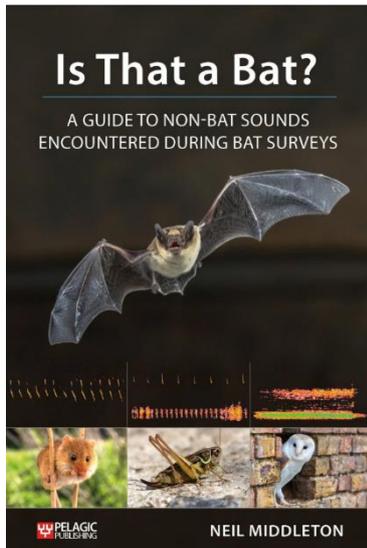


Book review – *Is That a Bat? A Guide to Non-Bat Sounds Encountered During Bat Surveys* by Neil Middleton (Pelagic Publishing, 272 pages, £34.99)



Anyone who has attended one of Neil Middleton's training sessions will be familiar with his enjoyable, conversational style of presenting information, and this applies to his writing style too in this entertaining, instructive and often eye-opening book. Its title might suggest that this isn't intended to be the first book you would buy when getting into bat detecting. In fact it is an invaluable read and reference for anyone identifying bats through sound analysis at any level, from beginners to the more experienced.

Neil documents his own progress in learning how to get the most robust conclusions from acoustic analysis and when and why caution is needed. He is very honest about his own past mistakes and how he learned from them, and beginners will be heartened by his comment that an expert who corrects your mistake isn't cleverer than you, it's just that they've already learned from making the same mistake. His own assumptions of expertise are regularly shaken but also enriched by his investigations into other sounds picked up on bat detectors. This approach gives the book a personal narrative which makes it an engaging read, enhanced by Neil's regular humorous asides.

Chapter 1 begins by making the case for having a better understanding of all sounds we pick up on a bat detector. If we think something isn't a bat but don't actually know what it is then how do we know it's not a bat? If it isn't a bat then is it something else that could be interesting or even important for assessing the biodiversity value of a site? Are some of the sounds we think are bats in fact something completely different (and potentially just as interesting)? With a view to helping the reader make more accurate assessments of recorded sounds, the chapter then provides a refresher course in the essentials of detecting, recording and classifying sounds. It covers bat echolocation and social calls, how to make the most of your field equipment, improving your fieldcraft, and the pros and cons of today's bat detecting technology (including essential cautionary advice on the use of automated classifiers). Also covered are the often confusing artefacts that can occur in recordings – why they occur (the more complex technical factors are explained very clearly with the aid of illuminating illustrations) and how to reduce their occurrence in order to get "cleaner" recordings that more accurately represent the sounds produced by the animals themselves. The chapter concludes by saying we shouldn't get hung up on being able to identify everything: it is fine to say "I don't know" and in fact caution is often the most accurate and credible approach.

The succeeding chapters give examples of sounds produced by terrestrial mammals, birds, amphibians, insects, electrical and mechanical devices, and "weather, people and other nuisances". In each case, guidance is provided on how to identify these different sounds, the likelihood of them being confused with bat sounds and how to differentiate confusion sounds. An example I have recorded many times myself is brown rat distress calls which look superficially similar to noctule echolocation calls. To my relief I had already been rejecting these sounds as not looking quite like noctules (most noticeably the interpulse intervals are often too short) though without knowing what the sounds actually were. Neil describes a number of scenarios under which brown rat calls are likely

to be misidentified as noctule calls: when viewing a file with compression applied (removing the gaps between sounds), when working through high numbers of files under severe time constraints, and when the analysis is carried out using automated classifiers. Several other non-bat species across different taxa are shown to produce sounds that can be confused with bat sounds, while many others fall into the category of “it doesn’t look like a bat but what on earth is it?” The final chapter focuses on sounds which don’t prove to be anything interesting in themselves (caused by weather, environment and people) but will be familiar “nuisance” noises to anyone who has made recordings in the field. Helpful advice is provided on how to minimise these. The spectrogram captions in this chapter can raise a chuckle (“Cough with bush-cricket”, “Sniffing – a quiet one, followed by a loud one”) and Neil saves the best (or worst, depending on your sensibilities) until last.

A downloadable sound library enables you to view and listen to the example recordings that illustrate the book and provides valuable references against which to compare your own recordings when carrying out sound analysis. The library also contains a “Test yourself” folder containing 20 mystery recordings plus a question and answer sheet. Working through this exercise is a valuable way to enhance your learning. One slight issue is that if you click the “next file” button in your sound analysis software the files don’t open in correct numerical order due to the way Windows sorts numbers in file names (Q1, Q10....Q19, Q2, Q20 etc.) and if you don’t spot this you’ll end up writing your answers against the wrong questions on the sheet. To get around this, select each file individually using the “Open file” function in your sound analysis software, or before starting rename the file names to include zeroes in the single digit question numbers (Q01, Q02 etc.).

This book succeeds brilliantly in encouraging appreciation of the rich and varied world of sound around us. These sounds can sometimes confound our attempts to accurately identify bat species from their calls but at the same time they greatly increase our scope for evaluating and enjoying the biodiversity around us (very timely in the context of current multi-taxa monitoring initiatives). It also makes an important contribution to helping raise standards in the acoustic identification of bats.

Philip Briggs