

### **Cirencester Science and Technology Society**

**The first lecture of the 2007-08 session was given by Professor Innes Cuthill on “The Art of Concealment - Prey Camouflage and Predator Vision”. His core research is in behavioural ecology and he is a member of the Behaviour Sensory and Neurobiology Research Group of the School of Biological Sciences of Bristol University.**

**Prof. Cuthill described the two main types of camouflage - one merging with the background and the other being in stark contrast to it. He gave a number of examples of each type, ranging from the film Predator to naval warships. The mechanism of animal colour perception was explained. Birds have four spectral peaks compared with three for humans. The extra peak allows birds to use the infra red part of the spectrum. The essence of the speaker’s work is to establish how birds see camouflaged objects.**

**The experimental approach used by Prof. Cuthill is to camouflage artificial moths which are put on trees in a wood near the Clifton Suspension Bridge. The rate at which birds take the moths is compared with the different camouflage patterns. He was able to show that breaking up the edge of the moth with a dark pattern provided the greatest protection. Putting the same pattern on the centre of the moth was less effective. Finally he described the application of his results to the camouflage of military personnel and vehicles/ships.**

**During a lively discussion, the speaker was asked if wind turbines could be camouflaged. Prof. Cuthill said some work was being done on this topic but the most likely solution would be to paint them black.**

**The next meeting is a public lecture to be given by Dr Andrew Ives, Past-President of the Institution of Mechanical Engineers, on “Engineering - The Ultimate Reality Show” on Wednesday 10th October 2007 at the Sundial Theatre, Cirencester College. Tickets £5 (free to members and full-time students) are available from the Theatre Box Office 01285 654228 or [www.boxoffice@Cirencester.ac.uk/sundial](mailto:www.boxoffice@Cirencester.ac.uk/sundial) .**