keep him informed about any jobs coming up in your labs.
