ISBE 2006 Conference Review

Entering the air-conditioned Vinci Centre in Tours was a welcome relief for those of us recently arrived from a southern hemisphere winter, hit hard by the mid-30 temperatures raging in France. The conference centre, built entirely from Leonardo da Vinci's 16th century diagrams of a futuristic, Star Trek-style mothership, was conveniently located and spacious. All visitors were impressed by the modern, comfortable lecture theatres and the glamorous, determined staff in matching white satin sailor suits.

Session times across the five theatres were regulated by recorded frog and cricket calls, with a few minutes of 'rainforest ambience' between talk slots. This technique has proved effective at past ISBE meetings and we look forward to further innovations in signaling at future meetings; we propose scents and vibratory cues.

During breaks in the program, some of the most popular venues for conference attendees included the shady park next to the conference centre, Tours' many excellent bakeries and the old town square with its exposed beam architecture, relaxed summer atmosphere, and extraordinary 'les giraffes' 2.5 liter beer vessels.

The dormitory accommodation favored by most participants was some distance away in the pleasant, leafy grounds of la Cité Universitaire de Tours. The large windows in every room provided access to the cool night breezes; invaluable given the heat and the absence of towels for post-shower drying. The morning buses to whisk delegates into town were extremely welcome. The crush of delegates squeezing onto the public transport home at night (aka *the sweat bus*) was probably largely unwelcome for the local Tours commuters, but we hope the discomfort was attenuated by the many engaging discussions on sperm competition and mating strategies they would have endured en route.

As usual, there were several informal contributions to the perennial discourse about the perceived overrepresentation of birds/insects/any other disliked animals. Perhaps this ongoing tension explains why many talk and poster titles provide only a common or species name without reference to any higher phylogenetic affiliation. Only when the first picture of a crested spiny shankshot appears on a screen does it become apparent whether it is bird, beast, bug or bacteria.

General trends @ ISBE

A very brief analysis of the spoken and poster presentation confirms, once again, that birds remain the taxon of choice for behavioral ecologists (Figure 1). Almost 50% of spoken papers and 40% of posters reported on some aspect of bird behavioral ecology. Mammals (including humans) and insects are battling for second place. Surprisingly, reptiles and amphibian contributions were scarce. There were no obvious (or statistically significant) biases in the distribution of taxa

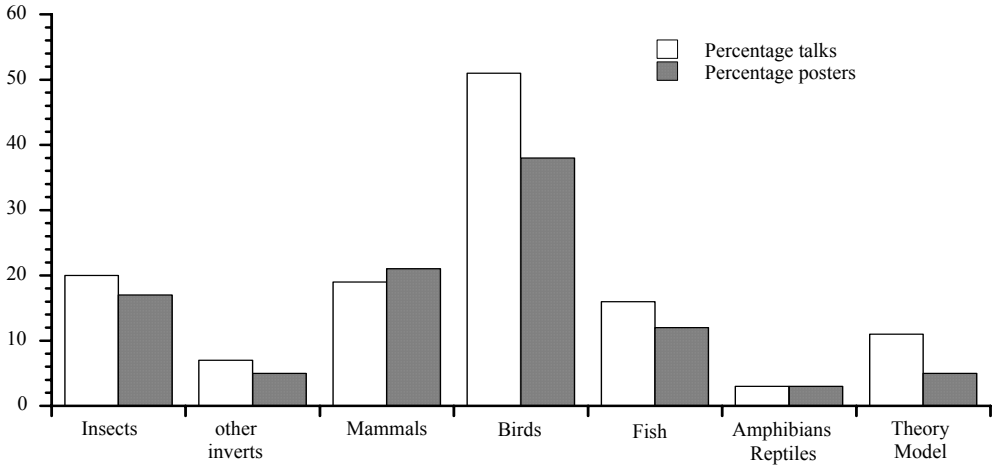

Figure 1. Distribution (%) of taxa in oral and poster contributions at ISBE 2006

between oral and poster presentation (Figure 1).

A more detailed analysis of the range of topics (only oral presentations) both from the 2006 and the 2004 conferences (Table 1) clearly shows that *Sexual Selection* is king! In both conferences, this research area scored the highest number of contributions, followed closely by *Life History*. It appears that *Multiple Mating* and *Sperm Competition* recorded an increase in contributions this year, while *Genes and Behavior* and *Sex Allocation* a decrease. Overall, contributions spread across more topics in 2006 compared to 2004.

Anecdotal evidence suggests this year's Peacock Index may be at a record low. In the past, peacock photos were reassuringly common examples of adaptations to sexual selection, handicap hypotheses, signaling, etc. The winner of this year's Peacock Index Award for most peacock pictures is actually studying peafowl (Adeline Loyau, Université Pierre et Marie Curie), so this may be an appropriate year to end this congress assessment technique.

Plenaries & Hamilton Lecture

The six plenary speakers, also referred to as the League of Gentlemen, treated us to several diverse topics

Table 1. Distribution (%) of topics among oral presentations at the 2004 and 2006 ISBE conferences.

Topic	2006 (%)	2004 (%)
Sexual selection	8.1	11.8
Life history	6.9	8.2
Predator-prey	6.6	4.5
Habitat use/dispersal	5.7	5.5
Acoustic signals	5.7	3
Mating strategies	5.4	5.8
Social behavior	4.5	4.2
Signal evolution	4.5	3.9
Multiple mating	4.5	1.2
Cooperation & conflict	4.2	6.1
Maternal effects	4.2	3
Communication	3.3	2.7
Sperm competition	3	0
Conservation	2.7	3
Foraging	2.7	3
Mimicry/Aposematism	2.7	2.7
Hormones/physiology & behavior	2.7	1.5
Sexual conflict	2.4	2.7
Sex allocation	1.8	3.9
Group living/territoriality	1.8	0
Parental care	1.5	4.5
Reproductive strategy/investment	1.5	3
Brood parasites	1.5	2.7
Fighting & assessment	1.5	1.2
Recognition systems	1.5	1.2
Breeding systems	1.5	0
Kin recognition	1.5	0
Learning	1.5	0
Altruism	1.5	0
Human biology/behavior	1.5	0
Behavior & genes	1.2	4.2
Parasites & Immune function	0.9	4.5
Behavior of populations	0	1.5

pertinent to Behavioral Ecology. Both Peter Hammerstein and Karl Sigmund demonstrated that economical modeling is not dead and there is still plenty of scope for theoreticians in behavioral ecology to tackle issues aligned with economics or sociology. Alex Kacelnic's plenary on optimality and rationality pushed concepts even further by examining biological, philosophical, psychological and economical concepts of rationality/optimality only to leave us with the distinct feeling that grackles have a much better understanding of these concepts than we ever will. Luc-Alain Giraldeau entertainingly demonstrated that evolutionary game theory can be observed in the laboratory if animals arrive at the same solutions as EES through behavioral flexibility rather than selection. Tim Caro's call for behavioral ecologists to save planet earth could not have come a minute too early. In fact some pessimists amongst us are asking whether anything can save this planet at this stage. Caro argues that as behavioral ecologists we need to promote outreach of the applied aspects of our work. Finally, John Endler dazzled us with bowerbird plumage and ornament color showing that ornaments do not elaborate plumage but rather are selected for maximal contrast. The Hamilton Lecture by Geoff Parker was nothing short of an ode to the humble yellow dungfly. His fascinating review traced the major developments in behavioral ecology over the last few decades drawing examples from Parker's own work on this enigmatic animal.

Highlights from the sessions

Highlights from the sessions on communication include talks by James Dale of the Max Planck Institute for Ornithology ("*Social control of bill coloration in zebra finches"*) and Denise Pope of Trinity University ("*Cryptic signaling synchrony in the fiddler crab* Uca tangeri"). Both speakers had used some elegant experimental methods to test whether behaviors observed in lab and field populations did in fact have signaling functions. The talk by Nichola Raihani (University of Cambridge, "*Adaptive deception in pied babblers*") spurred some interesting debate over the definition of deceptive signals.

In other sessions, pollinator learning and foraging were reviewed and updated by significant contributions from Nehal Saleh ("*Are they really repellent? The enigmatic role of the foraging bumblebee's scent mark*") and Elli Leadbeater ("*Finding flowers by proxy: Socially facilitated learning in an insect"*), both of Queen Mary University of London.

During the Wednesday morning sperm competition session, some great images were shown by Paul Ward (Zoologisches Museum der Universität Zürich, "*Field experiments on cryptic female choice, and anatomical details of the choice system*") and Simone Immler (University of Sheffield, "*By hook or by crook? Morphology, competition and cooperation in rodent sperm*"). Photos from these talks beautifully illustrated how females might control the release and use of sperm from their sperm storage organs after copulation, and how sperm can travel in rafts connected together by velcro-like hooks.

The conference featured a number of talks on learning, with a specific session devoted to this topic. The highlights of this session were Neetje Boogert's talk about the spread of innovations in starlings. She even managed to show off her Dutchness with a cheese sandwich analogy. Another highlight of this session was Isabelle Coolen's talk about social learning in crickets. Outside of the learning session, another learning themed highlight was Ben Chapman's presentation on information transmission in guppies. It appears that whilst learning is still a minor theme in behavioral ecology it is on the way up.

Surprisingly, almost 50 % of the oral presentations on *Predator-Prey Interactions* and *Antipredator Behavior* focused on the behavior of non-vertebrates. Like ISBE meetings in the past years, we learned that prey as well as predators optimize foraging behavior. For instance, Arnold Fertin and Jérôme Casas from the Université de Tours *("Optimality of antlion trap construction"*) showed that the most impressive catching technique of antlion larvae involves constructing a perfectly conical trap. Other remarkable invertebrate studies presented in Tours focused on the phylogeny underlying form and function of silk decoration in spider webs ("*Molecular phylogeny and web decoration polymorphism in the orb-web spider genus Argiope (Araneae: Araneidae)*" by Matt Bruce from Utrecht University and co-workers) and the behavioral mechanisms underlying spatial patterns in a stream community ("*Effects of habitat and scale on spatial associations between interactive predators and prey in a small stream community*" by John Hammond and co-workers from the University of California). Vertebrate study animals included bats, fishes, rodents, marmots, birds and meerkats. For example, Stefan Halle and co-workers from the University of Jena combined observational data with field experiments and convincingly demonstrated that rodent activity is synchronized at the population level and is not risk aversive ("*Flexible, but not risk-sensitive: the paradox of arvicoline rodent activity*"). A

major theme this year seemed to be the predator response to the warning coloration of insects, and undoubtedly some presentations, such as the one by John Skelhorn and Candy Rowe from the University of Newcastle, who used the sexy term "receiver psychology" in their talk "*Predator psychology and the evolution of insects' defense secretions*", will set the scene for forthcoming studies in this area.

Poster Sessions

Those brave enough to plunge themselves into the milieu of >500 posters during the poster sessions were rewarded with an outstanding visual feast. Position was everything to poster-holders and as usual, those dealt a space in the corner behaved like satellite males at a lek. However, those possessing endurance were rewarded with beer on the fourth night of the poster-marathon, graciously provided by the publishers. The quality of poster presentations was outstanding and rivaled that of the oral sessions. The prize-winners for posters this year were (1) Hanne Lovlie (poster 88: *Male sexual harassment shapes daily re-mating patterns in feral hens*), (2) Marja Jarvenpaa (poster 460: *Algal turbidity and sand goby reproductive behavior*) and (3) Lutz Fromhage (poster 64: *Paternity protection strategies in a terminally investing spider*). Although the judges had a difficult decision, these posters displayed excellent science with a high level of visual appeal and clarity.

Social Stuff

After a hard day of conferencing there is nothing that a Behavioral Ecologist likes more than a cold beer, and it doesn't get much better than the 2.5 liter "Le Giraffe": a meter high tube of beer with a tap at the bottom, the perfect accompaniment to increasingly incomprehensible conversation. We as committed correspondents felt it was our duty to partake in the drinking of a number of these vessels and we can report that they do the job. The centre of "Le Giraffe" drinking (although some of the more La-di-da delegates were observed drinking wine) was in the old town a short walk from the conference venue, so getting there wasn't a problem. Getting home, however, was another story for those of us staying in the student residences. Of course, the lure of "one more drink" remained strong, delaying the inevitable journey on the *sweat bus* to nowhere.

Soccer (football) Tournament

On Wednesday afternoon in temperatures reminiscent of summer on Venus, the players and supporters of the 12 ISBE 2006 soccer teams (after the World Cup we have to call it football in Australia) were bussed out to the venue on the River Cher. Unfortunately, the grounds person was on holidays on grass planting day and thus the pitches resembled the surface of Mars. Needless to say, the blood flowed freely from numerous gashes and grazes. Despite the conditions, the games were played in a good but competitive spirit (although the team of your correspondent was neither good, nor competitive) with the team from Norway taking the final (again) with France second (always the bridesmaid, never the bride?) and Canada third. The organizers must be commended for providing ample water in bottles, water pistols and those things used to spray fertilizer on grass. The 'Tough guy and most committed player' award goes to Lutz Fromhage for standing in goal for two penalty shootouts in a row (although he does lose points for doing it in his jeans and losing the second shootout). The 'commitment to science (AKA biggest nerd)' award goes to Fleur Champion de Crespigny for practicing her talk despite the world class action going on around her and the attention of passing motorists.

AGM

On a disappointing note, the Society's AGM, open to all members of the society, was almost exclusively attended only by the current executive and journal editors.

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