1046-YY-1441 **Nicole F. Kingsley*** (nfk2@geneseo.edu), Box 2466, 10 MacVittie Circle, Geneseo, NY 14454, and **Katherine L. McCaffrey**, 2115 Summit Ave #6209, Saint Paul, MN 55105. *Wavelets in Vocal Identification of Great Horned Owls (Part II).* Preliminary report.

Now that we have formulated the problem and established our hypothesis, we set up a wavelet packet decomposition algorithm from which we can extract features that will help determine specific characteristics of individual owl calls. These characteristics include spread, position, maximum power, and width. We will explain the derivation of these features, and how they are represented in a pseudocolor wavelet packet decomposition matrix. We will close by reporting some important results from basic statistical analysis of our data, and draw some important conclusions about the role of wavelet analysis in the vocal identification of Great Horned Owls. (Received September 15, 2008)