Supporting Online Material for

The World Through a Bat’s Ear

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SOM Text
Readings: Echolocation and Bats

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It is easy to be torn between thinking that either bats or their echolocation is the most fascinating. Don Griffin referred to echolocation as “the magic well” because research into this topic has consistently yielded exciting findings. But so has the study of bats, often marvellous discoveries that lead one deeper and deeper into their lives.

Below some of my favorite readings are presented in three categories. For the expert in the field my selection is mostly recent papers about bats and echolocation, from performance and behavior to connections to morphology and evolution. The question of whether or not echolocation was an ancestral character in bats remains unanswered. There are two points on this topic (Simmons et al. 2008; Veselka et al 2010; Simmons et al. 2010). It is not clear whether or not the earliest known bat, the 52.5-million-year-old Onychonycteris finneyi from Eocene deposits in Wyoming, could echolocate. The Horowitz et al. paper speaks to the importance of vision and echolocation to performance by big brown bats. These papers also demonstrate the innovative approaches biologists have taken to the study of bats.

For the general reader, I offer a selection of recent books about bats, and one about radar. Most of these are edited volumes presenting thorough reviews of a variety of topics, including echolocation. Any of them is a good jumping off place for exploring the lives of bats.

For the nonscience reader, Griffin’s 1958 classic is a way to learn about echolocation and how people discovered it. The Altringham, Fenton, and Wilson books are general contributions about bats, while Nancy Simmons’ piece from Scientific American looks at the evolutionary history of bats. There are many other books about bats, from regional (bats of ....) to those more focused on conservation or specific aspects of bat biology.

To me, one of the most intriguing things about bats is people’s fascination with them. This starts with children. Some of you will recall Janelle Cannon’s book Stellaluna, which continues to entertain children. Others may have children who have read Kenneth Oppel’s fantasies about bats (Darkwing, Silverwing and Firewing). My “young adult” nieces enjoyed them. For those who can read French, Denis Tupinier’s book “La chauve-souris et l’homme” (1989, L’Harmattan, Paris) is a gold mine of information about people’s perceptions of bats.

Bat Conservation International (batcon.org) also is an excellent source of information about bats.

Expert in Field


**General Reader**


Nonscience reader


Children