

### Bird Song Analysis Tools

Spectrograms are an immensely helpful tool when it comes to bird song analysis, with many uses ranging from identification, taxonomy, to comparative analysis between similar species. Such 2-dimensional representations of sound are widely used in ornithology, but can only be interpreted with specific software. A simple recording that can be done with any kind of device can be uploaded to that software and be worked with. An example of that software would be [Raven Viewer](#). Raven Viewer, however, is currently in a rocky stage of support and it seems will until further notice be disbanded by the creators, The Cornell Lab of Ornithology. However there are many alternative ways to obtain and work with spectrograms such as websites like [Spectrum Analyzer](#). Once on the website, one can upload a file into the in-browser tool and instantly have a spectrogram generated for the sound file. There are many more, more intricate software though suited for more advanced analysis.



As of right now, [The Cornell Lab of Ornithology](#) offers no alternative and therefore their data repositories are solely usable on their own website in browser. Raven Viewer is still available for download, but only the demo version is able to be run. Nevertheless it is still a helpful tool, because the demo comes with sound files of various animals along side it. So as practice, students can analyze the spectrograms of the calls of blue whales, or true to the name, spectrograms of raven calls. Audacity is a very popular alternative, because of its versatility. Despite being originally designed for musical or theatrical audio editing, Audacity creates spectrograms and is relatively user friendly. The Cornell Lab of Ornithology, however, is working on a new program to replace Raven viewer. A release date has yet to be published.