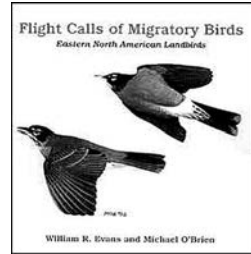


ABOUT BOOKS

Strangers in the Night

Mark Lynch

Flight Calls of Migratory Birds. Eastern North American Landbirds (CD-ROM). William R. Evans and Michael O'Brien. 2002. Old Bird Inc. CD-ROM produced by NuVision Media, Lake Oswego, Oregon.



One of the great pleasures of experiencing migration here in New England is to pick some quiet place on a still moonlit night in spring or fall and listen for the calls of the numerous unseen migrants winging their way overhead. It's as though a great invisible river of birds is passing right by you, and the only clue to their presence is their occasional quick and sometimes barely audible calls. We experience this dramatic continent-spanning spectacle only through the very subtlest of clues. Though some species' call notes are certainly recognizable, like those of the thrushes or a Dickcissel, most birds' brief flight calls have remained a frustrating collection of unidentifiable *zeeps* or clipped lispings *tsss*. It has always seemed an impossible task to attribute these fast night flight calls from unseen birds to species – which is why *Flight Calls of Migratory Birds* is such a surprise and revelation.

This CD-ROM is the culmination of more than fifteen years of research by William Evans. Birders first heard of Evans in 1990, when he produced an audiotope of night flight calls of *Catharus* thrushes. His long collaboration with Michael O'Brien began in 1991. Initially, Evans worked with the Cornell Laboratory of Ornithology and the then newly formed Bioacoustics Research Program (BRP). This group of ornitho-technologists developed new digital acoustics analysis software that revolutionized the study of night flight calls. Some of this software allowed for the automatic detection and recording of the short, high-pitched, barely audible sounds typical of warblers and sparrows during night migration. Sophisticated spectrographic analysis programs were then used to separate similar sounding calls. The identification of those *zeeps* and *seeps* in the dark was becoming a hard science. In 1998 Evans founded Old Bird, a nonprofit organization “dedicated to facilitating flight call monitoring” (from “A Short History of Nocturnal Flight Call Monitoring” on the CD-ROM). Old Bird contracted with former BRP programmer Steve Mitchell to develop even more advanced software. This time the recording equipment software could discriminate and identify a *single* species of nocturnal migrant, the Dickcissel. Old Bird then established a network of automatic monitors that could detect migrating Dickcissels by their flight calls at stations at a series of schools in Texas.

Initially wanting to use this technology to produce a new recording of night flight calls of sparrows and warblers, Evans and O'Brien realized that, while they were at it, the old thrush recording needed redoing too. In the end, they produced this CD-ROM that includes flight calls of everything from doves to finches, 211 species in all. As

you can imagine, identifying as to species these night flight calls was no mean feat and involved quite a bit of piecing together of different kinds of evidence. Sometimes recordings and sonograms of night calls were compared with diurnal calls of clearly identified birds. Evans and O'Brien then factored in known migration routes with the dates and locations of the nocturnal recordings. Finally, they then had to compare a specific call in question with other known similar and already identified calls from birds known to be migrating in the same area. Evans and O'Brien's self-described "confidence level" of identification varies from species to species on this CD-ROM. Some calls are clearly listed as "hypothetical" as to species, while for other species, no known flight call is even given. Although *Flight Calls of Migratory Birds* has a wealth of new information for birders, it is still very much a work in progress.

Although the obvious purpose of this CD-ROM is to help folks identify flight calls, diurnal and nocturnal, the CD has also a wealth of information on understanding the dynamics of migration and the behavioral function of calls in birds. For instance, in the section entitled "What is a flight call?" you learn:

Flight calls are given on both diurnal and nocturnal migration during long, sustained flights.

Many species do not give these calls only in flight. Some birds will give these same calls while foraging on the ground or interacting with young.

Some *Catharus* thrushes give the same nocturnal flight calls while perched during the day.

Though you may know that many species of birds, like pipits, sing in flight, you may not know that during nocturnal migration some species may also give a short burst of song.


Another section titled "Glossary" actually attempts to clearly define terms that we have read in field books numerous times before and have often found confounding. These are words that are typically used to describe the auditory quality of call notes. Words like "dry," "burry," "husky," "lazy," "lisping" and even the more exotic: "short rising seep." The list is long and confusing. I don't know about you, but I have often found these terms hopelessly subjective and often not useful. The genius of the *Flight Calls of Migratory Birds* CD-ROM format, is that after the verbal description of each of these terms you can click on a real avian example and hear it then and there. So THAT'S what "husky" sounds like!

Reading the section entitled "A Short History of Nocturnal Flight Monitoring," it is clear that advances in monitoring and understanding flight calls occurred only after a continual evolution of advanced audio recording hardware and software. The first published record of an attempt to count night flight calls occurred in 1896, when Orin Libby spent five hours in the dark sitting on a hill outside of Madison, Wisconsin, counting 3600 calls of night-flying birds. But it would not be until the late 1950s that Richard Graber and Bill Cochran made the first recordings of these same calls. Yet another crucial milestone was the development of a voice-activated flight-call recording system in the late 1980s by Peter Kaetsch.

Finally, do the recordings make this a worthwhile purchase? Clicking on a menu of groups of birds like Cuckoos, Wrens or Wood Warblers, you will find a menu of individual species. Each species has a home page that may include sonograms, notes on behavior, a discussion of vocally distinct subspecies and other vocally similar species. There are also links to short recorded examples of diurnal and nocturnal flight calls. Some species have only one example, others several. The quality of these recordings does vary considerably. Sometimes wind creates a background noise over which you must try to hear the calls. Other birds or animals are sometimes also heard in the background but are typically identified on the species home page. But, overall, the recordings are clear and distinct. However, some species when clicked reveal that there is no known flight call. I question whether these should even have been included.

To further help the listener discriminate between similar sounding species, there are several screens with titles like “Zeep Calls,” “Descending Seeps,” and “Thrush-like Calls,” that offer a grid of sound-alike species and several examples of each call so you can compare and learn. To folks who have difficulty learning even the songs of birds, clicking through these arrays of similar short calls may seem like a cruel joke. After all, to the neophyte, many of these diurnal and nocturnal flight calls sound like minor variations of someone trying to get your attention in a library. But, as Evans and O’Brien note, learning flight calls “demands dedication, concentration and repetition.” They recommend listening for length of call, pattern, and pitch, among other qualities. They also recommend following birds around while they forage to learn diurnal call notes, which are often similar to or the same as the nocturnal flight calls. Evans and O’Brien broadly divide flight calls into two very broad categories: “thrush-like whistles” and high, short, *seep* or *zeep* calls of warblers and sparrows. I would also recommend beginners start with some of the more distinct sounding species like the cuckoos and leave the wood warblers for later.

This is a very easy CD-ROM to use and is well designed and easy to navigate. Simply pop it into your PC, and it runs automatically. You will see a prompt to have Winamp installed, but I found that my disk ran perfectly with my previously installed Musicmatch software that I downloaded for my I-Pod. Minimum system requirements for PC users are Windows 95 or later, Pentium 266 MHz, 64 MB RAM, 800X600 display and a 4X CD-ROM drive.

There is still so much to be learned and studied about avian nocturnal migration. *Flight Calls of Migratory Birds* gives the birder some tools to get at least an auditory glimpse of the vast spectacle that is passing overhead. This CD-ROM also is a wonderful primer on birdcalls, the dynamics of migration, and the evolving collaboration of technology and ornithology. 

Mark Lynch is an ecological monitor, teacher, and trip leader for Mass Audubon’s Broad Meadow Brook, currently working on the birds of the Blackstone National Corridor. He is the host of Inquiry, a talk show of the arts and sciences, on WICN (90.5FM). He is also a teacher and docent at the Worcester Art Museum.