Shortened Lesson Plan Overview

Below are materials for a lesson that was implemented with college students on the effects of woody encroachment on native bird diversity.

The lesson consists of one lecture day spent going over material, and students spend time outside of class completing a project. The lecture introduces woody encroachment, fire, and their effects on native populations. Students are also introduced to Rangelands Analysis Platform, Christmas Bird Counts data, and simple data analysis (regression and ANOVA).

Objectives:

- Develop hypotheses and predictions on the effects of woody encroachment (eastern red cedar and ash juniper) on bird diversity based on background information on the effects of woody encroachment
- Analyze the relationship between the change of woody encroachment through time and bird populations using survey data.

Materials:

- At least one laptop per group
- Access to Powerpoint or Google Slides
- Lecture slides
- Rangelands Analysis Platform guide
- Christmas Bird Counts raw data
- Project description
- Project rubric

The instructor will need to have background knowledge of simple data analysis and to be familiar with Rangelands Analysis Platform.

Adapted from materials created by Jason Martina who participated in the Prairie Project educator cohort program.
Learn more about the Prairie Project at: theprairieproject.org