

IUSSI, BRITISH SECTION

(International Union for the Study of Social Insects)
SPRING NEWSLETTER, MARCH 2003

Editor/Secretary's Note

Dear Fellow Members of the British Section,

I would like to draw your attention particularly to the following entries in the present issue of the newsletter.

- **2003 Ballot for Officers of the British Section of the IUSSI – p. 2**

Put yourself forward or nominate a fellow member! – see more details inside

- **Annual Winter Meeting Friday, 5 December 2003, Dublin – p. 2**
- **Bolivarian Meeting, 11 – 15 July 2003, p. 3, enclosed flyer**
- **St. Petersburg Meeting, 22 – 27 September 2003 – p. 3, enclosed flyer**
- **Atlanta, Georgia Meeting, 15 – 17 December 2003 – p. 3, enclosed flyer**
- **INSECTS Network: Closing Symposium, 2 – 9 September 2004, p. 3.**

With best wishes and greetings for the arriving spring,

Ana Sendova-Franks, 15th March 2003, UWE

Officers of the British Section of the IUSSI

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Annual Winter Meeting Friday, 5 December 2003, Dublin

This year, the Winter Meeting will be hosted in Dublin, Ireland, at the historic Trinity College Dublin. Mark Brown (TCD, Zoology) and Jane Stout (TCD, Botany) will be organising the meeting. As usual, the meeting will be on the first Friday in December (5th December 2003), although we are still considering the option of a 2-day meeting if sufficient people would like to attend and give talks. Consequently, **Mark would be very grateful if members would email him (mabrown@tcd.ie) indicating whether a) they are likely to be coming, b) they would like to give a talk, and c) they would like to present a poster.**

Dublin is an attractive and bustling city, with a world-famous social scene based around its many pubs and bars. We hope that members will take the opportunity provided by the meeting to explore Dublin on the weekend. The city airport is served by a variety of airlines, including the cheap carrier RyanAir, and there are numerous accommodation options, ranging from Hostels to world-class hotels. Further details about accommodation and travel will be circulated at a later date. We look forward to seeing as many of you in December as possible.

2003 Ballot for Officers of the British Section of the IUSSI

2003 ballot for officers of the British Section of the IUSSI: CALL FOR NOMINATIONS

The officers of the British Section of the IUSSI are: the President, the Treasurer and the Secretary. The terms of the current officers, Professor Francis Ratnieks (President), Dr. Andrew Bourke (Treasurer) and Dr. Ana Sendova-Franks (Secretary), are coming to an end. New officers need to be elected for the end of 2003.

This is a call for nominations. The names of nominees will be announced in the Autumn Newsletter in September 2003. A postal/e-mail ballot form will be included in the same newsletter for return before the Winter Meeting in December 2003 and the election results will be announced at the Winter Meeting. The new officers take over at the beginning of 2004.

Members are asked to put themselves forward or approach colleagues they would like to nominate and find one fellow member to second their nominations.

Nominations procedure (time scale for nominations, ASAP but not later than 1 September 2003):

- 1. Nominate a person or persons for one or more of the three posts.**
- 2. Find one fellow member to second each of your nominations.**
- 3. Send an email or post a letter to the Secretary (Ana Sendova-Franks, see contact details below) with a copy to the seconder, containing the following information:**

- (a) President - nominee's name; seconder's name**
- (b) Treasurer - nominee's name; seconder's name**
- (c) Secretary - nominee's name; seconder's name**

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Electronic Distribution of the Newsletter?

At the Winter Meeting on 6th December 2002, the membership voted in favour of electronic distribution of the newsletter. Furthermore, after renewing their membership for 2003, 68 members said 'yes' and 6 members said 'no' to electronic distribution. Those members who have explicitly expressed their wish to receive a hard copy and/or do not have access to email and internet facilities, will continue to be sent a paper copy through the post. Currently, their number is 8. The rest of us will receive their copy via email. As usual a printable copy of the newsletter and the information contained in the attached flyers will be available on the section's web site.

Membership for 2003

Welcome to new members! We are always pleased to hear from people who would like to join. Please sign students, postdocs, colleagues, etc. I would like to remind those valued members who have missed to **renew their membership for 2003** to get in touch with our Treasurer. Even if you do not wish to renew your membership, please let Andrew Bourke know about it.

News from Other Sections of the IUSSI

The German speaking section has a new web page, www.iussi.de. There you can also find information concerning the next meeting of the German speaking section (14 – 19 September 2003) in Regensburg, Germany. The deadline for abstract submission is 1st June. **Juergen Heinze**

Other Forthcoming Meetings

Insect Sociobiology of the Northern Neotropics... INTERNATIONAL UNION FOR THE STUDY OF SOCIAL INSECTS (IUSSI), BOLIVARIAN SECTION -- Fifth Biennial Meeting, 11 – 15 July 2003, University of the West Indies, Trinidad and Tobago. The **Second Announcement** is now available. It is recommended to register no later than **31st March 2003**. The deadline for receipt of abstracts is **10th June 2003**. For more details please see the enclosed flyer or contact the Organizing Committee through: Christopher K. Starr, Department of Life Sciences, University of the West Indies, St Augustine, Trinidad & Tobago; E-mail: ckstarr99@hotmail.com; tel (868) 662-2002 ext 3096; fax (868) 663-5241

Two conferences in St. Petersburg... The second announcement for the international symposium "Life Cycles in Social Insects: Behavioural, Ecological and Evolutionary Approach", organised by Prof. Vladilen Kipyatkov, is now available, including details of registration, call for abstracts etc. This meeting will take place in St. Petersburg, Russia, 22 - 27 September 2003. **The deadline for normal registration is 1 June 2003**, although registration is possible right up to the date of the meeting, for a slightly increased fee. For further details please see the enclosed flyer and visit symposium web site: www.bio.pu.ru/win/entomol/Kipyatkov/iussi/2003/index.shtml.

2nd International Workshop on the Mathematics and Algorithms of Social Insects... organised by Drs. Tucker Balch and Carl Anderson at Georgia Institute of Technology, Atlanta, Georgia, U.S.A, 15 – 17 December 2003. **Deadline for extended abstracts: 15 June 2003**. For further details, please see the enclosed flyer and visit the web site: www.insects.gatech.edu. The latest news are that the organisers have not got the titles for the plenary talks, they have been encouraged to get NFS funding and the special issue of *Adaptive Behaviour*, with papers from the workshop will be published next year.

The closing symposium of the INSECTS network (INtegrated Studies of the EConomy of Insect Societies)... entitled *Sociobiology Revisited: The Scientific Study of Integration in Insect and Human Societies* will take place in Helsing, Denmark (Or Elsinor, as Shakespeare called it in Hamlet), **2 - 6 September 2004**. The symposium will be held in the LO-skolen conference centre, which will allow us to have up to 250 participants. We plan to invite a range of international social insect researchers, as well as speakers from related disciplines, and hope that this meeting will provide a focus for European and International social insect research.

More details are available from the INSECTS web site: <http://www.zi.ku.dk/eunet/>.

News from Social Insect Labs in the British Section

CEH Dorset... The Myrmecophily work at CEH Dorset has expanded in recent years; 10 staff and students are currently involved in a wide variety of research themes. Headed by **Jeremy Thomas**, the group is playing a principal role in the EU partnership program MacMan [http://www.ufz.de/\(en\)/spb/bioz/macman/index.html](http://www.ufz.de/(en)/spb/bioz/macman/index.html). This involves exploring inter- and intra-specific variation in endangered *Maculinea* (Large Blue butterfly) systems across Europe, assessing the suitability of *Maculinea* butterflies as indicators of biodiversity and also developing and expanding standardised methods of monitoring

populations as indicators with the aim of improving site management. Field and lab studies and mathematical modelling are aiding investigations into the hypothesis that *Myrmica* ants are keystone species, responsible for ‘shaping’ characteristic communities within their biotopes. **Ralph Clarke** and others are extending their spatial models to examine the crucial aspects of the interactions between the *Maculinea* butterflies and their *Myrmica* ant hosts, especially in relation to the population dynamics and persistence of *Maculinea arion*. Other models describe the interactions between *Myrmica* and the five parasitic European species of *Maculinea* butterflies and their associated ichneumonid parasitoids (Thomas, 2002, Thomas et al 2002). The composition of cuticular hydrocarbons (CHC) on the caterpillars of one species of *Maculinea*, *M.rebeli*, is already known to mimic that of its host ant, *Myrmica schencki*, (Akino et al 1999); we are now studying the profiles of the four other European *Maculinea* species in comparison to their hosts, as well as investigating any variation in chemicals across species geographical ranges, where intra-specific host shifts have been reported (Elmes et al 2002a). In the longer term we will test whether such CHC profiles on pre-adoption caterpillars can be used to determine *Maculinea* host specificity and to establish host-races in those species. Post-adoption host specificity, the impact of food stress on parasite tolerance in *Myrmica* ants and the effects of caterpillars on host ant survival have also been investigated (Wardlaw et al 2000). Many post-docs and PhD students involved in the program have visited CEH Dorset for training on standard techniques for laboratory ant experimentation.

New members of staff, **Zoe Randle** (also studying for a PhD) and **David Simcox**, are investigating the community changes that occur when sites are managed for Large Blue butterflies and why these changes occur. Management of the British Large blue butterfly *Maculinea arion* has increased biodiversity on sites including many other rarities. A key component of this research is to investigate the role of ants in the community.

Graham Elmes in collaboration with **Alexander Radchenko** of the Ukrainian Academy of Science, Institute of Zoology is working on a taxonomic revision of the *Myrmica* of the Old World. Already, they have completely revised the Himalayan and far eastern fauna and described about 40 new species - about 1/3 of the palearctic fauna (Radchenko et al 2001, Radchenko & Elmes 2001a,b, Elmes et al 2001, Radchenko et al 2002). In the course of this work they have discovered a species *Myrmica tulinae* (somewhat intermediate to *M. scabrinodis* and *M. sabuleti* on characters of both males and females) living in warm wet meadows of southern and central Europe (Elmes et al 2002b). Examination of Graham’s collection shows it to be quite widespread. They have also found *M. vandeli* - new for Britain (paper in press) and found this species much more widespread than supposed. Graham will be retiring in November after more than 40 years in the same organisation (under its various incarnations of Nature Conservancy, Institute of Terrestrial Ecology and latterly Centre for Ecology and Hydrology) but intends to continue his dedication to ant research in retirement.

The chemical ecology work on the myrmecophilous hoverfly, *Microdon mutabilis*, is also continuing at CEH (Elmes et al 1999, Schönrogge et al 2002, Schönrogge et al 2000). **Mike Gardner**, molecular ecologist, and **Emma Napper** (PhD student) are currently targeting the mechanism of host specificity and the population and colony structure of the host ant *Formica lemni*. Most recently, **Nicola Gammans** has joined the group as a PhD student and has started to study myrmecochory behaviour towards gorse seeds in *Myrmica*, *Lasius*, *Formica* and *Tetramorium* ants.

Judith Wardlaw and Karsten Schönrogge

References

- Akino, T., Knapp, J.J., Thomas, J.A. and Elmes, G.W. 1999 Chemical mimicry and host specificity in the butterfly *Maculinea rebeli*, a social parasite of *Myrmica* ant colonies. *Proceedings of the Royal Society of London Series B-Biological Sciences* 266,1419-1426
- Elmes, G.W., Akino, T., Thomas, J.A., Clarke, R.T. and Knapp, J.J. 2002a Interspecific differences in cuticular hydrocarbon profiles of *Myrmica* ants are sufficiently consistent to explain host specificity by *Maculinea* (large blue) butterflies. *Oecologia* 130, 525-535.
- Elmes, G.W., Radchenko, A. and Aktaç, N. 2002b Four new *Myrmica* species (Hymenoptera: Formicidae) from Turkey. *Annales Zoologici (Warsawa)*, 52 (1), 157-171.
- Elmes, G. W., Barr, B., Thomas, J. A. and Clarke, R. T. 1999 Extreme host specificity by *Microdon mutabilis* (Diptera : Syrphidae), a social parasite of ants. *Proceedings of the Royal Society of London Series B-Biological Sciences* 266, 447-453.
- Elmes, G.W., Radchenko, A.G., and Kim, B-J. 2001 Two new species of *Myrmica* (Hymenoptera, Formicidae) from Korea. *Korean Journal of Biological Sciences* 5, 107-112.
- Radchenko, A.G. and Elmes, G.W. 2001a First record of the genus *Myrmica* (Hymenoptera: Formicidae) from Northern Vietnam, with a description of two new species. *Annales Zoologici (Warsawa)*, 51 (2), 221-225.
- Radchenko, A.G. and Elmes, G.W. 2001b A taxonomic revision of the ant genus *Myrmica* LATREILLE, 1804 from the Himalaya (Hymenoptera, Formicidae). *Entomologica Basiliensia* 23, 237-276.
- Radchenko, A.G., Elmes, G.W. and Woyciechowski, M. 2002 An appraisal of *Myrmica bergi* RUZSKY, 1902 and related species (Hymenoptera:Formicidae). *Annales Zoologici (Warsawa)*, 52 (3), 409-421.
- Radchenko, A.G., Zhou, S., and Elmes, G.W. 2001 New and rare *Myrmica* species (Hymenoptera: Formicidae) from Southern China. *Annales Zoologici (Warsawa)*, 51 (2), 211-219.

Schönrogge, K., Wardlaw, J. C., Thomas, J. A. and Elmes, G. W. 2000 Polymorphic growth rates in myrmecophilous insects. *Proceedings of the Royal Society of London Series B-Biological Sciences* 267, 771-777.

Schönrogge, K., Barr, B., Wardlaw, J. C., Napper, E., Gardner, M. G., Breen, J., Elmes, G. W. and Thomas, J. A. 2002 When rare species become endangered: cryptic speciation in myrmecophilous hoverflies. *Biological Journal of the Linnean Society* 75, 291-300.

Thomas, J.A. 2002 Larval niche selection and evening exposure enhance adoption of a predacious social parasite, *Maculinea arion* (large blue butterfly), by *Myrmica* ants. *Oecologia* 132, 531-537.

Thomas, J.A., Knapp, J.J., Akino, T., Gerty, S., Wakamura, S, Simcox, D.J., Wardlaw, J.C. and Elmes G.W. 2002 Parasitoid secretions provoke ant warfare. *Nature* 417, 505-506.

Wardlaw, J.C., Thomas, J.A. and Elmes, G.W. 2000 Do *Maculinea rebeli* caterpillars provide vestigial mutualistic benefits to ants when living as social parasites inside *Myrmica* ant nests? *Entomologia Experimentalis et Applicata* 95, 97-103.

Limerick, Ireland... John Breen reports that he is getting back into social insect ecology. During summer 2001, supported by the Heritage Council, he studied the ant species' distributional ecology in an area of limestone grassland near Limerick. This type of habitat, which is very similar to the grassland in the better known Burren, supports a relatively diverse ant community: five species of *Myrmica* (*ruginodis*, *rubra*, *scabrinodis*, *sabuleti* and *schrenkii* – the latter is relatively common here), three *Lasius* (*flavus*, *niger* and *mixtus*), *Formica lemmani* and *Leptothorax acervorum*. In addition, *Bombus sylvarum* is regularly seen and *B. distinguendus* occurs. Information has been gathered on colony areas and distribution in relation to environmental variables. During Summer 2002, the current status of *Formica lugubris* was studied in the woods where he did his PhD in the mid 1970s. It appears that the species is in serious decline since the previous study and discussions are currently underway to see if a management plan can be put in place to improve the situation. Two current postgrads will include some social insect ecology as part of their research. **Veronica Santorum** is studying "Aesthetic Arthropods" as part of a large project, AgBiota based in University College Dublin and funded by the Environmental Protection Agency, on the effects of intensive management of grassland on biodiversity. She will be including bumblebees plus any other aculeate Hymenoptera which occur. **Ellen O'Sullivan** is studying the habitat usage by ants and bumblebees (mainly) in the vicinity of turloughs in the Burren region. There is also a current final year project by **Audrey O'Grady** on the morphometric effects of mermithid parasitism in *Lasius* species, which is producing some interesting results. **John Breen**

The Ant Lab at the University of Bristol... Collective decision-making continues to be a fruitful topic for the ant lab. One of the latest results is that ants face speed/accuracy trade-offs when making their collective house hunting decisions. This means that when they have no need to hurry, they take their time to decide carefully. We have also found that ants are well aware of the quality of their current nest, and take this into account when selecting a new nest site. Investigations of other aspects of colony decisions are under way. While all these experimental results start to pile up, I am still writing about bumble bees as well, with a paper on food alert pheromones just out in the *Journal of Comparative Physiology A* and one on Peruvian bumble bees in *Apidologie* (both in January), and more in the pipeline. **Anna Dornhaus**

In my Ph.D., I investigated the adaptive significance of polydomy in the ant *Leptothorax albipennis*. I have determined that under laboratory conditions, no difference in production levels of monodomous and polydomous colonies is evident. In addition, studies on the division of labour in colonies suggest that efficiency is maintained, rather than increased, under polydomy. Queen swap experiments indicate that queens are preferentially accepted into queenless colonies and that these queens may not be related to the resident worker population. Microsatellite analysis has suggested that the presence of dual matriline within colonies is high and that workers produce sons. I have hypothesised that polydomy may be driven by selfish worker behaviour and that queen acceptance into queenless colonies (or nests) is high. The presence of unrelated queens in colonies and worker male production may lead to a split sex ratio.

I have now begun a post-doc, with Nigel Franks, to produce microsatellite primer sets for the army ant *Eciton burchelli*. This work is progressing well and will allow us to answer some important questions on the biology and ecology of this, and other, new world species. **Jay Denny**

Institute of Zoology... Simon Rees and Tom Charman have started their Ph.D. projects with **Andrew Bourke**. They are studying the conservation genetics and ecology of, respectively, the Black Bog Ant, *Formica candida*, and the Great Yellow Bumble Bee, *Bombus distinguendus*. After completing some genetic training, Simon and Tom will both start fieldwork this spring and summer. **Roselle Chapman** is currently writing up her Ph.D. on the foraging ecology and conservation of urban bumble bees. In February, a well-attended evening of talks on bumble bee biology and conservation was held at the Zoological Society of London. The speakers were Andrew Bourke, Lars Chittka (now a Senior Lecturer at Queen Mary, University of London) and Mike Edwards of the Bumblebee Working Group. **Andrew Bourke**

Laboratory of Apiculture and Social Insects, Sheffield... Francis Ratnieks and Adam Hart are making an exhibit and giving a talk on 14 March 2003 as part of the National Science Week (NSW). There should be 1200 school children attending and it is one of the main events in Sheffield, which has a large program of events for NSW. For more details, please see <http://www.shef.ac.uk/uni/projects/taplab/natsciweek2003.pdf>. Francis has also been writing some pamphlets about the Sheffield laboratory and their research, for both beekeepers and the general public (including school children). He thinks it would be a good idea if we did more to present our work to the public and suggests that others might like to make pamphlets along the same lines. A copy of one of the pamphlets is enclosed with this newsletter. It is on "How bees make honey" and Francis thinks that it is required reading for any social insect biologist. For copies of the other pamphlets, please visit the lab web site: www.shef.ac.uk/uni/projects/taplab.

Copenhagen... The social insect group in Copenhagen has had a cold, but busy, period over the last months with several arriving and departing postdocs and visiting students.

Andrea Krug from the Humbolt University of Berlin has been visiting us for six months and has been working with **Boris Baer** and **Bill Hughes** on the immune system of leaf-cutting ants, using some of the techniques that have been developed in Paul Schmid-Hempel's group in Zürich. She is, as I write, finishing the last bits and pieces here to return to Berlin, but, of course, we hope to see her again in the near future!

Annette Bruun Jensen has taken over the postdoc position that **Kellie Palmer** started on the BABE (Beekeeping and Apis Biodiversity) project. She has been working for the last few years at the Copenhagen Veterinary Laboratory, but is now going full throttle in the DNA-laboratory, looking at the genetics of Danish honeybee populations.

Daniele Fanelli from Steffano Turillazzi's group in Florence visited us for two months in October/November 2002 to try out microsatellite markers on his stenogastrine wasps. **Duccio Lombardi**, also from the Florence group, was here for a week in January in order to explore the possibilities of working with chemical mimicry in *Acromyrmex insinuator*, the social parasite of *A. echinator* leaf-cutting ants. He will return to Copenhagen later this year, to start his M.Sc. work on this system.

The research on the lycaenid-ant interactions between *Maculinea* butterflies and *Myrmica* ants is going ahead at full speed. The two MacMan network postdocs (**Ian Wynne & Inga Zeisset**) arrived in June 2002. Inga's search for microsatellite markers for *Maculinea* butterflies has proven a challenge, as most people who have tried this for lepidoptera have found, but we hope that she is beginning to see the light at the end of the tunnel. In addition to these two postdoc positions, the *Maculinea-Myrmica* system has attracted a Danish M.Sc.-student, **Jon Ebsen**, who will be spending time on investigating the genetic structure of European *Myrmica scabrinodis* populations.

The study of supercolonial ants, prompted by the work of **Jes Søe Pedersen**, has expanded tremendously over the last year. **Tim Engelkes** from the University of Amsterdam has been part of the group for an eight-month period from June 2002 until January 2003, working on the genetic structure of populations of the recently discovered supercolonial ant *Lasius neglectus* as part of his M.Sc.-thesis. Before his departure, he had a chance to collaborate with **Sylvia Cremer**, who joined the group in October 2002 as the new INSECTS-postdoc. She finished her Ph.D. on *Cardiocondyla* ants last year with Jürgen Heinze in Regensburg, and is now continuing on the tramp ant *L. neglectus*. As part of this study she will be sampling *L. neglectus* and *L. turcicus* (the presumed sister species with a normal social structure) in Turkey this spring, together with Jes.

Boris Baer and **Duur Aanen** have each received an additional two years of postdoc funding from a Danish Science Foundation grant that Koos Boomsma recently received (the CSES: Centre for Social Evolution and Symbiosis, see <http://www.zi.ku.dk/cses/>). They will be continuing their successful work on leaf-cutting ants and fungus-growing termites, respectively. Duur, having a Danish wife and awaiting the arrival of a child by the end of this month, has plenty of reasons for staying in Copenhagen. Regarding Boris, his staying is more of a puzzle to us, given his constant complaining about the weather (actually, basically anything you could possibly imagine to complain about) – but... deep down inside, I'm sure he just loves Denmark (and the Danes)!

Vera Ros from the University of Wageningen arrived here in January to work with Duur Aanen on fungus growing termites. She has just returned from South Africa, where she has been doing field work and will continue her work here for another five months as part of her M.Sc.-thesis.

From the first of January 2003, **David Nash** has been given a permanent position at the Zoological Institute as coordinator for grant applications and dissemination. So, David is moving more explicitly into supporting others to do great science, but for at least a number of years he will continue his involvement in network dissemination and *Maculinea-Myrmica* research. In addition, he has been appointed web-master of

both the International and the European IUSI web sites. Having multi-talented David as a permanent force in Copenhagen is a great asset to all of us less gifted in IT and will continue to keep the frequency of computer-related panic-moments down to a level we are most happy to live with.

Bill Hughes' intended departure in January 2003 has been delayed for 10 months until the end of 2003, as he received a grant from the Carlsberg Foundation to follow up his work on the genetics of leaf-cutting ant castes. Given Bill's positive feelings towards beer, I guess it's only fair to say that in this case the money most definitely returned to the right person!

Michael Poulsen

Team:: Antzz, University of Helsinki... Members of Team::Antzz study several aspects of social life in ants. One of the main topics has been intracolony conflicts, and how these conflicts are resolved. Another topic which is gaining momentum concerns the genetic structure of ant populations and the impact of habitat fragmentation. Here the focus is on many different aspects including population genetics, quantitative genetics, and phylogenetics. The team is headed by **Liselotte Sundström**.

Since the last newsletter **Minttu Hannonen** has left the team after successfully defending her PhD thesis entitled 'Proximate and ultimate determinants of reproductive skew in the polygyne ant *Formica fusca*' in November. Andrew Bourke had the honour to act as the opponent. Minttu is now a research coordinator in Turku, Finland. We do miss her cheerful presence in the office! **Cathy Liautard**, our postdoc since last summer, moved from Lausanne to Finland in January. Cathy will study population genetics and effects of inbreeding in *Formica exsecta*, together with **Emma Vitikainen** who is working towards her Masters degree.

Having finished her Master's degree on the genetics of size in *Formica truncorum*, **Katja Bargum** started her PhD project last summer. The topic is polygyny, reproductive skew and colony-level resource allocation in *Formica fusca*. **Kalle Trontti** is now on his second year of his PhD studies on social parasitism in *Plagiolepis* ants, and focuses on both population genetics and phylogeny in his PhD. **Heikki Helanterä** is in his third year of PhD work on worker reproduction in *Formica* ants. Heikki recently spent a month in Sheffield collaborating with Tom Wenseleers and Francis Ratnieks on the interplay between worker reproduction and worker policing. **Vienna Setälä**'s work on foundress associations in *Lasius* ants will continue when she returns from maternity leave, having given birth to a baby boy in October.

At the moment, our Marie Curie-postdoc **Marianne Elias'** ants are waking up from hibernation. Marianne is interested in polygyny and polydomy in *Formica polyctena*, and travels back and forth between Oulu and Helsinki to collaborate with Pekka Pamilo's group, always with her guitar on her back.

Perttu Seppä is a lecturer at our department, and continues his work on population genetics in various ant species.

Katja Bargum

Conference Attendance

Roselle Chapman (IOZ/UCL) ... The British section of the IUSI very kindly donated £100 towards the cost of my travel to the XIV International Congress of IUSI at Hokkaido University, Sapporo (27 July - 3 August 2002). The conference was brilliantly organised and set in the calm oasis of the university campus with an abundance of volunteers and translators on hand to guide and organise the 500 participants from 37 countries through what was, for many of us, our first trip to Japan.

Each day started with two plenary sessions where we were treated to a diverse range of topics delivered by eminent speakers. Naomi Pierce spoke on the evolution of interactions between Lycaenid butterflies and ants and Diana Wheeler reviewed the history of the study of caste determination in social insects and discussed what future research might reveal. These were followed by 20-minute presentations divided into 4 symposia running simultaneously throughout the day resulting in an almost bewildering array of lectures to attend. Symposia topics ranged from 'Social insects as pests and their control' to 'Dominance behaviour'. British section members who gave talks included Andrew Bourke, Mark Brown, Nigel Franks, David Hughes and Francis Ratnieks. Approximately 150 posters were on display to keep us busy during breaks. I presented a poster on my research into the 'Foraging ecology and conservation of bumble bees in urban areas'. My poster session also included interesting work presented by Kiochi Goka's group on the ecological problems presented by bumble bee commercialisation in Japan. Three video presentations made a welcome break from the usual format, most notably that of Seirian Sumner on the biological and cultural significance of the stingless bee *Meliponia beecheii* in the Yucatan, Mexico.

A mid-week day trip enabled us to escape the city and get a flavour of the Japanese countryside. Sadly the weather was less than perfect and a thick drizzling fog obscured the much-hyped views of the Pacific Ocean and smouldering volcanoes.

The congress attracts many of the top researchers in the field of social insect science and provided the perfect opportunity to present my work to an international audience and to gain feedback and advice before I enter the final stages of my studies. It is also an excellent platform to discuss and foster future career opportunities and I recommend attending to any student who hasn't done so yet. Washington D.C. was confirmed as the venue for the XV conference in 2006.

Books and Journals

Mellifera... is the first scientific bee-keeping journal in Turkey. It is published in two languages, Turkish and English. The journal is screened by the ULAKBIM National Indices and "APICULTURAL ABSTRACTS" of Ulrich's International Periodicals, BIOSIS and EBSCO. For the address for correspondence, a subscription form, the Instruction to authors and other detailed information, please visit the web site: www.tkv-dft.org/publications/index.htm or write to the Editor at mellifera@ktg.com.

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Further information is available at:

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Applications, including curriculum vitae, relevant certificates, and statement of research interest should be sent until February 28, 2003 to Prof. Dr. Bernd Walz, University of Potsdam, Institute of Biochemistry and Biology, Dept. of Animal Physiology, P.O.B. 60 15 53, 14415 Potsdam, Germany. (E-mail: walz@rz.uni-potsdam.de)