

**Washington D.C. Chapter of the Acoustical Society of America
~ Invited Lecture ~
Wednesday, May 28, 2008**

**“Physics of an Avian Controversy”
Michael Collins, Ph.D.**

After being feared extinct for many decades, there have been recent reports by ornithologists of Ivory-billed Woodpecker in Arkansas and Florida. Although physical evidence has been obtained at both sites, this topic has remained controversial due to the fact that many ornithologists lack experience in evaluating evidence that falls short of a clear image. Due to the difficulty of obtaining evidence of this extremely rare and wary species, efforts to determine locations where small populations survive will benefit from the development of expertise in evaluating low-quality videos, audio recordings, and other forms of evidence. This type of analysis involves basic physics, such as motion dynamics, flight mechanics, sonograms, and bark adhesion. Applications to data from Arkansas and Florida as well as data obtained by the author will be discussed.

Michael Collins obtained a B.S. in math at MIT in 1982, the M.S. degree in mathematics from Stanford University, Palo Alto, CA, in 1986, and a Ph.D. in applied math at Northwestern in 1988.