

## Bibliography

### **Ecology**

- \*NEW\* Calver, M.C. & Wooller, R.D., 1998. **A non-destructive laboratory exercise for teaching some principles of predation.** *J.Biol.Educ.*, **33** (1), 45-48. A practical exercise to highlight the relationship between an individual predator's consumption rate (defined as the number of prey eaten), and the density of it's prey.
- \*NEW\* East,D. & Knight,D., 1998. **Sampling soil earthworm populations using household detergent and mustard.** *J.Biol.Educ.*, **32** (3), 201-206. Sampling earthworm populations in soil using detergent or mustard is compared with traditional hand-sorting techniques. The physiological effects of these vermifuges on earthworms are reported.
- \*NEW\* Fenner,M., 1997. **Evaluation of methods for estimating vegetation cover in a simulated grassland sward.** *J.Biol.Educ.*, **31** (1), 49-54. Estimating vegetation cover is subject to many pitfalls. This laboratory exercise examines the merits of different approaches to a familiar fieldwork problem.
- \*NEW\* Hauer, F.R. & Lamberti, G.A., 1996. **Methods in Stream Ecology.** Academic Press Ltd., London. This book provides a complete series of field and laboratory protocols in stream ecology that are ideal for teaching or conducting research. It is also a valuable reference for those who are not trained as stream ecologists.
- \*NEW\* Gilbertson, D.D., Kent, M. & Pyatt, F.B., 1985. **Practical Ecology for Geography and Biology Survey, mapping and data analysis.** Unwin Hyman Ltd, London. This book provides the basis for a project-based course in ecology at the upper end of secondary school and at college and university. It aims to demonstrate the relevance and simple application of carefully selected methods for data collection and statistical analysis in ecology and the critical analysis and interpretation of results.
- \*NEW\* Openshaw,P.H. & Whittle,S.J., 1993. **Ecological field teaching: how can it be made more effective?** *J.Biol.Educ.*, **27** (1), 58-66. Ecological field trips can be fun but sometimes frightening for both teacher and students. They can be more effective if learning problems are identified and overcome.
- \*NEW\* Slingsby, D. & Cook, C., 1986. **Practical Ecology.** MacMillan Education Ltd, London. This book gives background ecological theory within the context of practical exercises that illustrate scientific processes, instructions for the application of a range of techniques and equipment from the traditional to computers and the other electronic items. Also details the principles of experimental project work leading from ecological field studies.
- \*NEW\* Smith, R.L. & Smith, T.M., 2001. **Ecology and Field Biology** (sixth edition). Benjamin Cummings, an imprint of Addison Wesley Longman, Inc. This book aims to present a balanced introduction to ecology – plant and animal, theoretical and applied, physiological and behavioural, population and ecosystem.
- \*NEW\* Warrington, S., Knaggs, D. & Smith, A., 1996. **Methods for determining species habitat relationships, illustrated with fieldwork on freshwater macroinvertebrates in an upland catchment.** *J.Biol.Educ.*, **30** (4), 257-264. Species-habitat relationships are a fundamental part of the life history of all organisms, and their study should be encouraged in ecological fieldwork.

Compiled by Allan Jones, Co-ordinator of Special Interest Group: Practical work in the Biosciences

\*NEW\* Wheeler, C., 1989. **A comparison of two formats for terrestrial behavioural ecology field courses.** *J.Biol.Educ.*, **23** (3), 223-229. Two designs of undergraduate terrestrial ecology and behaviour field course are described, and the relative educational benefits of each are considered and the advantages of each type of course are discussed.