

# Listening to the Noisy Bugs

## Sound Waves—and What They REALLY Sound Like

When the bugs move a part of the body to make a sound, they are actually creating a little bit of air pressure that travels through the air as a vibration. This is called a “sound wave.” When the bug sounds are recorded, they can be made into sound wave graphs, as shown on the previous page. The height of the line from the middle represents how loud the sound is.



To hear what they *really* sound like, go to [www.dawnpub.com/our-books/noisy-bug-sing-along](http://www.dawnpub.com/our-books/noisy-bug-sing-along) and click on the audio files.

**Do it Yourself!** Can you imitate the sounds of bugs? They are hard to imitate with your voice, because usually the bugs make the sounds *mechanically* such as by rubbing their forewings together, like the crickets, or by tightening and loosening muscles in their drum-like abdomen, like the cicada. Can you find a way to make similar sounds? You might make an entirely new “insect” sound! Want more? For more insect, bird, frog, and mammal sounds, go to [www.musicofnature.org](http://www.musicofnature.org).



**Do You Remember?** Do you remember which insect makes what sound? Have someone make the sounds, and see if you can remember the insect. Or, have someone name the insect and see if you can remember the sound each one makes. How good are you at recognizing the voices of your friends and classmates?

**Bat Ears** When compared to many mammals, humans have small ears. But if you cup your hands behind your ears you make them larger and better able to pick up sounds. Try this: go out on a summer night when there is a lot of insect sound. Cup your hands behind your ears to pick out the individual callers. If you tip your head up, you can hear the insects in the trees. Slowly tip your head so you are looking at the horizon and listen for the insects in the shrubs. Tip your head down to the ground to hear the crickets calling from the ground. Then, pull away your hands for an explosion of sound all around!



**Travel Without Moving** Find a spot in your yard, schoolyard, or a park. Sit, close your eyes, and listen intently. Start by listening to your own breathing. Then “reach out” with your ears to hear every sound close to you. Who, or what, is making those sounds? Extend your listening to as far as you can hear. Imagine the place where those sounds are coming from. While in that one spot, your mind can “ride” those sounds to travel great distances.

**Safety in Numbers** True Katydids, like the one in this book, will often call together to create a chorus. This can make it difficult for bats to pick out an individual to eat. Here’s a game to demonstrate how this works. One blindfolded child (the bat) stands in the middle of a circle of children (the katydids). One katydid claps his or her hands. The bat has to locate this calling katydid by sound, and can usually do so easily! Now, the bat returns to the center. Then ALL the katydids clap together in a pattern. Can the bat find the original katydid? Good luck!

