



Bitterroot National Forest

Conservation Education Resources

1801 N. First Street, Hamilton Montana 59840

(406) 363-7100 or tgmckay@fs.fed.us

The Bitterroot National Forest has a lending library of educational materials available for use by community members. Below is a list and description of the materials that are available. To checkout

any of these materials please contact Tod McKay. Please pick-up the materials at the address above. In some cases, we may be able to mail or deliver the materials to you.

Guide to Traveling Educational Trunks - Our traveling trunks are ready-to-use kits that include hands-on-activities and educational materials geared toward a particular theme. Each kit comes with a teacher's reference guide to assist with implementation of the included activities.

Wolves and Humans - Offers a complete and in-depth look at wolves, their biology and their role throughout history. Includes hides, fur and skulls of wolves; tapes of wolves' sounds; videos; and plaster cast wolf tracks. This is a comprehensive curriculum package with individual lessons carefully geared towards specific grades. Grade level: K-12

Wilderness and Land Ethics Box #1 - Offers land managers, classroom teachers and outdoor educators an interactive resource to promote awareness of, understanding for, and appreciation of the cultural, environmental and historical values of Wilderness. Contains interdisciplinary lessons, activities and teaching tools including, books, videos, and games. Grade level: K-5

Wilderness and Land Ethics Box #2 - Offers land managers, classroom teachers and outdoor educators an interactive resource to promote awareness of, understanding for, and appreciation of the cultural, environmental and historical values of Wilderness. Contains interdisciplinary lessons, activities and teaching tools including, books, videos, and games. Grade level: 6-8

Aquatic Education - Engaging curriculum including lesson plans complete with materials and supplies to teach about fish habitat and aquatic resources. Grade level: 4-12

Fire Works - A comprehensive fire ecology curriculum for all grade levels, which is useable by classroom teachers and agency personnel alike. The portable trunk contains educational materials for hands-on learning about how forests change over time, especially in relationship to fire. Grade level: K-12

Sally Snag/Animal Inn - An interactive kit used to convey the importance of standing dead trees to the forest ecosystem and its inhabitants. Also includes lesson plan on the Animal Inn program. Trunk comes with stand up "snag", comprehensive set of puppets (eagle, bear, raccoon, beaver, etc), and supporting script. Grade level: K-3

Insight Into Insects Shoebox Science Kit- An educational trunk with numerous lessons nested within shoebox size containers within the larger trunk. Through hands-on activities students learn about the taxonomy, anatomy, life cycles, adaptations, and cultural and ecological significance of insects. Grade level: 4-8.

Bear With Me Shoebox Science Kit- An educational trunk with numerous lessons nested within shoebox size containers within the larger trunk. Through hands-on activities students learn about the taxonomy, anatomy, life cycle, adaptations, and cultural and ecological significance of bears. Lessons have also been developed to address safety in bear country. Grade level: 5-8.

Off Highway Vehicle (OHV) Ethics and Etiquette - An educational trunk containing materials to teach proper off highway riding etiquette and riding behavior to minimize damage to the natural resources. Trunk includes OHV safety gear, props to conduct role-play scenarios and the "On the Right Trail" curriculum. Grade level: 4-8.

Mini-educational Trunks-We have several mini-educational trunks that contain "props" to teach about a variety of wildlife species or natural resource topics. Below is a list of the mini-trunk topics that are featured: **bats, bobcat, beaver, birds, moose, mink, otter, fox, skulls, fish, trees, weeds, tracking, orienteering, and bird watching.**

Guide to Curriculum and Reference Books - In our library we have numerous conservation education curriculum that educators may checkout. Here are just a few of the items that are available.

Aquatics-

WOW!: The Wonders of Wetlands - This K-12 is filled with background material for teachers preparing wetland study units. It is brimming with proven wetland activities, which include curriculum planning information. The six chapters focus on the following aspects of wetlands: wetlands and people, defining wetlands, wetland functions, wetlands as homes, how people manage wetlands, and action for wetlands.

Leapfrogging Through Wetlands-An activity book for ages 6-12 that discovers the world of sedges, rushes, ducks and frogs. Provides many fun and reproducible activity sheets to use in the classroom.

Project WET - Curriculum and Activity Guide - This K-12 guide is a collection of innovative, water-related activities that are hands-on, easy to use and fun! The curriculum focuses on five modules: groundwater, watersheds, wetlands, water conservation, water/environmental history.

Project Wild - Aquatic - It is an K-12 instructional resource that includes activities that focus on aquatic resources with seven sections which focus on the following principles: awareness and appreciation, diversity of wildlife values, ecological principles, management and conservation, people, culture and wildlife, trends, issues and consequences, and responsible human actions.

The Stream Scene: Watersheds, Wildlife and People - The curriculum guides the user from the broad spectrum of watershed systems, riparian areas and their respective components to the specific nature of streams and the aquatic life they support. The curriculum can be used to prepare students grade 6-12 for field investigations, as the methodologies and field forms are included in the curriculum.

The Cascade Stream Watch Experience - A program and supportive curriculum that enhances young people's awareness and appreciation of aquatic ecosystems, while cultivating skills in science, math, and problem-solving. The curriculum includes activity instructions for numerous water quality and vegetation monitoring techniques.

Streamkeeper's Field Guide: Watershed Inventory and Stream Monitoring Methods Book and Video- Book includes sections on understanding watersheds and conducting field inventories. Video explains in a lively and entertaining manner how to investigate your watershed. Perfect for students 12 years of age and above.

Pondwater Tour-Hands-on science curriculum and water quality test kit for grades 4-8. Clearly written curriculum that helps students learn about the importance and measurement of water quality parameters.

Salmon Watch - A curriculum designed for grades 6-12, which teaches the students about salmon, water quality, and how human choices affect these resources. Field activities, which focus on these aspects, are presented along with the appropriate data forms. ++

Trees

Project Learning Tree - Environmental Education Pre K-8 Activity Guide - PLT uses the forest as a "window on the world" to increase students' understanding of our complex environment. The guide is arranged under five major themes: diversity, interrelationships, systems, structure and scale, and patterns of change. The activities integrate the themes within science, language arts, social sciences, art, music, and physical education.

Ecosystem Matters - Activity and Resource Guide for Environmental Educators - The goal of this K-12 guide is to provide engaging, thought-provoking, relevant, hands-on activities, which help students learn about ecosystems, their importance and the impacts of ecosystem management on their lives.

Ranger Rick's Nature Scope Series include: - Rain Forests: Tropical Treasures - A creative curriculum that focuses on four tropical rain forest themes: characteristics of tropical rain forests, life in tropical rain forests, people and tropical rain forests, and problems and solutions.

Wildlife

Project Wild - It is a K-12 interdisciplinary, supplementary environmental and conservation education program emphasizing wildlife. The activities focus on the following principles: awareness and appreciation, diversity of wildlife values, ecological principles, management and conservation, people, culture and wildlife, trends, issues and consequences, and responsible human actions.

Feathered Travelers Neo - tropical Migratory Birds of the Americas - A Reading Activity Book In English and Spanish - A coloring and storybook, which talks about the migratory birds of the Americas.

Everything Reptile-What Kids Really Want to Know about Reptiles- Children 7-11 will enjoy the creative question and answer format that addresses like "why are so many people afraid of reptiles". An attractive kid-friendly layout make this an ideal book for children.

Reptiles and Amphibian Coloring Book-Each of the species is described alongside its picture. Perfect for ages 7-13. Lewis and Clark Expedition- An American Legacy- A Curriculum and Resource Guide - Imagine how powerful and thrilling it can be to connect youngsters with the journeys of the Lewis and Clark Expedition. This curriculum provides students with information relating to the expedition and helps them develop a better appreciation for the accomplishments of the Corps of Discovery. Grade level: 5-9....

Nature Scope Series: Let's hear It For Herps!; Amazing Mammals

Insects

Creepy Crawlies and the Scientific Method: Over 100 Hands-on Science Experiments for Children- Teaches children the methods of science using dozens of reproducible charts, tables, and forms that emphasize data collection and graphing. Perfect for ages 5-12.

General Ecology and Natural Resources

Orienteering and Map Games- A book that uses the excitement of orienteering to make maps a more vital part of the learning process. This book is intended for the educator who has no sense of direction or confidence in using a map and compass, and probably has never heard of orienteering. Through the use of simple, fun and imaginative

hands-on activities, teachers of all grade levels and curriculum areas can understand and present the basics of maps and navigation.

Investigating Your Environment - Teaching Materials for Environmental Education Grades 6-12 -An interdisciplinary curriculum with the goal to help learners develop the skills and motivation to interact with and understand their environment. Participants observe collect, record and interpret data. The topics of study are soil, water, forests, plants, wildlife, deserts, dunes, range, ponds, marine, riparian and wilderness.

Eco-Inquiry, A Guide to Ecological Learning Experiences for Upper Elementary/Middle Grades- Three in-depth modules allow students to investigate ecological processes within their local environment.

Fire Works Curriculum Featuring Ponderosa, Lodgepole, and Whitebark Pine Forests - It is a K-10 curriculum, which provides hands-on activities for studying fire ecology, fire behavior, and the influences of people on three fire dependent forest types.

Getting to Know Wildland Fire- A Teachers Guide to Fire Ecology in the Northern Rocky Mountains-National Park Service and USFS. A curriculum developed to lead students to a deeper understanding of the nature of fire and to help them understand the components of wise stewardship of publicly owned wildlands. For grades 4-6.

Discover Nature in Winter- This book provides the "whys" of winter, the world of snow, the winter sky and offers specific winter activities appropriate for the classroom and field

Hands-On-Nature-Information and Activities for Exploring the Environment with Children- This book of activities hopefully will encourage children's curiosity and concern about the natural world and help them to gain an understanding of the way it functions. The activities encourage inquiry and allow for discovery. Children are invited to look more closely, ask questions, and explore freely. Activities include: drawing, writing, creating models, classifying, role-playing and more.

Kids Style Nature Crafts- 50 Terrific Things to Make with Nature's Materials- A book jam-packed with out-of-the ordinary projects and fascinating facts about the natural world.

Topsoil Tour- Designed for middle school students, this curriculum helps students examine, discover, and compare the physical and chemical properties of soil.

Soil- A wonderfully illustrated book that discusses soil formation processes, soil fertility, soil use etc. Good for grades 9-16.

Erosion- Explains the effects of erosion on the earth. Photographs accompany scientific explanations of the mechanisms and effects of wind, water, ice and chemical erosion. Good for ages 8-15.

Woodsy Owl Activity Guide - The guide offers educators twelve fun and engaging activities which are designed for children ages 5-8 to become more aware of the natural environment and provide fundamental conservation principles.

Sharing Nature With Children-Joseph Cornell uses nature to stimulate joy, enlightening insights and experiences for children through 50 games presented in the book.

Sharing Nature With Children II-Joseph Cornell describes his "flow learning" teaching process and provides descriptions of additional nature games to stimulate joy, enlightening insights and experiences for all ages.

Guide to CD Programs- A list of a few of the CD-ROM's available for checkout.

Ecosystem Matters - CD-ROM Activity and Resource Guide for Environmental Educators - The goal of this K-12 guide is to provide engaging, thought-provoking, relevant, hands-on activities, which help students learn about ecosystems, their importance and the impacts of ecosystem management on their lives.

Montana Forest Forever - CD ROM Teacher Guide - The CD-ROM teaches 6-8 grade students about forest ecology and the importance of employing scientific principles based on natural forest processes and sustainable forest management. The interactive format provides a fun and captivating presentation of forest facts, the forest products we all use, and the balance necessary to sustain our forest.

Peterson Field Guide-Western Birding by Ear- Three CD's that include 90 common birds found west of the Great Plains, arranged in groups with similar vocalizations.

Fish of Montana- A CD describing fish identification, habitat, range, and life history of Montana fish.

Introduction to Visibility by the Cooperative Institute for Research in the Atmosphere- A CD that discusses the causes, nature, and effects of haze on natural landscapes. Also discusses techniques to measure visibility.

Fire Works CD-ROM Curriculum Featuring Ponderosa, Lodgepole, and Whitebark Pine Forests - It is a K-10 curriculum, which provides hands-on activities for studying fire ecology, fire behavior, and the influences of people on three fire dependent forest types.

Guide To Videos - Below is a list of some of the videos available to checkout.

Protecting Your Home From Wildfire - Home Protection Guidelines - A video by the USFS Missoula Fire Sciences Laboratory - Rocky Mountain Research Station, which discusses measures that can be done to protect your home from wildfires.

Wildfire Preventing Home Ignitions- Jack Cohen at the Fire Sciences Laboratory describes how the combustion process works, why some homes survive while others are destroyed, and how to make your home more fire safe. 19 minutes in length.

Managing Wildland Fire - A Matter of Choice - A 12-minute USFS - Rocky Mountain Research Station video discussing the risks and benefits of wildland fire and the choices that people must make to manage fire in the West.

Fire History and the Urban Interface - A 14-minute video that discusses fire history in the Bitterroot NF presented by Jack Losensky.

The Bitterroot Fires of 2000 - A 5:30 minute video about the Bitterroot Valley fires of 2000.

Fire Safe Inside and Out - A 25-minute video by the California Department of Forestry and Fire Protection.

Fire Safe Landscaping - A video on how to protect your investments against wildfire destruction, includes public service announcements from Tim Allen and Tom Selleck. Produced by the Fires Safe Council and the California Interagency Fire Prevention Committee.

Firewise Communities/USA- Video describing the Firewise Program standards and commitments. The program supports and encourages fire-prone communities as they develop are-specific solutions to wildfire issues. 16 minutes in length.

Exploring Wildland Fire- BLM- An electronic field trip addressing the role of wildland fire in healthy ecosystems, fire behavior, and fire management. 90 minutes in length.

Best of Nature Great Yellowstone Fire- Discovery Channel- Story of the Yellowstone Fire. 54 minutes in length.

Wilderness Fire Pioneers- Under the Big Sky with Ian Marquand. Discussion on the use of fire in the wilderness over the last 30 years. 2002. 15 minutes in length.

Noxious Weeds- A Biological Wildfire- Applied fundamentals of wildfire management to improve noxious weed control. 15 minutes in length.

A Kid's Journey to Understanding Weeds- The weeds issue described at a child's level. 10 minutes in length.

No Need for a Saturday Night - A Montana Fish, Wildlife, and Parks documentary which joins six Montana poets in toasting Montana's rich fish and wildlife resources and colorful outdoor heritage.

The Green Scene - Forest Ecology and Wilderness - A 21-minute video that includes information on ecology, wilderness, and consequences of our uses. Produced by the University of Arizona-School for Renewable Natural Resources, Tucson. The video supports a written curriculum.

Streamkeeper- "The Science Guy" takes you on a zany journey through a watershed and shows you how to investigate, inventory and monitor a stream. An ideal tool to teach students of all ages about watersheds and how to protect the streams that flow through them.

List of Field Guides- Below is a list of the field guides that we have available in our lending library.

Insects- A Golden Guide

Insects- National Audubon Society/First Field Guide

Aquatic Insect Field Guides-Multnomah County

Water Insects- A Lerner Natural Science Book

Beetles- A Lerner Natural Science Book
Butterflies and Moths- A Golden Guide
Forest Insect and Disease Identification and Management
Amphibians-National Audubon Society/First Field Guide
Pond Life-A Golden Guide
Fish- National Audubon Society/First Field Guide
Mammals-National Audubon Society/First Field Guide
Birds West- National Audubon Society Pocket Guide
Birds of North America-National Geographic
Trees-National Audubon Society Pocket Guide
Western Medicinal Plants and Herbs- Peterson Field Guide
Rocky Mountain Wildflowers- Peterson Field Guide to
Weeds- A Golden Guide
Weed Handbook- USFS
Winter Field Guide
Rocky Mountain States Field Guide
Earth Color Soil Identification Guide-Globe
A Guide to Nature in Winter

Guide to Field Sampling Equipment- In our lending library we have equipment that can be used to conduct a wide variety of field sampling activities. Below is a list of the equipment that we have available.

Aquatic insect sampling nets, Field microscopes, Thermometers, Turbidity Sampling Tube, Soil Organism Study Kit, Soil Test Kits- Texture- pH, nitrogen, phosphorous, and potassium, Soil Profile Tubes, Soil Collection Steel Sampler Tube, Water Quality Monitoring Kit-BOD, coliform bacteria, DO, nitrate, pH, phosphate, ammonia, and turbidity, Tape Measure, PH Test Kits, Hach Color Disc Model, Hip Boot Waders,, Forceps, Dip Nets, Insect Viewing Boxes-Magnified, Insect Microscope Slides, Plastic Containers/Trays, Insect holding containers, Magnifying Glasses, Aerial Field Net for Terrestrial Insect Sampling, Sweep Field Net for Terrestrial Insect Sampling, Binoculars, Petri Dishes, Eyedroppers/basters, Safety Glasses, Work Gloves, Compasses, Snowshoes,

Give Away Materials-Materials available free-of-charge for educators in the valley.
Posters- wildlife, birds, weeds, OHV, wolves, Smokey, etc

Coloring Booklets- wildlife, fish, butterflies, and wildflowers.

Natural Inquirer Magazine- USFS scientists share their nature-related research with middle school students. Then the students "become" scientists when they do the FACTivity associated with each article.

Junior Snow Ranger Program Booklets- Students enjoy learning about the unique wonders of winter through discussions on wildlife adaptations, winter safety, winter recreation, and snowpack and watershed.

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