

12th Biennial ISBE Congress**Review of ISBE2008 Cornell University: Cornell was gorge-ous**

This conference had some stiff competition with two other major and far-flung American conferences just before and after. Despite this, it was the most well attended meeting in ISBE history, partly because of the prestige of Cornell perhaps, but also its proximity to New York made it an attractive and accessible location for the European hordes. The conference committee handled the 1,000+ delegates well. Almost everyone stayed in the reasonably priced and mostly brand new accommodation on the North Campus which added to the feeling of togetherness, and the dining area and beer tent were located conveniently nearby. The South Campus had the plenary auditorium and meeting rooms, accessed by a pleasant stroll across the bridge over the beautiful Triphammer falls. Cornell has a sumptuous, elegant campus, neatly delineated with ivy-covered stone buildings (the origin of the name 'ivy league school', trivia fans) and a gloriously Hogwarts-esque building right next to Barton Hall. This comfortably creaky structure was perfect as the central feature of the conference. It was once an aircraft hangar but has since been converted into a gym with full running track, and had acres of space for posters, vendors, refreshment stations and tables. The tasty lunches and coffee were served here which kept everyone together and lent the meeting a pleasant, cozy atmosphere. The beer tent proved a popular place to hang out in the evening, though many people took the option of going into Ithaca as the organizers had kindly produced a very helpful guide to local dining and drinking. As an added bonus the weather was mostly kind to us, even during one memorable evening when diners on the 3rd floor of Purcell Hall were treated to a spectacular lightning storm. Panic spread among the delegates that the lightning would cause the beer tent to close for the evening, but mercifully the weather passed and the tent stayed open.

The record number of talks (402) required no fewer than six concurrent sessions. Getting between them was easy however because the rooms were close together and well signposted with a snazzy computer system synchronizing parallel talks. The warning calls are getting more imaginative every year, and this time we had soothing Bluegrass music to relax us during the interval between talks. There was quite a bit of grouching over the decision by the ISBE committee to allow only one person per lab to give a talk, presumably to give people from smaller research groups a chance to be heard. This was an admirable though controversial decision, partly because it was not always followed.

The poster sessions went smoothly and proved just as popular as the talks. Despite the huge number of posters (465!) the organizers had shrewdly managed to fit them all into one end of Barton Hall through the cunning tactic of insisting everyone print theirs in portrait format. Another great innovation was that the posters were allowed to remain in place for the whole meeting so that people were free to browse through them at their leisure during coffee breaks etc. There were minor grumblings that the poster sessions were too short at 1½ hours, and major grumblings that people weren't allowed to buy any more beer or wine once they had used up their ticket for a freebie which led some to leave earlier than they probably would have done. Some thought it a mistake to have the poster session straight after the late afternoon oral session, but to be fair to the organizers, the dining area and the posters were in different parts of the campus meaning that well-fed and relaxed delegates might not have found their way back down, particularly if they had happened to call in at the beer tent on the way 'just for a quick one'.

The standard of the posters was generally high, although there is a curious creeping trend towards the use of psychedelic colour schemes and elaborate picture backgrounds, which usually makes it impossible (or painful) to read the text. Other puzzling trends are the random section placement and distractingly interchangeable font sizes. Maybe we are being old fashioned, but the time-honoured sequence of Introduction, Methods, Results and Discussion is hard to beat.

We followed standard conference review protocol by dividing presentations according to taxon and as usual, birds were by far the most common study organism (43%) followed by insects (17%) and fish and mammals (both 12%). Yet again, there were hardly any presentations on reptiles and amphibians (3%) which never ceases to amaze us given the range of behaviours, signals and unusual life history traits these animals exhibit.

Among the reasons people give for studying birds is their visibility and ease of study in their natural habitat, and the fact that 81% of bird studies were in the wild reinforces this perspective. One of the reasons people give for studying insects is their ease of study in the laboratory, particularly regarding sperm competition and trait heritabilities, and indeed, 72% of insect studies were performed in the laboratory (the figures for wild studies

of mammals and fish were 65% and 37% for fish respectively). This is not to say one is inherently better than the other of course, and in fact some of the best presentations we saw involved captive birds and wild insects. Furthermore, several of the more impressive presentations measured several behavioral traits of individuals in captivity before releasing them back into the wild and measuring how these translate across contexts. We got the feeling during the meeting that more bird studies were now being performed in captivity, but the equivalent figure for the 2000 Zurich meeting was basically the same (16%).

We divided the talks into 14 subject categories, defined by what we considered to be the primary focus of the presentation (Table 1). This was not a simple task since some presentations involved aspects of two or more categories and the distinction between a few of the topics is blurred. Given these caveats, the two dominant themes were *sperm competition* and *communication* (both vast fields admittedly). ‘Communication’ does embrace the gamut of vocal, visual and chemical signals, but even allowing for its breadth it is obviously a very active area, particularly concerning plumage colouration in birds. The significance of plumage variability in birds has long been a popular subject of course, but we got the definite feeling that large strides are currently being taken on several fronts towards understanding the mechanisms responsible for this variation. The other two popular presentation categories were life history (featuring some strong sessions on condition-dependent patterns of development and maternal effects on offspring performance), and behaviour (another broad field). There were several excellent presentations concerning personality, which is clearly a blossoming field and widely predicted to be even more prominent at the next ISBE meeting. A quick comparison with the millennium meeting in Zurich showed that the popularity of most topics has actually remained reasonably constant during the last 8 years (Table 1).

The state of the field of behavioural ecology was highlighted in the excellent plenary talks and the contributions of those presenters to our field. Specifically, Suzanne Alonzo encouraged the integration of multiple levels of theory and analysis, and demonstrated how the interactions of resource levels, sexual conflict and cooperation, and life-history combine to produce new insights into the patterns observed in nature. Ben Hatchwell gave a tidy talk on kinship and population structure in long-tailed tits which nicely illustrated the rewards that can be reaped from the intense, long-term study of a single model system and also provided an enviable example of how to fit several sub-projects

undertaken with a series of co-workers into one large conceptual framework.

Behavioural Ecology in general has also been improved by the advancement of technology, which has provided exciting ways to collect and analyse data using new molecular approaches, computer programs, and robotics. Although several people expressed the opinion that the thrust of the meeting was more heavily biased toward the behaviour end of the spectrum than the ecology, most presenters tried to place their results in an ecological context. Finally, we cannot help but comment on the multiple dimensions of this field and how many researchers are successfully and innovatively integrating several approaches to arrive at a more complete understanding of both new and old questions in behavioural ecology.

Table 1. Percentage of presentations listed by topic at ISBE 2000 (Zurich) and ISBE 2008 (Cornell)

	2000 (%)	2008 (%)
Sperm competition, mating systems and sexual selection	30.6	27.1
Personality	0	2.2
Cognition	1.7	3.9
Communication & signals	17.6	24.5
Predator-prey	3.8	2.1
Parental Care	5.3	4.2
Life history	11.9	12.5
Host-parasites	3.2	2
Population structure	4.6	1.3
Sex ratios	2.6	1.2
Behaviour	14.2	13.6
Conservation	0.2	1.2
Foraging ecology	4.3	4.2

Tuesday afternoon was left open to allow people to recharge their intellectual batteries by either kicking around footballs (soccer balls to Americans) or enjoying one of four relaxing and diverse excursions. All the excursions were well supported and voted a success, with the biggest smiles being present on the faces of those staggering off the winery tour buses. Bird-brains were thrilled to be able to visit the ‘Mecca’ of North America bird-lovers, the Cornell Lab of Ornithology, located just a short distance from Cornell’s campus. The football tournament has long been a simmering source of unease with mutterings of a few people taking it too seriously to the detriment of all. To counter this, the ISBE sub-branch of FIFA has decided to ban cleated football boots so hopefully the tournament will attract players of both sexes as well as all ages and skill levels in Perth in 2010 (the organizers assure us that the tournament will still be

soccer and not Australian 'no rules' football!). Still, the games were played in a friendly atmosphere with a team from Norway winning, and any hard feelings were soon washed away by some cold beers that evening while listening to an entertainingly unpredictable steel drum band at the barbecue.

The conference dinner was tremendously impressive. Barton Hall was transformed into the classiest aircraft hangar/gym most of us will ever see, and the food and locally-produced beer and wine were superb. Dinner was accompanied by an intriguing mix of wildlife sounds courtesy of the Cornell bioacoustics laboratory, ranging from some impressive elephant trumpeting calls to a series of baffling farting noises. Sandra Vehrencamp was given a well-deserved and prolonged standing ovation in appreciation of her considerable role in the conference's success, and we also got a stirring speech from the incoming president, Pat Monaghan.

The conference did end on a slightly flat note when the excited delegates streamed over to the post-dinner 'disco' to find only a small dark room with an iPod and a dodgy speaker system. This was a real opportunity missed, because a big disco or barn dance is guaranteed to send

everyone home happy: the dancers get to let off some steam and the graduate students get to laugh at their inebriated supervisors attempting to Macarena their way across the dance floor. It would be churlish to dwell on such a minor hiccup however. This was a memorable conference and the Cornell crew did an outstanding job of organizing 850 presentations and keeping over 1,000 people happy throughout. The scenery was beautiful, the accommodation was good, the food and drinks were great, and despite the mammoth size of the conference, it still managed to retain a contented community atmosphere. The science was impressive, the talks were professionally presented and handled, and there was, as always, a stunning diversity of invigorating research on display. The biennial ISBE conference has genuinely become something that we all look forward to, and Cornell 2008 was a perfect illustration of why!

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