

Man VS. Nature Teacher Guide

Field Trip Description

This tour is designed to introduce genetic variation in natural selection and how it leads to traits changing in populations. This tour will also look at how man can affect the genetic pool through selective breeding in both positive and negative ways.

SC State Standards: 8-LS1-5, 8-LS4-1, 8-LS4-4, 8-LS4-5

Objectives

- Students will be able to understand and make use of the terms associated with genetics.
- Students will be able to explain how nature selects traits to enable survival of plants and animals.
- Students will be able to explain how selective breeding is used to affect traits in plants and animals.

Vocabulary

Gene: any inheritable trait.

Dominant Gene: a trait that will appear even if only one copy of the gene is present.

Recessive Gene: a trait that only appears if two are present.

Selective Breeding: the choosing of certain plants and/or animals based on genes humans want to carry on in future offspring.

Natural Selection: the process by which organisms that are more suited for environments survive and reproduce better than those that are less adapted.

Pre-Visit

(suggestions to prepare students for the field trip)

- Have students make predictions about what traits they believe help plants or animals survive.
- Review the vocabulary list with the students.
- Watch "[Welcome to the Museum!](#)"
- Watch "[Welcome to Ice Age Carolinas!](#)"

Post-Visit

(suggestions to reinforce concepts learned on the field trip)

- Quiz students on the vocabulary learned at the Museum.
- Ask students to compare their predictions to what they learned about at the Museum.
- Ask students to write about two examples of how humans try to affect the genes of plants and animals.