### A Caribou's Tale

### EarthGames Teacher's Guide



#### **Overview**

EarthGames at the University of Washington created the engaging game, A Caribou's Tale, where players can put themselves in the hooves of a caribou in its journey against a changing climate. Students can follow Boo the Caribou as her parents teach her how to break through the snow of the tundra to find tasty grass below. As Boo grows up and raises a family of her own, she faces challenges with ice and rain, which is much more difficult to break through for food than snow. Rain on snow events are occurring more frequently in the Arctic, and this game gives players insight on the impacts of these changes for an important Arctic mammal.

The player must learn how to adapt to climate change, as food becomes harder to find for Boo and her family. Additionally, the game incorporates facts and learning about caribou and their ecosystem throughout each chapter of the game, as players unlock special science blocks. This game takes approximately 20 minutes to play and is designed for players 8+.

## **Objective**

Help Boo the caribou and her family stomp through snow, slush, and ice to find tasty grass beneath as they adapt to climate change in order to survive in a rapidly changing Arctic.

# **Learning Goals**

Players will be able to understand how the climate of the Arctic tundra is changing with climate change, and what this means for the survival of species like caribou. Students additionally see how Indigenous people in the Arctic aid in supporting the ecosystem and caribou.

### **Next Generation Science Standards**

Students who demonstrate an understanding can:

- 1. **ESS3D: Global Climate Change:** Human activities, such as the release of greenhouse gases from burning fossil fuels, are major factors in the current rise in Earth's mean surface temperature (global warming). Reducing the level of climate change and reducing human vulnerability to whatever climate changes do occur depend on the understanding of climate science, engineering capabilities, and other kinds of knowledge, such as understanding of human behavior and on applying that knowledge wisely in decisions and activities.
- 2. **3-ESS2-2: Weather and Climate:** Obtain and combine information to describe climates in different regions of the world.