



# Winter World

## Woodland Dunes *Coolest* Educational Program!

### Overview:

*Winter world* will involve your students in the wonders of winter ecology. Through becoming tracking and identification experts and learning how our furry and feathered friends survive the winter they will gain a better understanding of the world in which they live. Aligned with state educational standards your students will be so caught up in solving ecological problems using their math and science skills they will be amazed when it is time to leave!

### Purpose:

To foster an understanding of how ecological processes function in winter with a focus on the relationship between animals, plants and the environments in which they live.

### General Objectives: to give students the knowledge to. . . .

1. measure, identify and read the stories in winter tracks.
2. explore using scientific equipment what factors shape animals behavior in winter.
3. discuss the survival strategies of animals that spend the winter in Wisconsin.
4. understand what methods plants use to help them survive the winter
5. use a dichotomous key to identify plant life.
6. explore the winter world on snowshoes!

### Wisconsin's Science, Environmental Education and Physical Education Model Academic Standards:

1. Standard A.8.3 Use techniques such as modeling and simulating to organize information gathered in their investigations.
2. Standard C.4.4 Use simple science equipment safely and effectively i.e.. rulers, hand lenses and thermometers.
3. Standard F.4.4 Using Science themes develop explanations between the connections of living and nonliving things in various environments.
4. Standard F.4.2 Investigate organisms, especially plants and how they respond to internal and external cues.
5. Standard E.4.3 In problem solving situations, read, extract and use information presented in graphs or charts.
6. Standard B.4.2 Adapt a physical skill to the demands of a dynamic unpredictable environment.

### Winter World will be divided into three stations:

#### Station One: Discovery Snowshoe

In the adaptation station students will begin by learning how humans have adapted to winter travel through the use of snowshoes. A snowshoe hike will take us into the forest where the use of a bingo card will aid in our investigation of the forest. A couple of stops will be made along the way; one will involve close encounters with our feathered friends at chickadee landing a special place at Woodland Dunes where chickadees have been acclimated to human presence.

#### Station Two: Adaptation Station

After an indoor learning station featuring animal signs and adaptations to winter the students will take to the trail! In small groups they will measure and study animal tracks and search for evidence of animal life on the preserve. The final part of this station we will head back inside to analyze and present the stories we found in the snow and learn how wildlife survives our Wisconsin winter.

#### Station Three: Winter Green

While the first two stations focus on animals in winter the third will take your students into the world of plants. Just like animals, plants are living beings with special traits that help them survive the winter season. Along with learning how to use a dichotomous key your students will learn what is going on inside plants throughout the year and plants importance to animal survival.