

Grazing, we're grazing

Dr Richard Small was invited to make a presentation to the *Environmental Value of Animal Genetic Resources* session of the European Federation of Animal Science Conference in Stavanger, Norway in August. The presentation, entitled *Potential for conservation of local livestock breeds through delivery of ecosystem services*, considered several ecosystem services but focussed on the use of livestock in conservation grazing and how this has benefits, but also potential risks, for the conservation of farm animal genetic resources. The invitation arose from Richard's involvement with the Grazing Animals Project and his membership of the National Standing Committee for Farm Animal Genetic Resources (NSC FAnGR). *Right:* Hebridean sheep grazing on Freshfield Dunes Nature reserve.



Dr Jenny Sneddon has recently submitted a £2 million NERC grant proposal in collaboration with Aberystwyth (IBERS), Harper Adams University College and Edinburgh Universities. If successful, this project will investigate the relationship between grazing by cattle and sheep and biodiversity in British uplands. Overgrazing can destabilise the balance of species and result in degradation of vegetation, while under-grazing can also result in loss of biodiversity. An area with long-running field experiments near Aberystwyth will be used as the study site for this project.

Climate change and Cheshire mosses



Dr Jane Fisher co-ordinated this years Meres and Mosses Forum, bringing together over 50 delegates from universities, government agencies, conservation charities and environmental consultancies to share advances in scientific research and practical conservation for the West Midland Meres and Mosses. This years meeting incorporated a field visit to view historical environmental changes in the Delamere catchment.

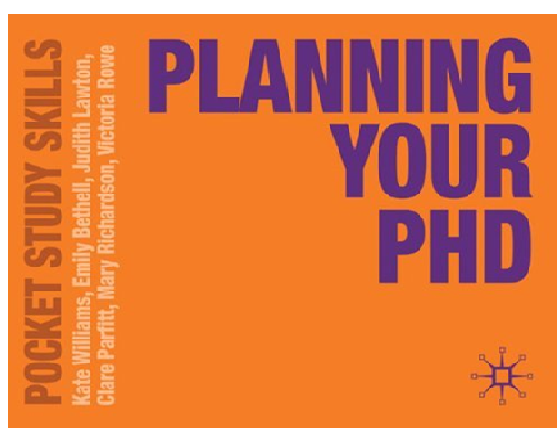
Left. Delegates visit Iron-age fort excavations in the catchment of the Delamere meres and mosses, examining the causes of changes recorded in the lake sediments.

Practical advice for postgraduates

Dr Emily Bethell, Lecturer in Animal Behaviour, has co-authored two books on research degrees and how to complete them. Published by Palgrave MacMillan they aim to provide advice to students at all stages of their PhDs from enrolment to viva.

Williams, K., Bethell, E.J., Lawton, J., Parfitt, C., Richardson, M. & Rowe, V. (2011) *Completing your PhD*. Palgrave Pocket Study Skills Series. Palgrave Macmillan.

Williams, K., Bethell, E.J., Lawton, J., Parfitt, C., Richardson, M. & Rowe, V. (2010) *Planning your PhD*. Palgrave Pocket Study Skills Series. Palgrave Macmillan.

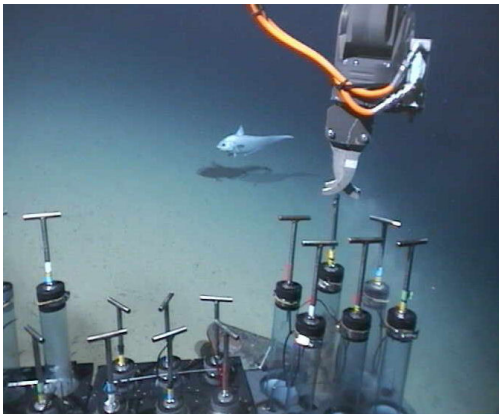


Capuchins and Corals

Students on the 3rd year BIEBL3027 Tropical Expedition Module have just returned from their two week trip to Costa Rica. The students were all from the Biology, Zoology, Animal Behaviour and Wildlife Conservation Programmes (*right*), and they conducted their own research projects in the tropical dry forest and on the coral reef. Projects on leaf cutter ants, howler monkeys, butterflies, butterfly cleaner fish, reef check protocol and coral bleaching were completed under the supervision of Dr Simone Dürr and Prof Filippo Aureli. Humpback whales and several species of monkey were seen during the trip. Students stay with local families and at a research station, allowing them to experience a different culture as well as improve their field skills and get to grips with the wildlife.



Examining Carbon and Climate in the Oceans



Dr Kostas Kiriakoulakis has been awarded an Early Career Researcher Fellowship from LJMU. He will be collaborating with Dr Robert Turnewitsch from the Scottish Association of Marine Science in Oban (University of Highlands and Islands). They will be looking at how [seamounts](#) (large underwater mountains, estimated to be >60000 globally) stir the waters around them and affect fluxes and composition of carbon particles that sink from the surface. On a global scale sinking of these particles into the ocean depths is an efficient mechanism for removing carbon from the atmosphere thus regulating climate. The project will focus on selected seamounts from the E. Mediterranean and N. Atlantic and comparing them with areas of the open ocean that are not influenced by seamounts. Ultimately the aim is to improve understanding about the variability of these processes and their impact on climate regulation on a global scale.

Above: A grenadier passing in front of the [Remotely Operated Vehicle \(ROV\) Isis](#) at 4300 m depth.

New faces in the School

Welcome to Dr Keri Nixon who will be joining the School as Senior Lecturer in Forensic Psychology in October. Keri was previously director of the Forensic Psychology MSc at Manchester Metropolitan University, and prior to that helped to set up the Merseyside Police Violent Offender Management Unit (VOMU). Keri's research interests include domestic abuse, homicide, police culture and performance, stalking, false allegations of rape, honour based violence, forced marriage and female genital mutilation. She works with police forces, probation services and charities throughout the UK.

Hello to Yvette Foulds, who has started an MPhil with Dr. Claudia Mettke-Hofmann. Yvette is a conservation assistant at Chester Zoo and will do her research on the effect of mixed species aviaries on reproduction. The study is being conducted in collaboration with Roger Wilkinson, Chester Zoo.

Spreading the word at Conferences

Jason Kirby attended the International Union for Quaternary Research conference in Bern, Switzerland in July and gave a paper entitled *A new Late Holocene relative sea-level record from Bracky Bridge, Donegal, NW Ireland*.

Sheila Glenn presented *Use of the Goodman Strengths and Difficulties Questionnaire with adults with Down syndrome* at the Joint congress of the European Association for Mental Health in Intellectual Disability & IASSID Challenging Behavior & Mental Health SIRG, Manchester in September.

Nicky Town presented her PhD studies on *Chapel House Farm Medieval Cemetery: Establishing the relationship between human bone and its environment* and Costa Eliopoulos spoke on *Diffuse idiopathic skeletal hyperostosis in a modern human skeletal collection from Greece* at the British Association of Biological Anthropology and Osteoarchaeology in Edinburgh in September.

Christina Stanley and Leah Williams won prizes at the LJMU Faculty Research Day. Christina poster *Mummy's Boys: maternal protective-ness as a response to colt directed aggression in semi-feral horses* won first prize for posters and Leah came joint second with her presentation *Head-colour reflects personality in the Gouldian finch* (*Erythrura gouldiae*).

Simone Dürr presented *Do barnacles have colour preferences in their choice of settlement substratum* at the 9th International Temperate Reef Symposium in Plymouth in July.

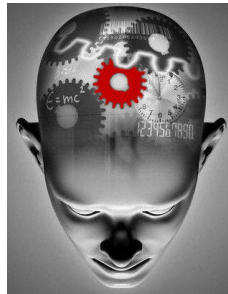
Spider monkeys on TV

Prof Filippo Aureli's study group of spider monkeys in Santa Rosa National Park, Costa Rica, was filmed for an NHK (the Japanese equivalent of BBC) documentary in June. This group of spider monkeys has been studied for over 10 years by Filippo and his team, including Elvin Murillo, who accompanied the crew throughout the filming. Because of the highly arboreal nature of spider monkeys, a remote controlled camera, a fast-speed camera (for high-quality images in slow motion) and a viewing tower were deployed to capture the gracefulness of the monkeys' locomotion and travelling patterns. A 30-minute documentary was produced which aired on the 2nd of October on the main NHK channel in Japan, and may be shown on other international channels at a later date.

Getting sweaty in ancient Africa

In the 1980s Peter Wheeler interpreted both our upright stance and loss of body hair as adaptations to keep cool in the sunny African savannah in which our ancestors evolved. Dr Dave Wilkinson and Graeme Ruxton (Glasgow) have recently revisited these models to investigate the plausibility of hunting by endurance running. Their model suggests that only early humans that had already lost their body hair and evolved the high sweating rates of modern humans would have been able to hunt by running for long periods under the African sun. Further work suggests that loss of body hair would have been advantageous for keeping cool in the way Wheeler had suggested, but the effects of an upright stance (without hair loss) are much less obvious in the new model. This work was presented at the British Ecological Society in September and attracted substantial media coverage.

Interested in Psychology?



Would you like to know how memory works, how stress affects our health or why people overeat?

The School of Natural Sciences and Psychology is looking for students to join a panel of volunteers for a range of psychology studies, giving you an opportunity to contribute to important scientific research. If you are added to the panel you will be under no obligation to participate in the studies, but if you do take part your out-of-pocket expenses will be reimbursed with shopping vouchers. All studies will be approved by an appropriate Research Ethics Committee.

To register your interest, call: **0151 904 6227** or Email psypanel@ljmu.ac.uk

Forthcoming research seminars

NSP Research seminars take place every week and all staff and students are welcome to attend. They are an opportunity to learn more about research—and to meet and question the people who are doing it—in a more relaxed setting than the traditional classroom environment.

Natural sciences seminars are held weekly on **Wednesdays at 4.30pm in room 327**, Byrom Street. The first seminar this semester takes place on October 26th. Ian Smith (LJMU) will present *Cumbrian cave archaeology: background and recent progress* and Nick Felstead will present *Palaeohydrology of the Cuatro Ciénegas Basin, NE Mexico: implications of over extraction of water and the need for future conservation*.

Psychology Research seminars are held every two weeks on **Tuesday lunchtimes at 1pm in the Tom Reilly Building, room 149**. The next seminar this semester will be on October 11th when Professor Felicia Huppert, University of Cambridge, will present *The science of well-being: defining, measuring and promoting flourishing in the population*.

Some recent publications by staff within the School

Bethell, E.J., Holmes, A., MacLarnon, A., Semple, S. *in press*. Cognitive bias in a non-human primate: husbandry procedures influence cognitive indicators of psychological wellbeing in captive rhesus macaques. *Animal Welfare*.

Clark, H.E., Jones, J.M. 2011. The use of a fieldwork audit to anticipate barriers to fieldwork for disabled students. *Planet 24*: 42-49.

Cunningham, C., **Glenn, S.** *in press*. Age, social and developmental appropriateness: Has the pendulum swung too far? *Down Syndrome Quarterly*.

Davy-Jow, S.L., Decker, S.J., Ford, J.M. 2011. A Simple Method of Nose Tip Shape Validation for Facial Approximation. *Forensic Science International*. doi:10.1016/j.forsciint.2011.07.039

Decker, S.J., **Davy-Jow, S.L.**, Ford, J.M., Hilbelink, D.R. 2011. Virtual Determination of Sex: Metric and Non-metric Traits of the Adult Pelvis from 3D Computed Tomography Models. *Journal of Forensic Sciences*, 56: no. doi: 10.1111/j.1556-4029.2011.01803.x

Edwards, K.J., Schofield, J.E., **Kirby, J.R.**, Cook, G. *in press*. Problematic but promising ponds: Palaeoenvironmental evidence from the Norse Eastern Settlement of Greenland. *Journal of Quaternary Science*. DOI: 10.1002/jqs.1518

Heger, T.J., Booth, R.K., Sullivan, M.E., **Wilkinson, D.M.**, Warner, B.G., Asada, T., Mazei, Y., Meisterfeld, R., Mitchell, E.A.D. 2011. Rediscovery of *Nebela ansata* (Amoebozoa: Arcellinida) in eastern North America: biogeographical Implications. *Journal of Biogeography* 38: 1897–1906.

Ho, L.W.P., Dickinson, N.M., Chan, G.Y.S. 2010. Green procurement in the Asian public sector and the Hong Kong private sector. *Natural Resources Forum* 34: 24-38.

Ingels J., Billett D.S.M., **Kiriakoulakis K.**, Wolff G.A., Vanreusel A. *in press*. Structural and functional diversity of Nematoda in relation with environmental variables in the Setubal and Cascais canyons, Western Iberian Margin. *Deep Sea Research Part II*, DOI: 10.1016/j.dsr2.2011.04.002.

Kiriakoulakis K., Blackbird S., Ingels J., Vanreusel A., Wolff G.A. *in press*. Organic geochemistry of submarine canyons: The Portuguese margin. *Deep Sea Research Part II*, DOI: 10.1016/j.dsr2.2011.04.010

Logie, R.H., Trawley, S., **Law, A.S.** *in press*. Multitasking: Multiple, Domain-Specific Cognitive Functions in a Virtual Environment. *Memory and Cognition*.

Rebecchini L., Schaffner C.M., **Aureli F.** 2011. Risk is a component of social relationships in spider monkeys. *Ethology* 117: 691-699.

Ruxton, G.D., **Wilkinson, D.M.** 2011. The energetics of low browsing in sauropods. *Biology Letters* 7: 779-781.

Tiddi B., **Aureli F.**, Schino G., Voelkl B. 2011. Social relationships between adult females and the alpha male in wild tufted capuchin monkeys. *American Journal of Primatology* 73: 812-820.

Trawley, S., **Law, A.S.**, Logie, R.L. *in press*. Event based prospective remembering in a virtual world. *Quarterly Journal of Experimental Psychology*.