



### ***I Wonder Where Dem Boidies Iz: The Biology of Bird Migration***

*Da spring iz sprung.  
Da grass iz riz.  
I wonder where dem boidies iz?*

*Da little boids iz on the wing.  
Ain't dat absoid!  
Da little wings iz on da boid!*

This comedic poem attributed to the American poet, Ogen Nash, is written in my native tongue, as it is the spoken English used by residents in the northernmost borough of New York City, known as the Bronx. I can hear in this poem the accent of my neighbors as they might have expressed their curiosity about the phenomenon of bird migration. You might even hear a bit of this accent in my own speech, as I grew up in the Bronx as a passionate bird watcher in the heart of the urban landscape.

Since ancient times humans have observed that, in many parts of the world, specific species of birds are only seen during specific times of the year. Even Aristotle, commented on the migratory habits of birds. Birds leave their breeding grounds at the end of the season and spend the winter elsewhere. Birds then depart their wintering grounds as spring arrives and the days become longer and warmer. But, we wonder, “Where do the birds go?” “How do they know when it is time to leave?” and “How do they navigate to the breeding and wintering grounds, sometimes over tens of thousands of kilometers?” Most likely the very first humans, who lived in close connection to nature and were dependent for survival on their understanding of the behavior of animals, were the first to notice and wonder about this yearly cycle.

In this lecture I will present a brief history of our scientific understanding of bird migration, and I will introduce what scientists understand about the complex biological mechanisms that allow birds to know when to migrate, where to go and how to get to their destination. I will explain what is currently known of the physiological sensory systems birds use to navigate and I will point out the mysteries that remain unresolved in our understanding of bird migration.

Audience members will have the chance to participate in an interactive bird migration quiz that will give everyone a chance to test their knowledge of bird migration and express their opinions and feelings on this topic.

#### ***...a Bird-Related Vocal Performance***

Birds love to sing and so do some biologists! As part of this presentation, I will perform two opera arias that have something to do with birds, either literally or metaphorically. For the second aria, I will require the help of my audience members to sing with me as the opera chorus. No prior singing experience is required!

