

DNA Files Lesson Outline – Chris Showalter

We investigated how to use DNA “barcodes” to identify several different species of birds. DNA barcoding is a taxonomic method that uses a short genetic marker in an organism's mitochondrial DNA to identify it as belonging to a particular species.

During the workshop we first demonstrated how ornithologists use “mist” nets to capture wild birds. We also demonstrated how to obtain a DNA sample from the birds. Second, we used BOLD (Barcode of Life Data Systems) an online workbench that aids in collection, management, analysis, and use of DNA barcodes to analyze several barcodes from different species of birds.

Materials and Activities

- An internet activity for identifying unknown DNA barcodes
- An article from National Geographic explaining how in the future there may be hand-held devices used to obtain DNA barcodes, allowing anyone to identify unknown species.
- Several other web links related to this topic