

JAMES RENNIE BEQUEST

REPORT ON EXPEDITION/PROJECT/CONFERENCE

Expedition/Project/Conference Title: 10th International Behavioral Ecology Congress.....

Travel Dates: 9th-15th July 2004.....

Location: Jyväskylä, Finland.....

Group Member(s): Helen Simcox.....

Aims: To present some of my postgraduate work in a unique and challenging environment, and to discuss ideas and results with other researchers.....

OUTCOME (not less than 300 words):-

In July 2004, I was fortunate to be able to attend the 10th International Society for Behavioral Ecology Congress, held in Jyväskylä, Finland. With around 900 delegates, it was a very diverse conference covering all aspects of behavioural ecology and its integration with other disciplines such as physiology, genetics and theoretical biology.

In the Hamilton lecture, Mary Jane West-Eberhard challenged some traditional concepts about how evolution works. She discussed how changes in the environment or behaviour of an organism could be incorporated into an evolutionary framework that might have greater evolutionary potential than genetic mutations alone. Environmental, dietary or life-history changes might alter the threshold of gene expression, or the spread of novel behaviours which could then lead to changes at the gene level.

Other plenary sessions covered a vast range of topics such as the role of behaviour in shaping decisions on conservation, how MHC affects mate choice in sticklebacks and the effects of stress of spatial memory.

Perhaps one of the most rapidly expanding areas of behavioural ecology examines the benefits of mating multiply. For males, the benefits of mating with more than one female can be easily explained, but for females, the reasons are less clear. Potential answers are slowly accumulating from studies on a range of species, but the results are not always consistent. Pressing for further work, Michael Jennions emphasised the need for replicate studies despite that fact that they are not always easily funded!

One of the most intriguing talks I attended described how a species of Asian cuckoo tricks its host into providing more food. The nestling has a yellow skin patch on each wing-bend that it displays when the host parents come to the nest. Tanaka et al manipulated the yellow patch and found that food provisioning rates declined when the patch was blacked-out. This is the first time such a trait has been documented in an avian species, and it fascinated both ornithologists and non-ornithologists alike.

My own study animal, the ever-popular poeciliid fish, featured in a large number of presentations and allowed me to meet other researchers whose work is directly relevant to my own. I presented work that examines the whether males preferentially mate with unfamiliar over familiar females. In the laboratory, all males prefer unfamiliar females, but in the field, there are notable population differences in this behaviour. I received invaluable feedback on my work, with a number of inspiring and thought-provoking discussions. I am very grateful to everyone that took the time to speak to me.

The evening social programme was almost as busy as the rest of the day, with boat cruises, traditional Finnish saunas, a very serious football tournament and a lot of delicious food.

I thank the James Rennie Bequest for the financial support that enabled me to attend the congress.