

## Teacher Trunk Information

All Chests have the materials that are required to perform each of the projects. Extensive lesson plans and how to do each activity is also in the trunks.

### Treasure Chest #1: Understanding the Work of Nature

#### 1. Activity 1- *BioWHAT????*

Description: *Biowhat* is a collection of 3 activities designed to teach kids about the diversity of life also known as biodiversity. Children will learn the three important components of biodiversity: species diversity, habitat diversity, and genetic diversity.

#### 2. Activity 2: *Species in the Hood*

Description: This two part activity is designed to acquaint the children with diversity of habitat zones in Idaho, their characteristics and the adaptations of species that live in those habitats. Learning about adaptations will help children understand the different roles species play within those habitats.

#### 3. Activity 3: *The Energy Trail*

Description: This activity illustrates the flow of energy through an ecosystem, concentrating on predator/prey interactions. Originating from the sun, energy captured by plants, is turned into food they use to grow. Then some of the energy is transferred to the next level when the plants are eaten. These exercises allow the children to build an energy pyramid that traces the flow of energy from the sun through the feeding levels. They will also learn where different organisms can be found in a feeding pyramid.

#### 4. Activity 4: *Linked for Life*

Description: As children construct a web of life, they will learn about the roles species have within an aspen community, how species are related to one another, and the importance of these relationships.

### Treasure Chest #2 Appreciation of Nature's Services

#### 1. Activity 1: *Services Provided By*

Description: This project will introduce students to the many services provided by nature. Students will discover how humans depend on these services which sustain life on earth. By playing a Jeopardy like game, students will reach a consensus on questions about nature's services.

#### 2. Activity 2: *WatershedWise*

Description: Through hands on simulations and a creative thinking exercise, students will discover what watershed and wetlands are and how they function. Students will learn

how watersheds and wetlands filter out sediments and digest pollutants to help keep our waterways clean and healthy.

3. Activity 3: ***Get Down!-To the Dirt***

Description: Through demonstration, investigation, and hands on activities students will learn that soil is ALIVE! They will also learn that the web of life in the soil provides vital services to all of the earth's inhabitants.

4. Activity 4: ***A Walk in the Park***

*A Walk in the Park* is designed to develop an appreciation for the recreational opportunities and mental well being we can receive from nature. *Surrounded Nature* allows the students to sit and experience nature while participating in a number of creative activities. Next, *Destination: Outdoors* gives students the opportunity to reflect on ways Idahoans use the outdoors for recreation and the costs and benefits associated with those uses.

## **Treasure Chest 3: Conserving the Diversity of Nature**

1. Activity 1: ***Got H.I.P.P.O?***

Description: A guided brainstorming activity and board game about the H.I.P.P.Os (HIPPO stands for Habitat loss, Introduced species, Pollution, Population growth, and Over-consumption) of Idaho introduces kids to the major causes of declining biodiversity. Students will also become familiar with some solutions to reduce the loss of biodiversity.

2. Activity 2. ***Species Speak Up!***

Description: This role-playing activity allows students to actively engage in small group discussions as if they were different species living in a particular habitat. The goal of this activity is to introduce the complexity of conservation issues and give the students a chance to think about how species are affected by human actions. Also they will be encouraged to explore practical solutions which reduce the loss of biodiversity.

3. Activity 3: ***Lighten Your Load!***

Description: Becoming aware of personal impacts on the environment is one of the first steps to conservation. In this activity, students will chart some of their daily behaviors as a way of monitoring their personal impacts. After analyzing their own daily behavior, students will devise and try out different ways to lessen their personal impacts on the rich diversity of life.

4. Activity 4: ***The B Awards***

Description: B is for Biodiversity! Your students have been elected to be the Biodiversity Conservation Judges. Judges will be asked to select winners in different categories of biodiversity conservation achievement. This activity will familiarize your students with various solutions to biodiversity problems. It will also give them a chance to evaluate these solutions.