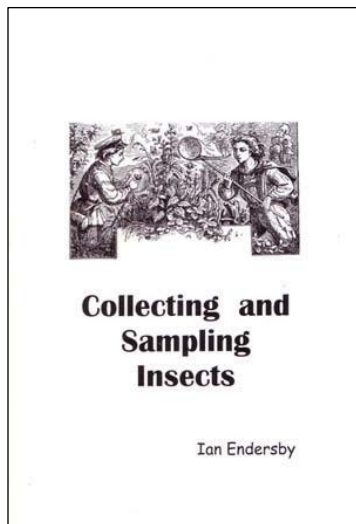


Collecting and Sampling Insects by Ian Endersby, *Entomological Society of Victoria, Montmorency, 2009, paperback, 28 pages (ISBN 978 0 9805802 1 1)*

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At first this 28 page booklet looks like yet another enumeration of methods for collecting insects, making it easy to miss the new territory that it treads.

Indeed, most of the booklet catalogues collecting methods such as direct (beating, sweeping, breeding cages), intercept (pit, malaise, sticky), aquatic (kick sampling, net towing, hess sampler) and litter/soil (handpicking, sieving, tullgren funnel). These methods are covered in more detail in the volume it aims to complement – *Methods for Collecting, Preserving and Studying Insects and Allied Forms* by Murray Upton (Aust. Ent. Soc., 1991). Endersby updates a few methods, such as pointing out that smearing fermented sugars, beer and honey on tree trunks to attract insects contravenes protection of the apiary industry from disease. Yet the author endorses use of ethyl acetate to kill insects without promoting less toxic alternatives in use these days such as freezing specimens.



Many traditional sampling methods are outlined without innovative solutions to improve them. For instance window traps notoriously consume a large quantity of preserving liquid in the trough below. In Europe a successful adaptation is an upside-down triangle shaped window that funnels insects into a collecting bottle at the bottom apex. While the booklet focuses on techniques that target commonly sampled microhabitats such as the ground and air, there is potential to broaden these techniques to sample others such as saproxylic and trunk insects.

A guide to the target taxa that each trap may catch would be invaluable. A collector interested in flying beetles would appreciate knowing not to bother with malaise traps

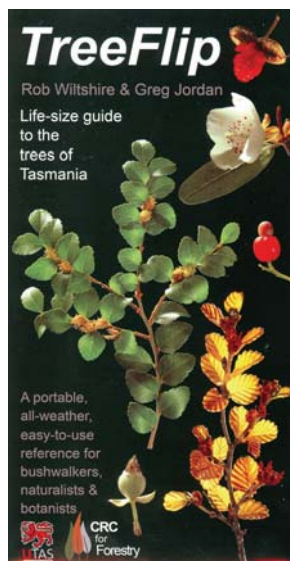
because samples are dominated by a soup of diptera and hymenoptera whereas window traps mainly catch beetles. There is no doubt, however, that it is difficult to juggle the included and excluded when compiling a book of such short length.

What, then, of the new territory that the booklet treads as an accompaniment to Upton (1991)? ‘Sampling’ in the title provides the clue.

‘Collecting’ refers to museum-style qualitative collection of insects to ‘see what’s out there’. ‘Sampling’ systematically applies the same chosen method to the collection of each sample. This replicated sampling enables quantitative analysis of the results from which information about the ecology or life history of species or communities of insects may be gleaned. Endersby introduces sampling methods through an innovative ‘Qualitative versus Quantitative’ segment at the end of each section where he suggests sampling strategies such as length of time of collection or area sampled. This, says the author, allows differences in populations, habitats, etc to be compared and may require measurement of environmental variables (weather, plant species etc) at the same time. As an introduction to sampling strategies the booklet would be useful for high school classes and novice collectors.

It would be an impossible task for a booklet of this size to provide the detail required to make the leap to well designed sampling methods, though the introductory outline of species accumulation curves hints that there is more to investigate for those who are interested, while a modest list of references provides a starting point for further investigation. Hopefully it stimulates the reader’s appetite to inquire further.

To quote the author: “*It is important to have a reason for collecting; having sacrificed an insect’s life for the purpose, some positive use must be made of the collection*”.



TreeFlip by Rob Wiltshire & Greg Jordan,
School of Plant Science, University of Tasmania
& CRC for Forestry, unique flip-open booklet-
poster (ISBN 978 1 86295 496 0)

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Many field naturalists will be users and admirers of *EucaFlip* – the ingenious, field-friendly guide to Tasmania’s eucalypt species. Now the School of Plant Science at the University of Tasmania has followed up with *TreeFlip* – a guide to Tasmania’s non-eucalypt tree species.