

Task Background

Domain & Area: Science - Life Science

Target CCR Standard(s) (including level of standard, if needed) and/or adult diploma competency for Science or Social Studies:

MN Standard Adult High School Diploma Science Competency

Area 2: Life Science

- Explain the concept of evolution and extinction.
- Explain how humans impact natural systems.

Task Description: The purpose of this task is to provide a student an opportunity to demonstrate competency in fundamental concepts in life science: evolution and extinction and human impacts on natural systems. In this task, a student will

- research a rare Minnesota species with a status at least partially due to human causes
- identify adaptations the species has made to its environment in terms of the process of natural selection
- correlate human activity to the species' status (endangered, threatened, or special concern)
- predict how likely the species is to become extinct in their lifetime, based on data about the conditions and the species' ability to adapt.

Information for the Teacher

- All materials described below are found in a Google folder here:
https://drive.google.com/drive/folders/1auTx-SZsZgKJobBKQ1bNgUaF7ra5_GZ6?usp=sharing
- Students should have already studied evolution and the process and mechanisms of natural selection. Students should have an understanding of competition and interdependence of species in an ecosystem, climate change and pollution, and other human causes of extinction.
- Besides copies of the materials linked above (materials could be provided to students in print or electronic form), the student will need access to the internet to research the selected species and access to a word-processing program or Google docs to complete the essay.

- This task was designed to be completed mostly independently by a learner. For students needing more support, they are encouraged to ask for feedback on their work from a teacher and make revisions as needed. Students are also encouraged to follow all activity instructions carefully and to study the rubric to understand how their essay will be evaluated.
- This task was developed so that the individual components could be used in different ways. Including additional research and citations and demonstration of writing at a Level E could show evidence of CCRS ELA Writing or Language anchors. It is up to the teacher to determine if appropriate CCRS standards will be included and if a claimed CCRS ELA anchor is demonstrated at a level to show diploma competency. It is up to the teacher and student to determine when task evidence is ready to be submitted to the portfolio reviewers.
- There is a rubric provided for evaluating the essay.

Activities

Title: Research a Species

Materials: This activity includes the *following link* and the “*Research a Species*” and “*Write an Essay*” handouts.

- Rare Species Guide:
<https://www.dnr.state.mn.us/rsg/index.html>

Title: Write an Essay

Materials: This activity includes the “*Write an Essay*” and the “*Life Science Task Rubric*” handouts.