



Palouse-Clearwater Environmental Institute

Treasure Chest #3

“Conserving the Diversity of Life”

The treasure chest series is a program of the Idaho Museum of Natural History and sponsored by the National Science Foundation. The materials are designed to “enhance understanding and conservation of the biological diversity of the Intermountain West.” The program consists of 3 kits, each with a different focus. The focus of this kit is “Conserving the Diversity of Life.”

Lesson Plan 1: “Got H.I.P.P.O?” Designed to teach some of the reasons for the diminishing amount of biodiversity.

Activity Description: Discussing reasons why we are losing biodiversity can help students devise solutions to these problems. H.I.P.P.O. represents the five major causes of declining biodiversity:

- H** Habitat Loss
- I** Introduced Species
- P** Pollution
- P** Population Growth
- O** Over Consumption

Concepts: Analytical thinking, creative thinking, verbal and written communication, categorization, and problem solving.

Lesson Plan 2: “Species, Speak Up!” Designed to further students’ understanding of species’ roles in habitats.

Activity Description: Students will become acquainted with the diversity of habitat zones. It will also give students the chance to think about the ways humans can affect species.

Concepts: Verbal communication, values clarification, exploration, problem solving, analytical thinking and creative thinking.

Lesson Plan 3: “Lighten Your Load” Designed to help students understand that they do have an impact on the environment and therefore can have an affect on diversity.

Activity Description: 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 lesson their personal impact.

Concepts: Written and verbal communication, analytical thinking, brainstorming, decision-making, values clarification, evaluation of data and personal accountability

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Lesson Plan 4: “The B Awards” Designed to teach students about the conservation of biodiversity as well as evaluating these efforts.

Activity Description: Students will play the role of judges, be asked to select winners in different categories of Biodiversity conservation achievement. This will familiarize students with solutions to current problems.

Concepts: Written and verbal communication, analytical thinking, evaluation, creativity.

Idaho Science Education Standards Addressed:

I. Unifying Concepts of Science

-Understand concepts of form and function

II. Concepts of Scientific Inquiry

-Understand scientific inquiry and develop critical thinking skills

V. Interdependence of Organisms and Biological Change

-Understand the interdependence of organisms

VI. Matter, Energy and Organization in Living Systems

-Understand the relationship between matter energy and organization to trace matter as it cycles and energy as it flows through living systems and the environment

-Understand the individual behavior of organisms and their interactions on populations and communities as influenced by physiological and environmental factors

IX. Personal and Social Perspectives

-Understand common environmental quality issues, both natural and human induced

-Understand the cause and effects of population change

-Understand the importance of natural resources and the need to manage and conserve them

Idaho Social Studies Standards Addressed:

I. Critical Thinking and Analytical Skills

-Acquire critical thinking and analytical skills

Language Arts and Communication Standards

III. Listening

- Listen for information and understanding

- Listen for critical analysis and evaluation

IV. Speaking

-Speak to share an understanding of information

-Speak for critical analysis and evaluation

To borrow this kit from PCEI, please contact:

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