



Teacher Workshop Handbook



for the

Wilderness and Land Ethics Box

and Curriculum



ARTHUR CARHART NATIONAL
WILDERNESS TRAINING CENTER
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INTRODUCTION

This is the second edition of the *TEACHER WORKSHOP HANDBOOK for the WILDERNESS AND LAND ETHIC CURRICULUM AND BOX*. The first edition began as a collection of thoughts, examples, and ideas contributed by those who had been involved in the Wilderness Box teacher workshops, mostly in Colorado. Now, the program has grown and many new contributions have improved the quality and design of the teacher workshops to implement the *Wilderness and Land Ethic Curriculum and Box*. Examples from other regions and new formats have been included in this second edition.

This handbook is designed for public land managers. It is to enable those within agencies to initiate, conduct and participate in workshops for teachers. The "*Wilderness and Land Ethic Curriculum and Box*" is an interdisciplinary approach to teaching about wild lands and wild land ethics through the disciplines of history, ecology, social studies, science and the language arts. Teachers who have participated in the program have found that it fills a needed niche in the environmental education field. This handbook is intended to provide direction for those who want to bring the Wilderness Box program to their communities.

Teacher workshops are designed to 1) educate teachers about Wilderness and 2) to familiarize them with the Box and the curriculum. The materials in this handbook are organized into five sections that correlate to the steps of putting on a workshop:

Planning
Workshop Set-Up
Workshop Pieces
Evaluation
Box Administration

Many people have been instrumental in developing and refining teacher workshops: David Cockrell, Lori Rasmussen, Jessica Clement, Frogard Ryan, Kari Gunderson, Joe Flood, Connie Birkland, Lisa Merigliano, Diane Taliaferro, Michael Olwyler, Brenda Tracy, Barb Miranda, Pat Lancaster, Teresa Wenum, Liz Close, Sally Blevins, and Lisa Therrill. A big thank-you goes out to them and all the others, for their creativity and contributions to this effort. But most of all, special thanks go to Mary Beth Hennessy for finding the time and vision to compile this second edition, and to Rochelle Nagy for her help with putting it in its present form.

As you utilize this *Teacher Workshop Handbook* and its companion the *Wilderness and Land Ethic Curriculum*, may you, too, be touched by "the lonely places on the face of Mother Earth," as Aldo Leopold wrote, "where all her ways are pleasantness, and all her paths are peace."

Connie G. Myers
Director
Arthur Carhart National Wilderness Training Center

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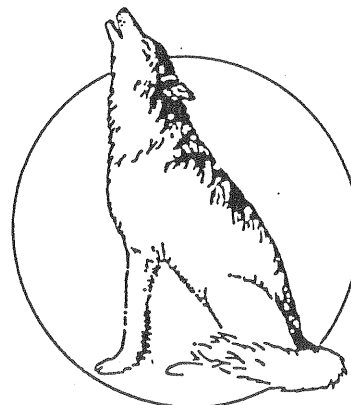
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PLANNING



WILDERNESS BOX -
TEACHER WORKSHOP
HANDBOOK

WORKSHOP SET UP

- Set up early so you can talk to participants as they arrive.
- Have goals and objectives written on flip charts or an overhead.
- Make sure all equipment is functioning.
- Make sure handouts are ready.

Welcome Table -

Have a table at the entrance with the following:

- Mailing List / sign up sheet
- Curriculum (But mailing the curriculum prior to the workshop is ideal).
- Forms for continuing education credits and Graduate credit
- Course outline and requirements
- Evaluations

Reference Table -

Further inside the teaching area have a reference table. Bring appropriate books from your office, or a personal or public library. Make sure your name is inside personal copies. Handouts like a wilderness fact sheet, articles, essays, Leave No Trace literature, and wilderness brochures are great for your reference table. Here are some specific suggestions:

Books (They can be referenced in a bibliography.)

- Ghost Bears, Edward Grumbine
- Wilderness Management, Hendee, Stankey, Lucas, Cole
- Wilderness and the American Mind, Roderick Nash
- Ecological Literacy, David Orr
- Practice of the Wild, Gary Snyder

Articles, Essays:

- Metaphors and the Image of Wilderness, Herbert Schroeder.
- Your favorite !

PLANNING

Funding

The first Wilderness and Land Ethics Curriculum and Box workshops were held in Colorado and were funded primarily by the Forest Service. Workshops held in Montana have been very successful at receiving funding from groups such as the Wilderness Society and The Boone and Crocket Club. Others have been successful in getting the costs absorbed by fees charged for the course. There are many ways to combine these methods, such as through cost share agreements and tagging onto existing workshops or other training opportunities. Potential partnerships should be explored through local retailers or grants. Consider all the possibilities! The goal is to make the workshops available with low or shared costs.

Format

Workshops can be designed and scheduled in a variety of ways. You will want to use input from teachers or school district science or environmental education coordinators to determine what works best for the teachers you are targeting. Do what works best for you and the teachers.

If possible offer educational credits. How many credits you will offer for the course will determine how many hours the course will be. Generally, no less than 15 hours is suggested. A minimum of 16 hours is usually needed to earn credit. There are several options for your schedule. Some examples are:

Two consecutive Saturdays

Saturday- Sunday

Friday evening, Saturday - Sunday

Two weekday afternoons and an all day Saturday session.

However, if your goal is simply to get the curriculum into the teachers hands so they will use it, and a full length workshop is not going to attract the participants, feel free to shorten the workshop. If it is feasible just do a mini workshop of a few hours.

The main purpose of the teacher workshop is to familiarize teachers with what wilderness is. The curriculum itself is less the focus of the workshop, than teachers understanding the wilderness connections of the lessons. To do this, they need to be comfortable with what wilderness is. That is why the workshop described in this handbook has the focus that it does. It is by no means the only way to do it; just keep in mind that teachers may need more instruction on wilderness than the curriculum. They are professionals, and it will be easy for them to pick up the curriculum and use it.

Logistics

Select a location

The classroom should be large enough for the group to be comfortable with room for break out sessions. Maximum size classes have been 40. An ideal class size is 20-25.

The classroom should hold the group, a TV, VCR, overhead projector, screen and slide projector. A kitchen or area for refreshments is nice but not needed. Nature Centers with an outdoor area are great; it helps put everyone in the right mood if the location has an atmosphere that is appropriate. Whenever possible do activities outdoors.

Educational Credit

Teachers need graduate and continuing education credits, which are incentives for teachers to attend the workshop. You must have an instructor that can provide the proper accreditation. State universities and technical schools are options for providing accreditation. Seek out these types of institutions in your location.

Outreach

Build support

Identify key players

It is best to find a contact person within the school system you are targeting. Seek out environmental or science group alliances within the teaching community. Find out what type of workshop works best for the local teachers and build the workshop plans from there.

Produce a flier with **what, when, where, who** and a map to the workshop location (examples of some fliers are at the end of this section). Mail fliers to all schools with instructions to post and distribute to teachers. Also place announcements in newspapers and newsletters that are geared towards teachers.

There may be phone calls to your office concerning the workshop and the Wilderness Box program. Ensure that your office staff is knowledgeable about both. (See the pages at the end of this section). Consider selecting one person to oversee all calls, and have them attend a workshop if possible. The more this person understands the aspects of the program the better they will be able to assist and be a part of it.

Make sure a sign up sheet and waiting list are accessible to all who may be answering phones. Consider setting up a file or binder that has all the information and sign up list in one place.

Before the workshop:

- * Locate and arrange for use of Wilderness Boxes, impact monster skit, and skills trail posters. Beware that obtaining these items may take time. Allow enough time for extra phone calls and logistics.
 - * Remember to have the boxes ready and a system in place for administering boxes.
 - * Explore the possibility of sending copies of the curriculum to teachers a couple of weeks prior to the workshop. Include a cover letter asking them to preview it, familiarize themselves with contents, and anticipate teaching a lesson from the curriculum as a workshop assignment. Include a tentative agenda.
-

ROLES

A workshop requires, at a minimum, 3 people who have specific roles. The optimum is about 6 people. This helps to distribute the responsibilities and creates a calmer, more relaxed atmosphere. Consider having guest speakers instead of just a couple of people doing all the talking.

To ensure quality, all workshop instructors should participate in an actual workshop before becoming instructors.

It is important to define the roles of everyone involved in putting on the workshop before the workshop begins. Here are some ideas:

Course Coordinator: The course coordinator arranges for the location, and oversees the logistics of putting the workshop on. Other responsibilities are to seek sponsorship, ensure communication between the instructor and the sponsoring organization, follow up with teachers to insure boxes are available, and assist with implementation of the curriculum when requested. This person is also an assistant during the workshop, available to be a group leader for the Map Lab, the Wilderness Box walk through, impact monster skit and anything else that may be needed.

Instructor: The instructor's primary role is to teach how to use the curriculum. This person is responsible for securing the materials needed for the workshop. They are also the primary instructor of the curriculum, evaluate assignments, and are the point person for continuing education credit.

Wilderness Manager: The wilderness manager is the representative for the land management agencies at the workshop. This person is also the presenter of background materials relating specifically to wilderness. The wilderness manager is also responsible for administering the reference table.

Facilitator: If possible, identify one person that is primarily responsible for keeping the workshop on track and on time. This person also helps to review, summarize, or introduce materials.

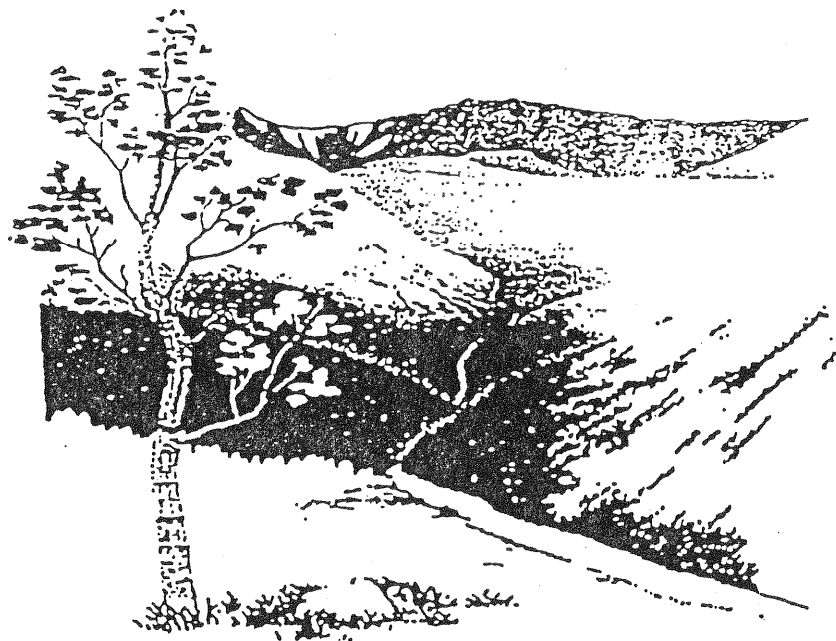
**COMING SOON - JUST FOR
YOU!**

**WILDERNESS AND LAND AWARENESS BOX
AND
CURRICULUM FOR GRADES K - 8**

WHEN: October 1995

WHERE: Available at the Bozeman and Gardiner Ranger Districts,
Gallatin National Forest

HOW TO GET IT: Call 587 - 6920 in Bozeman or 848 -7375 in
Gardiner to reserve the box for your classroom.

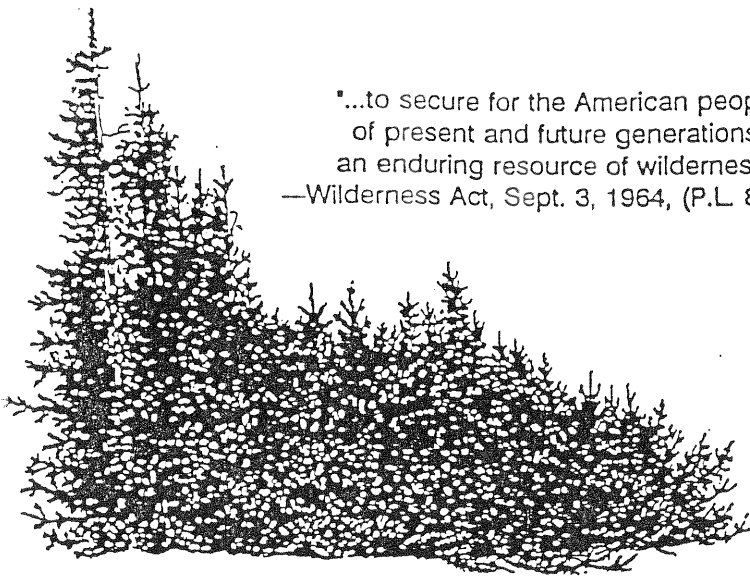


**Learn More About the Box
TEACHER WORKSHOP
AT MUSEUM OF THE ROCKIES, BOZEMAN**

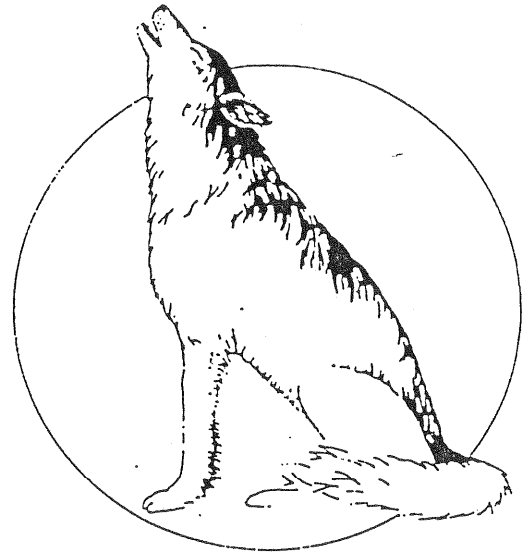
OCTOBER 27, 1995

9 AM TO 4 PM

CALL 994 - 6618 to register.



"...to secure for the American people
of present and future generations,
an enduring resource of wilderness."
—Wilderness Act, Sept. 3, 1964, (P.L. 88-577)



Are you a WILD teacher?

Montana is a "wilderness-wealthy" state; our wildlands are an important part of the natural heritage we share with students. Throughout the years, Wilderness Rangers and other public lands managers have visited schools, bringing the "wild" into the classroom with stories, slides, demonstrations and lots of enthusiasm. Unfortunately, there aren't enough rangers and resources to visit every classroom. The attached information describes a national curriculum designed to give you the materials and training to teach about wildlands, while at the same time sharing important lessons in history, science, geography and social studies.

The WILDERNESS AND LAND ETHIC BOX brings the wild into your classroom, with a curriculum guide for grades K through 8, linked to a box of educational materials that includes slides, audio and video tapes, skulls, skins, books, maps and much more. Boxes will be available beginning Fall 1995 for you to check out and use. Workshops are being offered to introduce teachers to the curriculum and box, and to help you become better acquainted with the wilderness resource. We invite you to learn more about the Wilderness Box during MEA, during the session at 1:20 p.m. on Thursday, Oct. 19 at Jefferson School. A one day workshop will also be held Friday, October 27 at the Museum of the Rockies in Bozeman (see the attached flyer). For more information about this session, contact Teresa Wenum, 406-587-6701. Watch for announcements of a 3-4 day workshop, summer 1996, at the Theodore Roosevelt Memorial Ranch on the beautiful Rocky Mountain Front.

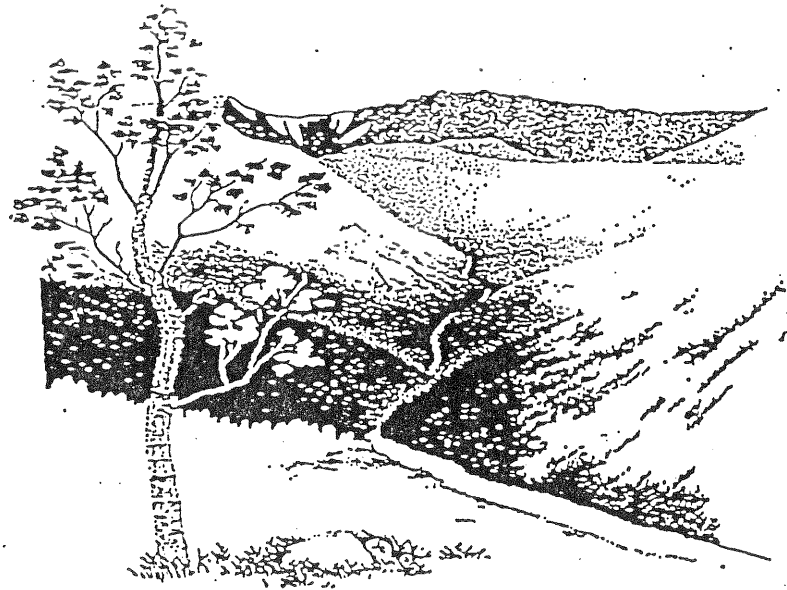
The Forest Service and our partners in the Wilderness Box are excited to be offering this new and effective educational tool. We encourage you to investigate and use the Box, and give us feedback on the curriculum and materials. Bring the wild into your classroom! For more information, contact Liz Close, 406-329-3587, or others on the attached contact sheet.

"In Wildness is the preservation of the world."

—Henry David Thoreau

"In human culture is the preservation of wildness."

—Wendell Berry



Wilderness and Land Ethics Awareness Teacher Workshop

*A two-day workshop for teachers to teach
the new Wilderness and Land Ethic Box curriculum K-8*

Date: July 11 (5:00 pm) - July 13 (3:00 pm)

Place: Theodore Roosevelt Memorial Ranch,
10 miles west of Dupuyer, MT

Curriculum provides for a broad based understanding of the fundamental importance of wilderness areas and promotes a land ethic to help maintain our valuable natural resources. Workshop participants will receive a complimentary copy of the curriculum.

Instructors:

Kari Gunderson, co-author of the curriculum
Teresa Wenum, Flathead National Forest Environmental Education Coordinator
Sally Blevins, U.S. Forest Service Region 1 Wilderness Education Coordinator
Al Koss, U.S. Forest Service Recreation Forester/Wilderness Ranger

1 credit, graduate level PENDING

Class size is limited, so register early by calling

Gloria Weisgerber, U.S. Forest Service, Missoula, MT (406) 329-3094.

Co Sponsored by:

Montana Environmental Education Association
Montana Department of Fish, Wildlife, and Parks
Boone and Crockett Club
USDA Forest Service

WORKSHOP SET-UP

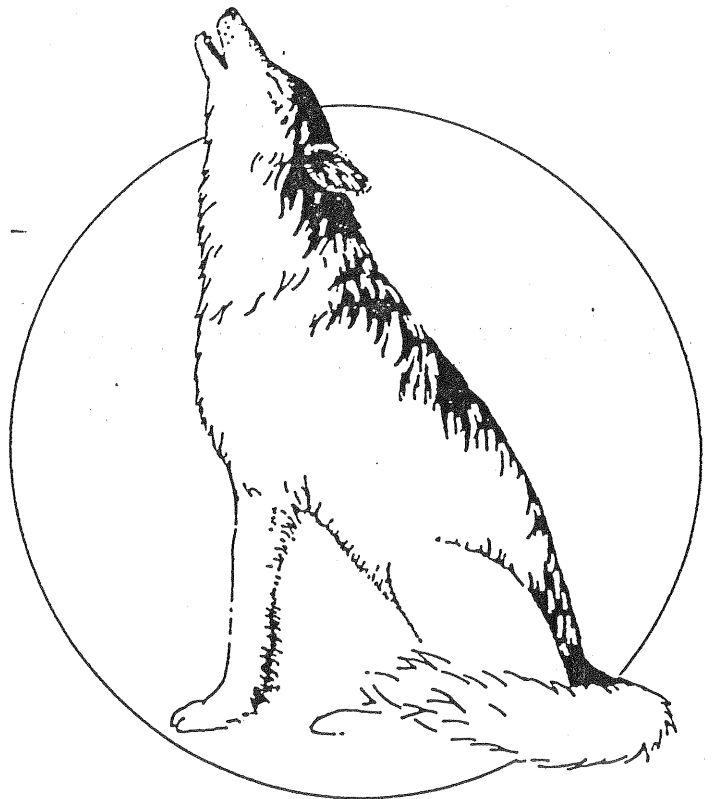


WILDERNESS BOX -
TEACHER WORKSHOP
HANDBOOK

Publications

- Arthur Carhart National Wilderness Training Center Wilderness Awareness manuals
- High Country News
- Wild Earth
- Wilderness magazine

You may also want to decorate with posters, particularly the 25th Anniversary of the Wilderness Act (these are scarce but worth the search), the 30th anniversary of the Wilderness Act poster, and recent Arthur Carhart Training Center reproductions. Maps are a nice touch as well, in particular the Raven series maps displaying topography and geographic/ecologic characteristics.



TEACHER WORKSHOP

Wilderness and Land Ethics Awareness
1 Graduate or Undergraduate Credit
Big Creek Outdoor Education Ctr.
August 13 (5:00 pm) - August 15 (3:00 pm)

...from R1

Summer, 1996

Course Description

This course is designed to familiarize teachers with the Wilderness and Land Ethic Box curriculum. The Wilderness Box curriculum targets grades K-8 and uses an interdisciplinary approach to teach about wilderness through activities focused on history, ecology, social studies, science and language arts. The Wilderness and Land Ethic box contains a variety of teaching materials including skulls, skins, puppets, books, and videos to be used in conjunction with the curriculum.

This course addresses philosophical, scientific, and legal dimensions of our National Wilderness Preservation System. An awareness of wilderness and its role in the American society can then be passed on to school age youth in the classrooms. Methods are examined and practiced for teaching students at various grade levels about the cultural, environmental and experiential values of wilderness.

Course Objectives

At the completion of the course, participants will:

1. Understand the historical and legal foundations of the National Wilderness Preservation System, and be aware of the prominent national and regional issues of wilderness management.
2. Be familiar with the locations and characteristics of Montana's existing wildernesses.
3. Be able to explain the philosophy of preserving wilderness in a pristine condition and the values of wild lands.
4. Be familiar with the Wilderness Box curriculum and have a plan for implementing the curriculum in the classroom.
5. Know currently accepted "Leave No Trace" techniques for travel and camping in the backcountry.

Objectives will be accomplished through lectures and interactive participation while teachers become familiar with the curriculum. Teachers will obtain experience in implementing the lessons.

Wilderness and Land Ethics Awareness Teacher Workshop Agenda

August 13 - 15 1996

Tuesday, August 13

- 4:00 - 5:30 Get settled in!
Registration, name tags, pre-test, paperwork for receiving credit. Resource Table and displays available
- 5:30 - 6:00 Introductions
- 6:00 - 7:00 Dinner
- 7:00 - 9:00 Theme: "Getting Acquainted" with the workshop, with workshop participants, and with wilderness.
- Activities:
- * Ghost of Ranger's Past
 - * What is Wilderness? (a personal reflection)
 - * Course overview and requirements for credit
 - * Wilderness: A Flannelboard Story -- pg. 2-116
 - * History of the Wilderness Box
 - * Video: Convictions of the Heart

Wednesday, July 14

- 7:00 - 8:00 Breakfast
- Morning Theme: "Understanding the Wilderness Concept & Exploring the Wilderness Box"
- 8:00 - 8:20 Activity: Mapping a Wild Story
- 8:20 - 9:45 Introduction to Wilderness History and Philosophy--slide show, talk, discussion with John Gatchell, Montana Wilderness Assoc.
- 9:45 - 10:00 BREAK
- 10:00 - 10:15 Explanation of Wilderness Box Exploration, group and activity assignments.
- 10:15 - NOON Exploration of box contents
- 12:00 - 1:00 Groups look for activity to present on Thursday
Lunch
- Afternoon Theme: "Wilderness Skills"
- 1:00 - 2:30 Wilderness Skills Trail -- p. 3-334
- 2:30 - 2:45 BREAK
- Map Lab ---
- 2:45 - 3:15 "Early Maps" Activity; pg. 3-238 and 3-243
- 3:15 - 3:45 Becoming familiar with various maps including planographic and topographic; Understanding contour lines using Mountain Model Kit; Preview of curriculum lessons relating to maps. pg. 3-298 and 3-313; pg. 3-207
- 3:45 - 4:30 Putting it into practice! Fun orienteering course.
- 5:00 - 6:00 Dinner

*Boldface items --- location of activity in curriculum guide.

Wednesday Evening

- 6:00 to 8:30 Time to explore! Experience a piece of the wild! Float the Wild & Scenic North Fork of the Flathead River. OR Take a hike, fish...spend more time exploring the box, check out the videos!
- 9:00 Campfire...swap wilderness stories and songs around the campfire.

Thursday, August 15

- 7:00 - 8:00 Breakfast
- 8:00 - 8:15 Theme: "Keeping the Wild in Wilderness"
- 8:15 - 8:45 Activity: "Landscapes through time". p. 3-233
Wilderness Management: Two Perspectives -- Fred Matt, Salish-Kootenai Wildlands Recreation Dept.
- 8:45 - 10:00 Al Koss, Wilderness Ranger -- Bob Marshall Wilderness Area
- 10:00 -10:15 BREAK
- 10:15 -10:30 Pulling it together....
- 10:30 -11:00 Meet the Impact Monster -- pg. 2-186
- 11:00 -12:00 Lessons lead by groups (30 minutes each)
- 12:00 - 1:00 LUNCH
- 1:00 - 2:00 Lessons lead by groups, continued
- 2:00 - 3:00 Bringing the wild home
Course Assignment Review/wkshop critique
Closing activity

Evaluation Criteria

Teachers wishing to receive UNDERGRADUATE CREDIT will be required to:

- * attend all presentations and activities during the 3-day workshop,
- * complete lesson evaluation sheets on four lessons from the curriculum,

For GRADUATE CREDIT, teachers will have an additional assignment:

- * write a 4-5 page researched-based implementation plan.

Teachers will be given a letter grade for the course. \$70.00 fee for credit

Post-Course Work Requirements

1. Complete Lesson Evaluation Sheets on four lessons from four different strands of the curriculum. (for undergraduate and graduate credit)
2. Four to five page Research-based Implementation Plan (graduate credit)

Describe how you intend to use this curriculum.

What grade levels will you target?

How much class time will be necessary?

Which themes, units and lesson plans will you use?

Could you use any of the lesson plans at learning centers
or with cooperative learning groups?

How will you sequence the activities?

What instructional materials will you use?

What are the expected learning outcomes for your students? Can
you measure these outcomes before and after the lessons?

Both assignments will be due August 11, 1995.

Evaluation Criteria for OPI Renewal Units (17 units)

Teachers wishing to receive renewal units will be required to:

- * attend all presentations and activities during the 3-day workshop,
- * complete lesson evaluation sheets on four lessons from the curriculum,
- * write a short critique of the curriculum.

Post-Course Work Requirement for OPI Units:

1. Complete Lesson Evaluation Sheets on four lessons from four different strands of the curriculum.
2. Write a Short Critique of the Wilderness and Land Ethic Box Curriculum.

Consider:

How would you use the curriculum?

What activities complement your existing curriculum?

What suggestions do you have for extending lessons?

Wilderness and Land Ethics Awareness Teacher Workshop Agenda

August 13 - 15 1996

Tuesday, Aug 13

2:00 - 4:00 Workshop Leaders Meet at Center-- set up ALL
 Review teacher registrations and make group assignments -- 4 groups (Teresa) -- check out skills trail locations; put up wilderness questions sheet.

4:00 - 5:30 Registration, name tags, pre-test, paperwork for receiving credit (Kari-credit, Nametags-Teresa & Al)

5:30 - 6:00 Have displays and resource table set up
 Introductions AL and Teresa
 Activity: "Wild Acquaintances"
 Introduce staff, cook, other guests, welcome to Big Creek.

6:00 - 7:00 Dinner

EVENING FACILITATOR: AL

7:00 - 9:00 Theme: "Getting Acquainted" with the workshop, with workshop participants, and with wilderness.

Activities: To begin...Al will BRIEFLY gather info from teachers, and write on flipchart -- What I'd like to learn from this course....intro. wilderness questions sheet. Refer back to this periodically throughout workshop

- * Ghost of Rangers Past -- AL and Teresa (skit)
- * What is Wilderness? (a personal reflection) JOE
 What does Wilderness mean to you? Write own definition on index card. Volunteers read their thoughts to the group. (sometime put some of these on flipchart/post)
- * Course overview and requirements for credit KARI
- * What is Wilderness? flannelboard story LYNNE
 small group participate - the rest observe
- * History of the Wilderness Box KARI
- * Video: Convictions of the Heart TERESA

Wednesday, Aug 14

7:00 - 8:00 Breakfast MORNING FACILITATOR: TERESA
 Morning Theme: "Understanding the Wilderness Concept & Exploring the Wilderness Box"

8:00 - 8:20 Activity: Mapping a Wild Story AL
 (Teachers will be given Montana Wilderness maps with coordinates and will yell out answers to the Wild Story)

8:20 - 9:45 Introduction to Wilderness History and Philosophy
 Slide show and talk, questions, with JOHN GATCHELL

9:45 - 10:00 Break

10:00 - 10:15 Explanation of Wilderness Box Exploration, group and activity assignments. KARI

Wednesday, continued:

10:15 - Noon Exploration of Box contents 1 or 2 Instructors per box
Groups look for activity to present to workshop on Thursday
In Small Groups, intro to curriculum structure & box
contents. See info under Curriculum/Box Overview in
"Pieces" section of Teacher Workshop Handbook. Have
groups write down lesson they choose on flip chart
paper.

*workshop leaders meet at 11:00

12:00 - 1:00 Lunch

AFTERNOON FACILITATOR: TERESA

1:00 - 2:30 Afternoon Theme: "Wilderness Skills"
Wilderness Skills Trail ALL
Small groups lead through stations using posters/props
STATIONS 1-3 Pre-trip preparation KARI/JOE
4,7 Fires & Naturalization LYNNE
6,8 Sanitation & Water TERESA
5,9 Choosing Camp & Horses AL
Each station is ~20 minutes -- ring stock bell to
switch

2:30 - 2:45 BREAK

Map Lab ---

2:45 - 3:15 "Early Maps" Activity;

KARI

3:15 - 3:45

In small groups:

ALL

Becoming familiar with various maps including planographic
and topographic; Understanding contour lines using Mountain
Model Kit; Preview of curriculum lessons relating to maps.

LESSONS: "Reading the Land -- Contours!"

"National Wilderness Preservation System"

"State Wildernesses"

*only mention lessons

3:45 - 4:30

Putting it into practice! Orienteering course. AL

5:00 - 6:00

Dinner

EVENING FACILITATOR: JOE

6:00 - 8:30

Time to explore! Experience a piece of the wild! Float the
Wild & Scenic North Fork of the Flathead River. OR take a
hike, fish, bike..spend more time with the box, check out
the videos. KRAIG LANG -- Will join group for dinner and
evening float--offer to chat briefly (at dinner) about Wild
& Scenic Rivers

9:00

Campfire ..swap wilderness stories and songs.

Thursday, August 15

7:00 - 8:00

Breakfast

MORNING FACILITATOR: KARI

8:00 - 8:15

Morning Theme: "Keeping the Wild in Wilderness"

"Landscapes Thru Time"

LYNNE

8:15 - 8:45	Wilderness Management: Two Perspectives, FRED MATT
8:45 - 10:00	AL KOSS (Wilderness Act Cards)
10:00 - 10:15	BREAK
10:15 - 10:30	Review pre-test answers--link to wilderness mgmt. talk.
10:30 - 11:00	The Impact Monster Skit TERESA AND AL
11:00 - 12:00	Lessons led by groups (30 minutes each, 2 before lunch)
12:00 - 1:00	Lunch
1:00 - 2:00	Lessons led by groups, continued - 2 more groups
2:00 - 3:00	Group Discussion and Critique Facilitator: KARI
	Review list of Expectations & What Wilderness Means
	Course Assignment Review KARI
	Closure Activity: Black Kettle JOE
	Give Teachers Wilderness Pins... and other handouts (refer to handout list)

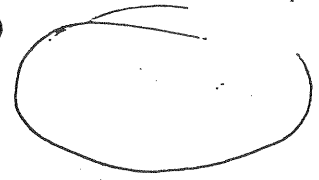
Connecting People with Wildlands

An introduction to the Wilderness / Land Ethic Box
1/2 Day Workshop

...from Linda Merigliano R4

- 8:20 am Introduction to morning's activities
Divide into 4 groups
Travel to first station using map
- 3:45 Station
- 7:15 Station
- 7:45 Station
- 10:15 Station
- 10:45 Meet in middle of upper meadow
Impact Monster Ray Leicht + Ray Hansen
- 11:45 Wrap-up
- 12:00 Lunch

- | | | |
|------------|--------------------------|-----------------|
| Station #1 | Wilderness Values | Linda + Nancy |
| Station #2 | Wild Book | Rick + Fred |
| Station #3 | Stories behind the names | Amy + Ray |
| Station #4 | Wilderness Jeopardy | Susan + Antonio |



Come join the pack for

“Call of the Wild”

A Teacher Workshop
October 13 & 14

Participants: Teachers & assistants K-8, college instructors, U.S. Forest Service.
Materials closely tied to curriculum objectives for 2nd, 5th, and 8th grade.

Leaders: Pat Lancaster- US Forest Service
Sue Elderkin Lyons- US Forest Service
Mary Arnaudin- environmental educator for pre-K through college level

Date: October 13 and 14, 1995. Friday 5:30-9:00; Saturday 8:30 am-7:00 pm.
(total of 10 hrs. workshop time) Friday and Saturday dinner included;
bring bag lunch on Saturday--drinks and snacks provided.

Location: Friday: The Forest Place on corner of Broad Street and Jordan
Saturday: Ranger Station conference room and porch

Credit: One hour continuing education unit for participating in 10 hours of
workshop.

Friday evening: 5:30-9:00

5:30-5:45 Welcome (howl) and “What is Wilderness?” (personal reflection)

5:45-6:15 Dinner

6:15-6:45 Flannel board activity including which activities are allowed and why.

6:45-8:00 Explanation of W vs. w. Read the Act (sec. 2a & c; sec. 4c). Point out
Values and Benefits (middle, p. 3-294-296). Forest Service role in the
management of timber, water, soils, recreation, wildlife, and Wilderness.

8:00-8:50 Wild by Law video.

8:50-9:00 Specifics on local Wilderness Areas

Saturday: 10:00-2:00

- 10:00-10:30 Gather: snacks, hot drinks.
Magic School Bus activity and discussion.
- 10:30-10:45 Explanation of the Land Ethic which applies not just to Wilderness, but to a spectrum of natural areas.
- 10:45-12:00 Introduction to the generic curriculum and changes made to create a Southeastern box correlated to NC standard course of study.
Participants explore the box contents.
- 12:00-1:30 Leave No Trace Meal (modeling of pack a pack, cooking, clean-up).
Tree Key activity done while waiting for water to boil.
- 1:30-2:00 Discussion of what Wilderness now means to each participant.
Set times for checking out the Box and field trips led by Brevard College students.
Decide on final meeting date when participants will share their experiences with the Box, critique the curriculum, and clarify concepts.
- (Next meeting set for Jan. 24 at 3:30 - 5:00 at the Forest Place).

"Call of the Wild"
LandEthic/Wilderness Box
Teacher Workshop

Purpose

To help teachers enable students to recognize the need for the preservation, conservation, and wise use of our natural resources. The practice of this land ethic is applied across a range of situations: from Congressionally designated Wilderness areas, to backcountry regions, recreational forests, developed parks, school grounds, and backyards.

The Program

The Box is a national program which originated in Colorado to help students appreciate and take care of natural lands.

All activities in the Box have been correlated with NC State Curriculum Objectives in the areas of science, communication skills, social studies, and healthful living at the 2nd, 5th, and 8th grades. An understanding of the value and care of natural areas will be established in the second grade and expanded in the fifth and eighth grades. Several activities in the 8th grade work promote the use of conflict resolution skills. Most of the lessons are "hands on" and can be implemented in cooperative learning groups.

The Box has been pilot-tested in Transylvania County in the 2nd, 5th, and 8th grades. All teachers and principals involved have been very enthusiastic about their experience and want to see the program expanded. Brevard College outdoor education majors helped lead a field trip for the pilot program and will be a partner in the Box program from now on. Transylvania County Schools was the first system to use this curriculum in the Southeast, resulting in our county being recognized as a national leader in Land Ethic/Wilderness Education.

Objectives

At the completion of the course, participants shall:

1. Recognize the need for the preservation, conservation, and wise use of our natural resources.
2. Be able to explain the values of wild lands and the philosophy of the National Wilderness Preservation System. Be familiar with the locations of NC Wilderness.
3. Understand the role of the U. S. Forest Service in managing public lands for timber, watersheds, wildlife, soil, mining, grazing, recreation, and Wilderness.
4. Know "Leave No Trace" ethics which may be applied to any lands.
5. Develop a plan for implementing the Land Ethic/Wilderness Box curriculum in the classroom.

...from Barb Miranda (R5)

Sequoia National
Park

**Wilderness and Land Ethics Awareness:
A Curriculum Training for Educators
Course Outline**

August 1 (evening) - 5, 1996

AGENDA
is it workable

August 1 (evening)
5-9:30 PM TR

Wilderness
Cards

Evening Introductory Session
Ice Breaker - "Wild Words" Activity
What is Wilderness
Course Overview and Logistics
Basic Backpacking and Leave No Trace skills

EQUIPMENT NEEDED

August 2 FRI
7:30 - 8:30 AM
9 AM
10:30 - 11:30 AM
3:00 - 5:00 PM
7:00 - 10:00 PM
On your own

Backpack into Tablelands
Equipment Overview and Leave No Trace
Hit the Trail
The National Wilderness Preservation System
Wilderness Management - visit from the Ranger
"Campfire" - Wilderness Values
Journalling

Overhead

VCR

Slide projector

August 3 SAT
8 - 10 AM
11 AM
2:00 - 3:30 PM
7:00 - 8:00 PM
Remainder of Evening

Backpack back to Wolverton
Wilderness Values
Hit the Trail
Wilderness Management Issues
"Wilderness Experience" Activity
Rest and Relax - Journalling

August 4 SUN
8:00 AM - 6 PM

On your own

The Wilderness and Land Ethics Curriculum
Map Lab
The Curriculum structure
Lesson Plan Assignment
Payne's World Video - Air quality and Wilderness Management
Practice Activities and develop lesson plans in small groups.

August 5
8:00 AM - 1 PM

Curriculum Presentation/ Closure
Presentations of lesson plan and curriculum activities

*This would
great for
colleg students!*

Cal Poly, San Luis Obispo
Recreation Administration
REC 400 Special Problems - Wilderness Education Curriculum (1)
Spring, 1996

I. Course Information

- a. Prerequisites: REC 210 or Instructor Consent
- b. Instructors: Barb Miranda, U.S. Forest Service, Program Coordinator,
Wilderness Education Project
Chrisi Boston, National Park Service, Yosemite National
Park, Wilderness Specialist
Bill Hendricks, Cal Poly
- c. Office: 11-262; 756-1246
whendric@oboe.calpoly.edu

II. Required Text

Wilderness Curriculum, Arthur Carhart National Wilderness Training
Center. Purchase from Instructor first meeting of class.

III. Course Description

Training in the delivery of a K-8 Wilderness Education Curriculum.
Wilderness management, philosophy, education, values, history, ecology,
culture and skills will be discussed. Active participation in wilderness
curriculum teaching and activities. Upon completion of the course
participants are prepared to present the K-8 curriculum.

IV. Course Outcomes

The student successfully completing this course will:

- a. be familiar with the interagency curriculum for wilderness education and
have program and lesson plans for implementing the curriculum in the
classroom or with a particular clientele.
- b. understand the historical and legal foundations of the National
Wilderness Preservation System, and be aware of prominent wilderness
management issues.
- c. be able to identify the locations and characteristics of existing wilderness
areas.
- d. develop an awareness of ecological, social, and cultural wilderness values

V. Course Schedule

Saturday, March 30

9:00 - 9:30	Welcome, introduction, workshop requirements
9:30-10:30	"Magic School Bus"; "Wild Words"
10:30-11:00	K-8 Wilderness Curriculum orientation
11:00-11:15	Break
11:15-12:30	"Wild by Law" video
12:30-1:30	Lunch
1:30-2:00	Wilderness discussion
2:00-3:00	"Map Lab" lesson
3:00-3:15	Break
3:15-5:00	Activity/lesson planning
5:00-5:30	"Wild Words" revisited or "Wild Cards"

Sunday, March 31

9:00-9:15	Workshop review
9:15-11:15	"Paynes World" - Wilderness management
11:15-11:30	Break
11:30-12:00	Final activity/lesson preparation
12:00-1:00	Lunch
1:00-4:00	Activity/lesson teaching and leadership
4:00-5:00	Workshop discussion and evaluation; Curriculum implementation and logistics; Wrap-up

VI. Evaluation

Lesson planning and leadership	40 points
Curriculum evaluation	20 points
Wild Words	10 points
Map Lab	10 points
Paynes World	10 points
<u>Participation</u>	<u>10 points</u>
<i>Total</i>	100 points

Grade Scale

93-100%	A	80-82	B-	67-69	D+
90-92	A-	77-79	C+	63-66	D
87-89	B+	73-76	C	60-62	D-
83-86	B	70-72	C-	<59	F

AGENDA
TEACHER'S WORKSHOP for THE WILDERNESS BOX
TOYON SCHOOL, SAN JOSE, CALIFORNIA

SATURDAY, OCTOBER 21

8:00 PM --> 9:45 PM

Introductions.

Course overview: goals, objectives, agenda.

Wilderness history and philosophy - "Wild By Law" video.

10:00 AM --> 12:00

California Wilderness Ecosystem Values

Map Lab-Where California wildernesses are.

Stand up break.

Wilderness Box curriculum and contents.

Brown bag lunch.

"Soft Paths" video.

Teaching Teams prepare presentations.

1:00 PM --> 1:30 PM

Wilderness Management.

-Issues

1:30 PM --> 4:30 PM

Wilderness Box group presentations.

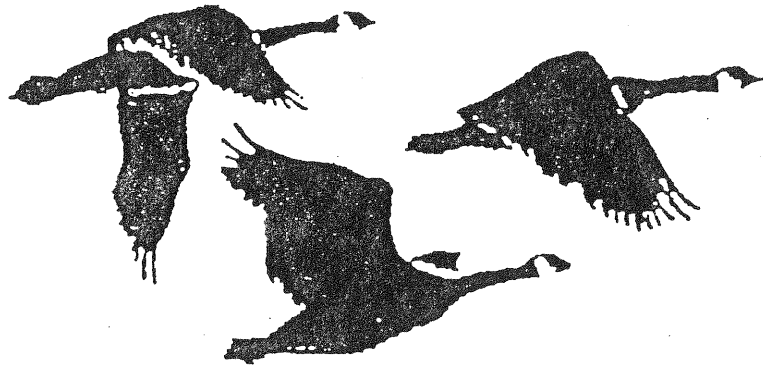
Wilderness Box administration - Pony System - Cheryl

4:30 PM --> 5:00 PM

Group discussion about this Teacher's Workshop.

Workshop critique.

WORKSHOP PIECES

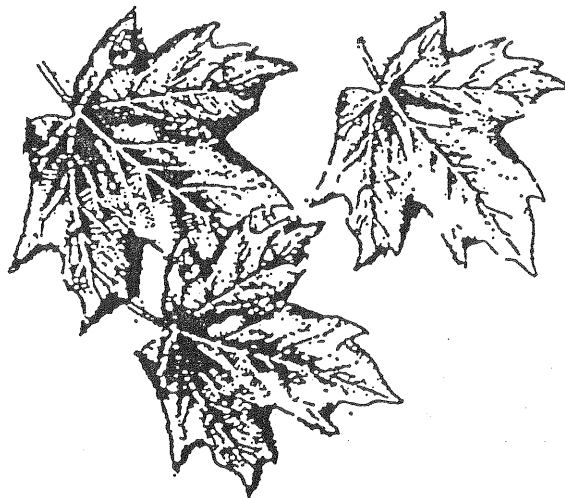


WILDERNESS BOX
TEACHER WORKSHOP
HANDBOOK

WORKSHOP PIECES

- Start on time
- Stay on schedule
- Leave time in presentations for questions and discussions
- Have an "instructors version" of the agenda (see example at end of section)

Put together the workshop schedule so that any lecture is followed by an activity. There are examples of agendas at the end of this section. Whenever possible incorporate lessons from the curriculum using the box materials. The following are examples from past workshops. Use these directly or as individual ideas. We can all learn from everyone's styles and new approaches.



INTRODUCTION

About one hour should be allocated to cover the following introductions: the overall project, the course, and the participants.

Project: (15 minutes)

1. Introduce the instructors. Identify and differentiate the roles of these individuals.
2. Give a short overview of the Wilderness Box program and development:

WECC - Wilderness Education Council of Colorado. This group evolved in 1992 when the America's Great Outdoors program provided funding specifically allocated to Wilderness Education. This group is comprised of many partners, including REI, Trails Illustrated, Colorado Outward Bound, Keystone Science School, Wilderness Education Association, Colorado State University, University of Southern Colorado, Sierra Club, Colorado Mountain Club, ORCA (retailers of outdoor products), and U.S. Forest Service representatives from the Pike/San Isabel and Arapahoe/Roosevelt National Forests.

These people identified priority audiences and designed an action plan with goals and objectives. The highest priority audience that they identified were school groups. One action item that has gained considerable recognition nationally is the Wilderness Box program. Between 1992 and 1994 this Colorado group produced the Wilderness Box curriculum. In 1994, the Arthur Carhart National Wilderness Training Center (ACNWTC) redesigned the curriculum to fit a national audience and began working with representatives from around the country to implement it.

ACNWTC has also led the development of a high school curriculum that is scheduled to be piloted in 1997.

**You may want to add your region's development and applications of the curriculum.

Course: (15 minutes)

1. Have teachers read the course outline.
2. Read and explain out loud the objectives of the course, the schedule, and the in class assignment.
3. Explain the procedure for receiving credit.

Participants Introduction: (30 minutes)

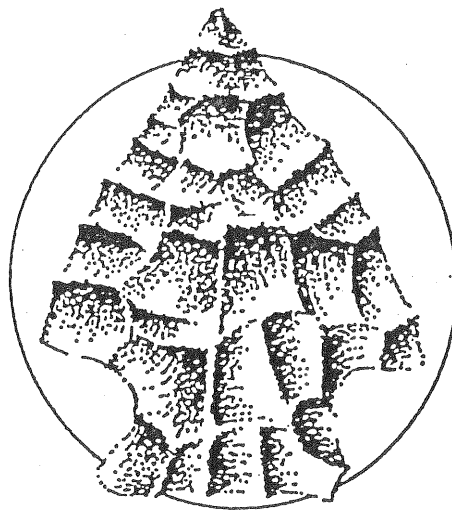
1. Ask teachers to:

- introduce themselves.
- tell what grade level they teach.
- define wilderness in one to three words.
- explain what their goals and expectations of the workshop are.

Asking participants to describe their goals and expectations may help frame a class goal, which can be reviewed at the end and used to evaluate the workshop.

2. Have someone help you write the defining wilderness words on the board for teachers to review throughout the workshop. Consider reviewing the words again at the closing to see if definitions changed or expanded.

3. Wilderness Quiz - The Wilderness Quiz can be fun and is a great educational tool. Have teachers take the quiz either individually or in small groups. The quiz may help focus the teacher's attention during the workshop and will also show how much they learned when reviewed at the end of the workshop.



CURRICULUM/BOX OVER VIEW

Time: 30 minutes to 1 hour

Objective: To familiarize participants with the organization and structure of the curriculum and the materials in the Wilderness Box.

It seems best to have teachers handling materials from the box while "walking" through the curriculum.

1. You may want to divide the class into small groups with one assistant instructor.
2. Show the overall structure and organization of the curriculum, the sections of the curriculum, including the glossary and bibliography.
3. Discuss individually the strands, which are: Overview, Aesthetics, Ecology, Connections and Skills. Use the accompanying goals matrix as a visual aid. You might consider making an overhead transparency of the matrix.
4. Pull out pieces of the box, and explain whenever possible what lessons, strands, or grade levels they relate to. This will require some pre-work on the part of the instructors to become familiar with the contents of the box.
5. Spend time carefully looking at:
 - book illustrations
 - different kind of maps
 - the posters
 - the feely bag contents.
6. Refer to the handout "Materials Referenced to Lessons?" by Sally Blevins. This is an excellent reference.

Note: It's good to have this segment before a break time, so there is more time to discuss and not rush into another session.

Have fun and get the teachers 'in the box' !

MAP LAB

Time: 1-1 1/2 hours

Objective: To familiarize participants with the national, regional and local wilderness resources.

- 1) Break into small groups with assistant instructors.
- 2) Use the National Wilderness Preservation System map, the BLM state wilderness status map, National Forest maps, and topographic maps, which are provided in the Wilderness Box.
- 3) Follow or adapt the Middle School Overview lesson included in the curriculum.
- 4) With each map, start by looking at the key. Discuss what the colors represent and what other symbols there are.
- 5) **National Wilderness Preservation Map** - Discuss the distribution of Wilderness areas across the country. Talk about the size of Wildernesses in the East compared to the West, and about representations of ecosystem types. Have the participants find the smallest Wilderness, and then the largest Wilderness.
- 6) **State Wilderness Status Map** - Again, start with the question what do the colors mean? Talk about administration of Wilderness by different agencies. Where in the state is a Wilderness area? What is the closest Wilderness to their city? What is the largest area? The smallest? What is the shape of the areas?
- 7) **Forest Map** - What does each color mean? Discuss private land, inholdings, and mining claims. Where is Wilderness in these Forest maps? Have the participants find a Wilderness and follow the boundary. Ask questions like: is the whole area on one National Forest? Is it composed of more than one administrative unit? Discuss the relevance to management of the area by different offices, or Forests. Does this map show topography? Would you want to travel in Wilderness with this map? What would this map be useful for?
- 8) **Topographic Map**- What do the colors mean? What do the symbols mean? What do the lines mean? Utilize, or at least refer to, the contour model in the Box. Discuss different ways of teaching about contours. You can use your knuckle to show how lines represent elevation and how their arrangement represents topography or shape of the landscape. Draw lines around your knuckle in a fist (like a mountain) and then flatten your hand to show how it looks represented in one dimension.
- 9) **Treasure in the Wilderness** - Elementary, Skills, Lesson 1. This is a good closing activity.

VIDEOS

Throughout the workshop you may want to use any of the following videos:

Wild By Law (1 hour) This video can be a good way to do the Wilderness History piece by stopping the video at a half way point and leading a discussion by asking questions and interjecting commentary.

The Last Parable - (30 minutes) This video has received mixed reviews. Although it is mostly suited for an older audience, it has been viewed by primary and elementary students and some messages do get across. However, you may want to preview to make sure the video is appropriate for the group watching.

Soft Paths - This video covers Leave No Trace skills. Most of the topics in this video are covered with the skills trail or impact monster skit. It seems to always be received well.

Vision's of the Wild -(22 minutes) This video is primarily the view of recreational use as seen through a more managerial eye, in particular the wilderness ranger. This has a tendency to put the manager against the visitor and may make the audience feel a bit uncomfortable with the perception of recreational use by the Forest Service.

Battle For Wilderness -(1hour) A historical review of the lives of John Muir and Gifford Pinchot and the famous battle over the Hetch Hetchy valley.

* At certain workshops, videos were viewed during a brown bag lunch hour. Videos can be used in many different ways, either as a presentation of materials, as an optional activity, or as a take home activity.

WILDERNESS ECOSYSTEMS

Time: 45 minutes

Objective: Participants will understand the importance of the wilderness resource in managing ecosystems. Non recreational values of wilderness are emphasized. Discuss the following concepts:

1) Bio-diversity

Bio-diversity means diversity of species, gene pools, landscapes, and populations. It is widely recognized that we are in a bio-diversity crisis. Loss of species, due to loss of habitat, is having a tremendous impact upon the health of our environment. Global climate change, caused by humans, is also contributing to this change.

The concept of conserving biological diversity is the driving factor behind conservation biology and behind new management practices ...like....

2) Ecosystem Management

Managing ecosystems means managing processes more than parts. It requires looking at larger landscapes for sustainability over the long-term, meaning centuries, not decades.

This way of thinking is underpinned by the realization that in order to save parts we must save the whole. A great example is the spotted owl. In order to truly 'save' the species, you must 'save' the habitat. The Endangered Species Act takes a single species approach to conservation, not a whole landscape approach. Wilderness often provides crucial undisturbed habitat that species require for survival.

3) Aldo Leopold

Give a short history of Leopold. Explain that many of his thoughts and ideas are consistent with this new ecosystem management approach.

Mention Leopold's book Sand County Almanac. Read some excerpts (included). Talk about "Thinking Like a Mountain" and Leopold's transformation from an advocate of predator control to his realization of the importance of predators in a healthy ecosystem. Also discuss the Land Ethic.

The Forest Service's new mission of Ecosystem Management attempts to integrate resources. Look at larger landscapes, and use 'team' approaches.

4) Wilderness

Wilderness is a congressional designation that protects wildland and provides for recreational human use. The importance here is that ecosystems are preserved and can be seen as a 'core' reserve area where habitats are protected. The implications for conserving bio-

diversity are significant. There is still controversy in the protection of new lands as wilderness because the new designation removes them from the resource extraction base. But, there is also growing recognition of the importance of these preserved lands.

5) Wildlands Project

Michael Soule and David Foreman are utilizing the "core reserve" concept in an attempt to map out these reserves throughout the country, which are not always Wilderness areas. They are looking for ways of linking these reserves with biological corridors. This concept looks at a much larger landscape in trying to conserve biological diversity. (Background reading on this project is included and should be done before discussing this project).

One problem with this method is that it is a 'technical solution' to the problem of loss of biological diversity. Leopold might argue that there is a need to apply ethics and instill a land ethic into our life-styles and practices in order to truly conserve biological diversity.

Once the public understands the issues of biological diversity and the importance of conservation, a solution to our biological diversity 'crisis' can start to be realized. Close by discussing the need for public education.

6) Closure

Wilderness plays a key and crucial role in the big picture of landscape ecology and conserving biological diversity. Although there is a tendency to view wilderness as a recreational resource it is also important because it is an undisturbed landscape that provides crucial habitat for our Threatened, Endangered and Sensitive species, which are indicators of ecological and global health of our planet.

WILDERNESS HISTORY AND PHILOSOPHY Outline

Objective: Introduce the historical progression of Wilderness preservation and natural resource conservation.

Abstract:

John Wesley Powell is emphasized instead of the traditional Muir vs. Pinchot dichotomy. Powell represents the first political thinker who argued for a planned settlement of the west in response to aridity and the limitations of natural resources. His thinking clearly predates Muir or Pinchot, and really carved the path for the late 19th century conservation movement. Because he is normally not credited nor mentioned, using his thinking provides a fresh approach to the philosophical progression, and perhaps a less dualistic picture of conservation history.

I. PUBLIC LANDS HISTORY

Acquisition ..Louisiana Purchase etc boosted the size of America's domain. There was a feeling that the west was so huge, we would never exhaust the resources.

"Disposal" --Homestead Act Timber & Stone Act; Desert Lands Act; Land Grants to Railroads

- * all designed to distribute out the public domain into the hands of the private sector

- * 160 acre, quarter sections, of land. Attempt to promote agrarian yeoman farmer, the Jeffersonian ideal.

Aridity - one problem with settling the west in 160 acre homesteads beyond the 100th meridian....ARIDITY

The west is too dry to farm w/out irrigation. Without irrigation 160 acres too small (ranching). With irrigation, 160 acres is too large. The concept works in the east, with the wetter climate, but not in the arid west.

John Wesley Powell - known as the one armed general who boated down the Colorado River, first person to do so, an incredible journey and story. But, more importantly J.W. Powell became the head of the U.S. Geological Survey, and conducted a national irrigation survey. In a very controversial report in 1876 :**"Report on the lands of the Arid Region of the United States...."** Powells's message was that the settlement of the west required planning, specifically, irrigation and social institutions that helped communities resolve the problems of aridity. The implications for Congress, was to embark on a federally subsidized water works program. This was an idea about 50-60 years ahead of its time, and our government was not ready either politically or philosophically for such a radical proposition. It threatened the very core of the governments ideal for the public

domain - privatization. It was proposing public ownership of resources, socialization of the resources.

Powell's plan, his thinking of socialized institutions in the settlement patterns of the American West, were completely rejected by Congress and political powers. In 1876, the concept went nowhere, in 1890, through Gifford Pinchot, the idea was accepted in the form of National Forests. Pinchot really owes credit to Powell and his thinking for the National Forest idea.

[Excellent background material on Powell can be found in Wallace Stegner's book, Beyond the 100th Meridian].

End of the Frontier - at about this same time, a fellow by the name of Frederick Jackson Turner, presented his thesis titled "The Significance of the American Frontier". This paper had two important messages, one was that there was no more frontier, we had explored to the west coast, the frontier period of history was over. That was 1890. In this paper he also suggested that American culture was formed by our frontier experience, specifically our contact with Wilderness; traits and characteristics such as self-reliance, independence, individualism were developed primarily as a result of our interaction with the wilderness frontier.

What implications this all has, is that American culture was greatly formed by our interaction with wilderness, wilderness. For better, or for worse. What we also begin to see is how our culture's perceptions of these wildlands has changed through time....

II. Attitudes Towards Nature

At the same time as our frontier period was "ending", appreciation of our natural areas was growing. We are all very aware of this pattern - as supply decreases value increases.

There were thinkers such as Henry David Thoreau who expressed the ideas of Transcendentalists. Natural areas were where God, spirit resided. Interestingly, this thinking came from those who primarily resided in cities, not those who were interfacing with the wildlands and battling the powers of the natural world for their livelihood. Nonetheless, this appreciation began to grow, and the movement became political, especially in the realm of preserving land from development.

So we see land beginning to be removed from the public domain, from privatization, to be preserved or reserved, or conserved, for the American Public and for future generations. The first such act of this kind came in 1964, with Yosemite Valley. Since this was in the middle of the Civil War, the Federal gov't wasn't much interested in getting into a new ball game and so ceded it back to the state of California.

1872 - the first National Park - Yellowstone

1891 - Forest Reserve system created
for the purpose of conserving primarily timber, for the future. The concern was over the rapid depletion of timber on private lands.

Gifford Pinchot, who really was an evolution of J. Wesley Powells ideas, was political wise and successful at getting T. Roosevelt to buy into the

Forest Reserve idea. Which became what is now know as the U.S. Forest Service.

Later, a multiple use mission began to evolve with the reserves, for the purpose of grazing, mining, logging, recreation, watershed, wildlife.

By the turn of the century we had the framework for a Public Lands program, where the Federal government was no longer in the land disposal business but in the business of managing lands and natural resources for the public. A major evolution of thinking had taken place...

Enter Aldo Leopold....

Leopold worked for the U.S. Forest Service between 1909 and 1924. In the 1940's he wrote what has become a "bible" of conservation literature..*Sand County Almanac* . In this book, and in his lifetime of committed work in wildlife and resource management, Leopold advocates expanding the consciousness of our relation to the land. He asks us to look at all the pieces of the land organism and to understand the roles and save all the cogs and to do "intelligent tinkering". He asks us to "think like a mountain", as if we had been here for millenia, as mountains have been, we would understand the complexity of the land organism. And if we understood the complexity of the land organism, we would take great care in our management practices, we would practice something more like husbandry or stewardship, rather than extraction and destruction.

What Leopold was getting at was our cultural view of the land and the need for us as individuals and as a culture to develop a land ethic.

Wilderness Legislation

Politically, Leopold, along with Arthur Carhart who pushed for protection of Trapper's Lake in northern Colorado, and Bob Marshall all working in different parts of the country for similar goals - to protect some lands whose value they perceived as highest in their preservation. They promoted the idea of removing these lands, not from privatization this time, but from the federal government extracting resources. They urged stronger protection of some of the spectacularly scenic public lands.

The L-20 regulations were passed in 1929, stronger language for protection of Forest Service lands.

In 1955 Howard Zahnizer prepared the first draft of the Wilderness Act. It took nearly 10 years of drafts and re-writes for the Congress to agree enough to pass the legislation. The Act was and continues to be very controversial, with preservation advocates often fighting battles with strong and powerful industry who see serious threats to locking up of lands from resource extraction.

The Wilderness Act was signed into law on September 3, 1964. It is in places a work of art in language. It is a concept turned in to law, that only America could have pioneered.

WILDERNESS CARDS Activity

This activity is good here because it provides some interaction and dialogue. It introduces the concept of Wilderness in political and legal terms. Close with the handout on "Defining Wilderness, discussing other viewpoints on Wilderness.

CLOSURE

Even in 1964, our cultural view of Wilderness was one where we viewed the difference between Wilderness and Civilization - "contrast to civilization" which comes from a worldview that considers humans separate from their environment.

As we enter into the 21st century there is an apparent shift in our thinking that attempts to see the relationship between wilderness and culture, and that the separatedness is really only in our perception. In fact it may be most important to focus on how we are connected to wildlands, if we are to preserve these lands. In response to Henry David Thoreau's famous statement "In Wilderness is the Preservation of the World", Wendell Berry writes: "In culture is the preservation of Wilderness".

The bottomline is that we need to bring these two together, wilderness and culture, and recognize the relations between them. This may be the significant contribution to the next era of Wilderness thinking and philosophy.

WILDERNESS MANAGEMENT

Time: 1 - 1 ½ Hours

Objective: To expose participants to the issues of managing wilderness.

Background Material:

1) Nash quote... 'Wilderness Management is a contradiction of terms'.

Talk about the thought expressed by Nash that all you should need to do is put a boundary around an area, and if it is to be wild, it should be left alone.

2) Boundaries

- Do animals, noxious weeds, and fire recognize boundaries?

- Air? Either describe or do the activity in the curriculum - Wilderness Boundaries and Air Pollution, (Elementary, Connections). This demonstrates clearly the problems with the political boundaries humans have created when attempting to manage ecological processes.

3) What are we managing?

If you have done the Wilderness cards activity, have a short review of some of the phrases in the Wilderness Act: opportunities for solitude, primitive and unconfined type of recreation, untrammelled by man, etc. Discuss the difficulty and subjectivity involved in managing some of these characteristics.

If appropriate, talk about planning systems. If we accept that some change is necessary, should we establish limits of acceptable change? This may or may not be interesting to people and may go over some people's head.

4) Sixteen Management Principles

At a past workshop, the 16 management principles were discussed by distributing the handout and talking briefly about each of the principles and when possible relating them to local or regional issues. This was very well received, generated dialogue, and caught many people's interest. Again, it is dependent on the teacher's level of interest.

Another way to do this is to show the list of 16 management principles on an overhead and pick a few to discuss. It is helpful to try and encourage dialogue and get the participants thinking about the issues involved. It may create some antagonism, but by including the entire group, and facilitating well, you will find the most important points concerning these principles.

5) Closure

Close with the point that when we manage we are managing many resources, not just recreation. We are trying to allow natural processes to exist, yet the constraints of human values also enter our decision making.

Other Ideas:

- * Case studies using ACNWTC Wilderness Awareness handbook.
- * Town Meeting, having role plays of different interest groups over a particular issue.



ACTIVITY EXCHANGE

Objective: To give participants a chance to conduct and critique activities from the curriculum.

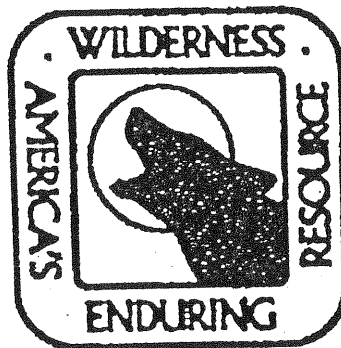
1. Early on in the workshop have participants group themselves into teaching teams, preferably by grade levels.
 2. Give the participants about 45 minutes to find a lesson they will teach cooperatively. Remind them that a lesson contains 2-4 activities, which they can organize amongst themselves to present to the class.
 3. Instructors should act as facilitators for groups helping them follow the curriculum. If possible, try to make sure different strands of the curriculum are being used.
 4. This now becomes a homework assignment. Teachers will come prepared to put together the lesson. They will have one more opportunity to coordinate with their group before presentations.
 5. Have groups meet one more time for about 20 minutes to finalize teaching plan.
 6. Groups give their presentations. Lead a critique of the activities at the end of the entire sequence. Use the following as a guideline for discussion:
 - Did the sequence flow?
 - What were the strengths and weaknesses of each activity?
 - What was the objective?
 - What was the message?
 - How could it be strengthened to meet objectives?
6. Focus on the wilderness context. Was the context brought out in the lesson, was a connection to wilderness made in the activity? If not, how could it have been presented to be more specific to wilderness? Try to strengthen participants' understanding of the connection between the lesson and wilderness.

Note: Many comments in the evaluations remark that the Activity Exchange section should be shortened and more time spent on presenting background information on wilderness.

WRAP UP

There are many ways to wrap up the workshop.

- 1) One excellent activity is to review the words that participants used to define wilderness at the beginning of the workshop. Have the teachers look at the words and see if their definitions have changed, expanded, or narrowed. Review the Wilderness Quiz if you used it as an introductory activity.
- 2) Have all instructors sit at the front of the classroom. Ask for questions regarding the Box, and feedback on the different parts of the workshop: what was good, what helped, what was not? Ask for suggestions on future workshops? Encourage discussion on what else teachers might need to feel comfortable in teaching about wilderness.
- 3) Encourage teachers to fill out evaluations and thank them.
- 4) Review the post-course work assignment for those who are receiving credit.



AGENDA (w/ Instructor's notes)
TEACHER'S WORKSHOP for THE WILDERNESS BOX
SAN JOSE, CALIFORNIA

Text in bold are notes for instructors and are not show on participants agenda.

SATURDAY, OCTOBER 21

8:00 AM --> 9:45 AM

Introductions. (Use Teacher's Workshop Handbook, "Workshop Pieces" for reference.)

30min Getting to know each other:

-We introduce ourselves - Chrisi leads.

-Teachers indroduce themselves with:

Name

Grade they teach

Subject

Why interested in this Teachers Workshop?

-Teachers into their Teaching Teams using Fractured Sentence exercise. We will use these three (?) teams to do 2 (3?) excercises in the afternoon session. They will explain what the strand theme is, what the lesson is, and how the exercises fit with the lesson. They will have two or three opprtunities to get together to prepare for this during the day. - Michael

-Define Wilderness in 3 words - Sarah

-Wild Words or Wild Cards - Chrisi

Course overview. (See Workshop Pieces (WP))

20min Goals, objectives, agenda, logistics - Michael

Wilderness history and philosophy. (See WP.)

45min. Wild By Law video; break after about 40 min., and discussion or activity - Chrisi

10:00 AM --> 12:00

California Wilderness Ecosystems: (See WP.)

-Values - Sarah (possibly use Rolston's 12 Wildland Values?)

Map Lab-Where California wildernesses are. (See WP.)

1hr. Familiarize teachers with FS and other maps; location of CA wilderness areas; map lesson from curriculum - Chrisi

Stand up Break

Wilderness Box curriculum and contents. (See WP.)

30min Explain how curriculum works - Michael

30min Explain and explore Box contents - Chrisi + others.

Lunch. Show "Soft Paths" video, short version (20 min).

Teaching Teams Prepare their presentations (20 min).

1:00 PM --> 1:30 PM

Wilderness Management. (See WP.)

-Issues

30min. Three statewide issues; three Central Sierra issues - Sarah & Crisi.

Break.

1:30 PM --> 4:30 PM

Wilderness Box group presentations.

1/2 hr. Preparation time

2 1/2 hrs. All assist teacher's as needed to present their selected activity from the Box. Lets have a break between the second and third presentations.

Wilderness Box administration - Pony System - Juanity Ryan

15 min Juanita or Cheryl Connolly

4:30 PM --> 5:00 PM

Group discussion about this Teacher's Workshop.

15min Discuss value of Workshop to participants. What change (write on flip chart)? What keep (write on flip chart)? Other questions?
- Michael

Workshop critique.

20min Hand out evaluations; explain them; allow time for completing -
Chrisi

Thanks from all of us. Each of us tell the teacher's group what we appreciate most about them participating in this program. End program.

After everyone's free, before we pack up, provide one suggestion for improving our style of presentation.

Head home safely!

a.o. 10-19-95 2:00pm

EVALUATIONS



WILDERNESS BOX
TEACHER WORKSHOP
HANDBOOK

EVALUATIONS

Course Evaluations

Have teachers evaluate the workshop. This evaluation is essential to improving both the workshop and your skills in putting on workshops. There are examples of evaluations at the end of this section, some with a compilation of comments.

At workshops in the past teachers were asked to fill out the "Tentative Outline for Using the Wilderness Box Curriculum" (included). Consider using this as a method for determining how teachers view the curriculum and what their needs are.

It is important to respond to the evaluations, and make future changes to the workshop based on this input.

Course requirements

Review the "Post Course Work Requirements" handout from USFS Region 1. Most course requirements have had the following components for credit:

- 1) Attend all presentations and activities during the workshop.
- 2) Complete lesson evaluation sheets on a specified number of lessons.
- 3) Write a curriculum implementation plan.

The curriculum implementation plan and lesson evaluation sheets have been a good way to get feedback on the curriculum.

WILDERNESS AND LAND ETHICS AWARENESS
 TEACHER WORKSHOP
 July 11-13 1995
 Theodore Roosevelt Memorial Ranch, Dupuyer, MT

WORKSHOP EVALUATION

Thank you for taking the time to help us improve future workshops, by sharing your feedback!

<u>Instructors</u>	Great!		Not so Great.		
Knowledgeable about subject matter.	1	2	3	4	5
Box materials	1	2	3	4	5
Curriculum	1	2	3	4	5
Wilderness Mgmt./Issues	1	2	3	4	5
Gave useful, valuable feedback.	1	2	3	4	5
Open and available for questions.	1	2	3	4	5
Well organized in presentations.	1	2	3	4	5
 <u>Content/Organization</u>					
Course objectives were clear.	1	2	3	4	5
Course objectives were met.	1	2	3	4	5
Material presented in an organized, clear manner.	1	2	3	4	5
Recommendations for changing the order material was presented:					

Methods used to teach material were effective.

Small group work	1	2	3	4	5
Slides/video(s)	1	2	3	4	5
Modeling lessons	1	2	3	4	5
Other: _____	1	2	3	4	5
Overall	1	2	3	4	5

What could instructors do to present material more effectively? _____

Course Evaluation

CENTER FOR CONTINUING EDUCATION AND SUMMER PROGRAMS

Extension Division

Course Dept. & No. _____ Location _____

Title _____ Dates _____

Instructor _____ Your profession/occupation _____

Please circle your response:

1. What is your over all evaluation of this course?

Excellent Good Average Fair Poor

2. Were your objectives met through the content presented?

Yes No If no, why not? _____

3. How effective was the instructor in presenting material and leading discussions?

Excellent Good Average Fair Poor

4. Was the format/schedule of the course conducive to learning?

Yes No If no, why not? _____

What aspects of this course were most beneficial for you? Why?

What aspects of this course were least beneficial for you? Why?

Additional comments or suggestions:

Suggestions of topics for future courses:

CAL-POLY Wilderness Box Course

Workshop Critique

Following is a summary of comments received at end of workshop:

- "Wild-By-Law too long for an activity, but excellent for training.
- More activities the first day
- Do more than just activities from the overview strand the first day.
- Map Lab was good
- Small groups for management discussion
- Management discussion good
 - use lots of case scenarios
- Get binders ahead of workshop
- Cross Boundary issues excellent for discussion
- More hands-on with map and compass skills
- Marketing
 - ESB students
 - environ ed classes
- Timing for course is good
 - students have more energy early in the quarter
 - more background information later in the quarter
- Student/Teacher mix in future classes would be good
- Activity day really fun

Center for Continuing Education & Summer Programs, Extension Division
Comments compiled by Kari Gunderson
10 evaluations returned

1. What is your over all evaluation of this course?

Excellent = 8 responses Good = 2 responses

2. Were your objectives met through the content presented?

Yes = 10 responses No = 0 responses

3. How effective was the instructor in presenting material and leading discussions?

Excellent = 8 responses Good = 2 responses

4. Was the format/schedule of the course conducive to learning?

Yes = 9 No = 2

Comments:

- There was so much information & ideas, we were always pushed for time. I would suggest incorporating one more day into the workshop to allow more discussion and to have more of a chance to hike and experience the wilderness.
- More time to digest information, too much for the time available

What aspects of this course were most beneficial for you? Why?

Comments:

- The training on how to camp in the wilderness, mapping skills, & information on how and when wildernesses were established, and the Curriculum Guide as a lesson & activity & resource.
- Instructors are extremely knowledgeable; skits done to illustrate low impact camping; active participation "Hands On"; Groups presenting 1 activity for the whole group.
- Objective of wilderness was well defined. Development of usable lessons.
- The modeling by the instructors for the activities. Having hands on activities and materials that can be used in the classroom.
- Exploring the curriculum and contents of the Wilderness Box.
- Wilderness philosophy and wilderness management issues are pertinent to my job as a wilderness ranger. A variety of supplemental materials were available.
- All aspects were beneficial, the enactments were great!
- The geographic location and preparedness of instructors.
- The discussion of the lessons & activities and the "doing" of the lessons by the teachers
- The curriculum guide is excellent.

Center for Continuing Education & Summer Programs, Extension Division
Comments compiled by Kari Gunderson

What aspects of this course were least beneficial for you? Why?

Comments:

- Too much time spent on spiritual and philosophical issues. Although they are very important, as teachers we need educational/academic tools first (information).
- Time limitation
- All was great!
- Each aspect of this course was beneficial in some way.
- Wilderness management session-very interesting but perhaps not something I will use in the primary classroom.
- Too structured, not enough quiet time to process.
- Tried to do too much in the time allotted. Needed down time & time to relate to others.

Additional comments or suggestions:

Comments:

- The instructors were great! They were lively & upbeat. You could sense that the wilderness is truly in their hearts. I suggest 1 more day and more hikes.
- The T. Roosevelt Ranch is the perfect place for this and Bob & Kelly Peebles are the perfect hosts. It's extremely important for conservation educators to interact with working ranchers to understand their concerns & feelings.
- Not spend so much time on teacher led activities so there can be more time to assimilate the information. This was an outstanding workshop and the curriculum guide is terrific! I know I can use this all year long across my curriculum!
- I understand the need to stay on schedule - so perhaps schedule in more group discussion time - it felt a bit short on group discussion.
- Instructor had broad background of experience and provided a variety of approaches to wilderness issues and education. There was something for everyone. Excellent delivery of materials.
- Need additional guest speakers to gain further insights. Example- outfitters, fish & game, Sierra Club
- Everyone involved with this workshop did an excellent job!
- A wonderful course, with lots of great "stuff"!

Suggestions of topics for future courses:

Comments:

- Continue doing what you are doing. Looking forward to the high school curriculum.
- I can't think of anymore you could add-this was jam-packed!
- Restoration and/or rehabilitation of wilderness (philosophy and implementation of techniques)
- High school - Junior High Version
- Types of wildlife in the certain wildernesses.

**CONTINUING EDUCATION
STUDENT PERCEPTION OF TEACHING**

INSTRUCTOR'S NAME _____ TERM _____
 COURSE _____ CALL# _____

This form will provide information about your perception of your instructor in the context of this course, in comparison with other instructors with whom you have taken courses. Your instructor and other appropriate persons will use the results obtained, along with information from other sources, in assessing faculty effectiveness and promoting better teaching.

Each of the following statements includes a characteristic or cluster of related characteristics. If a statement **DEFINITELY** describes this instructor, circle 1. If it does not, circle the appropriate intermediate number, with 7 indicating **NOT AT ALL**.

	<u>DEFINITELY</u>				<u>NOT AT ALL</u>		
	1	2	3	4	5	6	7
1. Has command of the subject, is analytical							
2. Is organized, clear, states objectives							
3. Encourages questions, discussion, tolerates student views							
4. Is available to, friendly toward students							
5. Enjoys teaching, enthusiastic							
6. Is a good facilitator, resource person							
7. Gives students clear, useful feedback							
8. Communicates values of ideas, reason and inquiring mind							

	<u>Among the</u>				<u>Among the</u>		
	<u>Best</u>				<u>Worst</u>		
	1	2	3	4	5	6	7
9. Overall I would rate the effectiveness in this course:							

You are invited to comment briefly, and anonymously if you prefer, on the following.

1. How has the instructor helped you to learn effectively the material presented in this course?

2. What might the instructor do to help students in future courses to learn the material more effectively?

You may use the back of this form for further comments.

Wilderness and Land Ethic Box and Curriculum
Teacher Workshop -- Big Creek Outdoor Education Center
August, 1996
Evaluation Summary

12 responses -- 14 participants

Scale FROM (1) Great TO (5) Not so Great.

*Responses to questions, not adding up to twelve, were left blank on evaluation form.

INSTRUCTORS

Gave useful, valuable feedback

(1) Great = 11 responses (2) = 1 response

Open and available for questions

(1) Great = 12 responses

Well organized in presentations

(1) Great = 12 responses

CONTENT/ORGANIZATION

Objectives were clear

(1) Great = 11 responses (2) = 1 response

Objectives were met

(1) Great = 11 responses (2) = 1 response

My own expectations were met

(1) Great = 8 responses (2) = 2 responses (1-2) = 1 response, "Avenues for meeting these expectations were presented."

Material presented in an organized, clear manner.

(1) Great = 11 responses (2) = 1 response

Methods used to teach material were effective

*Small group work -- (1) Great = 10 responses (2) = 2 responses

*Slides/videos -- (1) Great = 8 responses (2) = 4 responses

*Modeling lessons -- (1) Great = 10 responses (2) = 2 responses

*Other: Lecture -- (3) = 1 response; Group discussion -- (1) = 1 response

*Overall -- (1) Great = 8 responses (2) = 1 response

What could instructors do to present material more effectively?

"Ask teachers to share ideas that could enhance lesson, (insist on it).

"Do this workshop more often!"

I'll be able to incorporate what I learned into my own teaching.

(1) Great = 10 responses (2) = 1 response (4) = 1 response

How would I recommend the workshop to other teachers and administrators?

(1) Great = 11 responses (2) = 1 response

Setting and facilities appropriate, well suited for workshop.

(1) Great = 11 responses (2) = 1 response

"Great setting for the workshop. Looking forward to next year."

TIME FOR REFLECTION

I liked it when:

"Great class."

"The student taught lessons out the curriculum."

"Issues were discussed, group questions answered, follow up activities implemented."

"Opportunity to work with participants."

"We shared our lessons."

"We observed other teachers making presentations of sample curriculum."

"We did the skits, tried out lessons from the box, had time to present a lesson ourselves."

"The instructors constantly taught and shared from the heart."

"Fred Matt talked."

"The staff interacted with everyone."

"You had such a nice variety of speakers and instructors."

I wish we had more time for:

"Liked the time frame as it was."

"Looking at items and videos in the box."

"Viewing available materials in box."

"using/exploring the curriculum guide."

"Maybe a little more free time, it was so beautiful in the area."

"spending actual classroom time within the outdoor boundaries with instructors as a learning environment."

"Story and history."

"Solitude with environment."

"Hiking/exploring the wilderness. Learning by doing."

"A day hike in the wilderness area would be nice."

The most important thing I learned:

"I knew as much as the other teachers at the most. I already had been incorporating wilderness themes in my lessons (without knowing it)! I now have more knowledge and confidence to take back to my students."

"Wilderness ethics."

"understanding."

"The principles behind wilderness preservation."

"Keeping wilderness wild-understanding."

" 'W' and 'w' areas."

"New and creative ideas to take back to my students."

"More info. on what "Wilderness really is.""

"I was reminded of the value of wilderness in my life and of the importance of helping students understand its value as well."

"What wilderness is, more important than just physical beauty."

"A respect with wilderness."

"I learned so much and of course all the handouts and curriculum guide are just invaluable. This will be used in my classroom."

OTHER COMMENTS/SUGGESTIONS

"You were all wonderful!"

"Have a workshop on Mission Mtn. Wilderness--maybe tribal people can run it - pertaining more to tribe, etc."

"Wow! Keep up your excellent and essential work!"

"I thought this was such a great workshop! All of the instructors were excellent. The setting, food, lessons, etc. were all wonderful. Thanks for spending your time with us."

"This was one of the best organized workshops I have attended. The instructors were wonderful and knowledgeable about the information and the Wilderness Box. They were friendly and great fun. Thanks."

"Was comprehensive-have a better understanding of components, issues and wilderness philosophy. Curriculum on wilderness is easy to use - explained in concise manner. Box is wonderful resource - using senses and multiple intelligence approach. The presenters were friendly and open to all questions. Food was great!"

Post-Course Work Requirements

1. Complete Lesson Evaluation Sheets on four lessons from four different strands of the curriculum. (Lesson Evaluation Sheet is attached.)

2. Curriculum Implementation Plan

Describe how you intend to use this curriculum.

- What grade levels will you target?
- How much class time will be necessary?
- Which themes, units and lesson plans will you use?
- Could you use any of the lesson plans at learning centers or with cooperative learning groups?
- How will you sequence the activities?
- What instructional materials will you use?
- What are the expected learning outcomes for your students? Can you measure these outcomes before and after the lesson?

Both assignments will be due August 11, 1995 to:

Kari Gunderson

P.O. Box 1008

Condon, Montana 59826

Phone: 406-754-2543

Evaluation Criteria

Teachers wishing to receive graduate university credit will be required to:

- attend all presentations and activities during the 3-day workshop
- complete lesson evaluation sheets on four lessons from the curriculum
- write a curriculum implementation plan.

LESSON EVALUATION SHEET

1. LESSON TITLE, STRAND, GRADE LEVEL
2. ARE OBJECTIVES ACHIEVED IN THE LESSON?
3. DO YOU HAVE ADEQUATE BACKGROUND INFORMATION TO TEACH THE LESSON? IF NOT, WHY NOT?
4. IS THERE A CONNECTION TO WILDERNESS MADE IN THE LESSON? IF NOT, HOW COULD IT HAVE BEEN PRESENTED TO BE MORE SPECIFIC TO WILDERNESS?
5. ARE LEARNING OUTCOMES (OBJECTIVES) MEASURABLE? HOW WOULD YOU EVALUATE THE EFFECTIVENESS OF THE LESSON?
6. PLEASE LIST IDEAS FOR IMPROVEMENT, MODIFICATION, EXTENSIONS, AND EVALUATION.
7. OTHER COMMENTS...

TENTATIVE OUTLINE FOR USING THE WILDERNESS BOX CURRICULUM

NAME/SCHOOL _____

1. At which grade level/subject area will you use this? _____

2. How much class time do you envision spending on it? _____

3. Which themes, units and lesson plans will you use? _____

4. Could you use any of the lesson plans at learning stations or during other science, math, etc. programs? How? _____

5. How will you sequence the activities? _____

6. What instructional aids will you use? _____

7. What do you hope will be the learning outcome? _____

Can you measure this outcome before and after? _____

BOX ADMINISTRATION



WILDERNESS BOX -
TEACHER WORKSHOP
HANDBOOK

BOX ADMINISTRATION

Have a system in place for administering the Boxes.

Have a calendar ready so teachers can sign up for the box at the end of the workshop.

Design and use a contract letter for loaning the Box. **

Make sure teachers are clear on how the system works.

Have an evaluation form. ** Make sure teachers fill it out upon return of the Box. Again, this provides feedback to the program.

Maintain a mailing list of all participants who have been through the workshop and consider sending out a flier or newsletter with updates on the program.

Have a contents list and check off sheet, and utilize it each time the Box is returned. **

** Examples at the end of this section.



United States
Department of
Agriculture

Forest
Service
(406) 387-5243

...from R1
Hungry Horse Ranger District
PO Box 190340
Hungry Horse, MT 59919-0340

File Code: 2320

Date: Sept.18, 1995

Dear _____

At your request, we have scheduled the Wilderness and Lane Ethic Box for your use between:
_____ and _____

Your Box will be available for pickup on _____ at the Front Desk at:

_____ Flathead Nat'l Forest
Supervisor's Office
1935 3rd Ave. East
Kalispell, MT 59901
755-5401
Contact: Dennis Jones

_____ Hungry Horse Ranger District
Hwy 2 East
Hungry Horse, MT. 59919
387-4224
Contact: Al Koss, Lynne Dixon

Please return Box by _____ to the same site where you picked it up, so it will be ready by the following Monday for the next user.

We'd also really appreciate your cooperation in completing the enclosed check list and evaluation sheet. Just return them in the Box.

Feel free to include any student projects that were generated by the Box curriculum. A folder is provided in the Box for that purpose.

Thank you very much!! Enjoy!!

Lynne Dixon
Wilderness Education Specialist

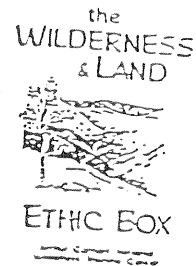
the
WILDERNESS
& LAND



ETHIC BOX

Arthur Carhart National
Wilderness Training Center





THE WILDERNESS AND LAND ETHIC BOX CONTENTS LIST

Teacher _____ School _____ Date _____

Teachers: Regarding this contents list, please note what is not present in the box, or any items that are already damaged before your use. We would appreciate your time and effort in checking the contents and condition of the items before you return the Box. Thank you very much!!

	IN	OUT	CONDITION (GOOD/BAD)
Skulls and Pelts			
1/4 Beaver Pelt	—	—	G / B
Beaver Skull	—	—	G / B
Coyote Skull	—	—	G / B
Deer Skull	—	—	G / B
Black Bear Skull	—	—	G / B
Mt. Lion Skull	—	—	G / B
Fisher Skull	—	—	G / B
Pelt Samples	—	—	G / B
Puppets			
Beaver Puppet	—	—	G / B
Bear Puppet	—	—	G / B
Squirrel Puppet	—	—	G / B
Eagle Puppet	—	—	G / B
Frog Puppet	—	—	G / B
Posters			
Fire's Role in Nature Poster	—	—	G / B
The Wilderness Wolf Poster	—	—	G / B
Rocky Mountain Poster	—	—	G / B
Skills Trail Posters	—	—	G / B
Videos, Slide and Tapes			
The Green Scene	—	—	G / B
Soft Paths	—	—	G / B
The Last Parable	—	—	G / B
Camp Nhizona in the Wilderness	—	—	G / B
Come Walk with Me	—	—	G / B
3 Men, 3 Rivers	—	—	G / B
A Kid for the Wild (Audio)	—	—	G / B
National Wilderness Slides (2)	—	—	G / B
Book and Pamphlets			
Fire, a Force of Nature	—	—	G / B
The Other Way to Listen	—	—	G / B
The Lost Lake	—	—	G / B
Living Treasure	—	—	G / B
Wilderness America: 25 Yrs	—	—	G / B
The Lorax	—	—	G / B
Signs Along the River	—	—	G / B
The Wildwatch Book	—	—	G / B
The Last Bit Bear	—	—	G / B

FLATHEAD NATIONAL FOREST
SUPERVISOR'S OFFICE
1935 3RD AVE. EAST
KALISPELL, MT 59901
(406) 755-5401



HUNGRY HORSE RANGER DISTRICT
P.O. BOX 190340
HUNGRY HORSE, MT 59919
(406) 387-5243

WILDERNESS AND LAND ETHIC BOX EVALUATION FORM

Please complete this evaluation form and return it with the Box

Name:

Work Phone #:

School:

Address:

Grade:

Number of students who used the Box:

Number of hours Box materials were used in classroom:

Date of Box use (month and year):

Which items were most useful?

Which items were not used?

What additional materials would you have found useful?

How did the students respond to the Box's contents and curriculum?

Did the attitude and knowledge of the students change as a result of using the Box? In what way?

How did you evaluate how much your students learned about Wilderness after using the Box?

APPENDIX



WILDERNESS BOX
TEACHER WORKSHOP
HANDBOOK

**A SAMPLE OF WILDERNESS BOX ACTIVITIES THAT MEET THE
GUIDELINES OF THE SCIENCE FRAMEWORK FOR CALIFORNIA PUBLIC
SCHOOLS AND THE TRINITY VALLEY SCIENCE MATRIX**

Grade Level	Theme	Subject	Activity Description
K-2	Patterns of Change	Life Science	Wacky Adaptations p. 2-125. Students are given a variety of materials to create an animal that lives in a wild place and has never been discovered.
2-5	Structure and Scale	Earth Science	Wilderness Boundaries and Air Pollution p. 2-154. Students discuss sources of pollution in their community, and demonstrate the effects of this air pollution on Wilderness systems using erasers and home-made fans.
2-5	Structure and Scale/ Patterns of Change	Life Science	Birds and Bills Game p. 2-123. Students use chopsticks, tweezers, spoons, straws, nutcrackers and pliers to experience specific feeding adaptations of a variety of bird species.
3-5	Structure and Scale	Life Science	Impact Monster Skit p. 2-187. Students use puppets and cardboard props to role play the effects of Smart Camper and Impact Monster actions in a Wilderness area.
3-5	Energy/ Systems and Interactions	Life Science	Community Web p. 2-135. Students identify a plant or animal of their choice, and collect information from library resource books focusing on its specific survival needs. Together as a class, students construct an interdependent community complete with decomposers.
4-6	Patterns of Change	Earth Science	Water Circle p. 2-158. Students role play water in the water cycle to determine if they could be drinking the same water a woolly mammoth splashed through. Good to follow this activity with Upstream Clean. p. 2-159, or Acid Rain Investigations p. 3-281
6-8	Systems and Interactions	Life Science	Stories From a Skull p. 2-143. Students use real skulls to determine an animal's eating habits and its specific adaptations to its unique natural community. Students become familiar with the terms cranium, mandible, incisors, canines, molars, carnivore, herbivore, ungulate, and omnivore. Students gather visual clues to gain insight into the life of each animal, and identify characteristics which indicate if the animal is generally a predator or prey species.
6-8	Systems and Interactions	Earth Science	Bag of Water p. 3-287. Students become aware of the relative scarcity of fresh water on the planet through an activity which separates the water in oceans, lakes, rivers, polar ice caps and glaciers from the remaining 1/4 of a teaspoon which represents the deep ground water supplies. This demonstrates to students that human survival is fundamentally dependent on the integrity of the water cycle, and that Wilderness plays a critical role in preserving this integrity.

A SAMPLE OF WILDERNESS BOX ACTIVITIES THAT CAN BE
INCORPORATED INTO EXISTING CURRICULUMS

Grade Level	Subject	Activity Description
K-2	Art	Learning Center Activities p. 1-93. Students use a variety of art supplies to create everything from Wilderness murals and animal puppets, to shoe box dioramas, survival shelters, and animal track blocks.
K-2	Physical Education	The Life and Times of a Bald Eagle, and Grizzly Bear Habits and Habitats p. 1-69 to 1-72. In both of these activities students learn specific information about the animals, and gain a sense of these species' dependence on Wilderness habitats. The activities involve investigations through movement, which provides students with first hand knowledge about the life of these two animals.
3-5	History	Flannel Board Story p. 2-116. A narrator tells the story of westward expansion, as students use flannel board pieces to graphically illustrate the historical events leading to the current practice of Wilderness preservation.
3-5	Language Arts	The Lorax p. 2-150. After reading the popular book as a class, students are given a com "truffula" seed, and are encouraged to view the story from different perspectives, taking a problem solving approach to the issues. As a writing assignment, students can describe why the word UNLESS is so important in the story, or write what they would do with their truffula seed, or they can write a letter to either the Lorax or the Onceler.
6-8	Language Arts	Wilderness Metaphors p. 3-225. Students divide into groups and select one object from the "Mystery Metaphor Container". They are asked to describe and demonstrate ways the object they have chosen represents the values or qualities of Wilderness metaphorically. For example: If the coffee filter is selected, it might represent how plants filter pollutants and impurities from the air. If the sponge is selected, it might be a metephor representing how wild lands provide watersheds that insure water quality.
6-8	Physical Education/ Math	Basic Map and Compass p. 3-297. Students are taught to use a map and compass to read bearings in the field. They are also taught to triangulate with a map and compass to determine differing locations. Students calculate the difference between true north and magnetic north to successfully navigate themselves through an orienteering course.
6-8	History	Wilderness Cards and Wild By Law p. 3-253 to 3-255. Students are given cards containing words from the 1964 Wilderness Act. After a discussion of the information, students will be encouraged to rewrite the Act in words the entire class can understand. Following this exercise, students view the Wild By Law video, and discuss the questions provided, which pertain to the historical events and the ensuing battle that led to the passing of the Act.

Materials Referenced To Lessons In....

THE WILDERNESS & LAND ETHIC BOX for Montana and Idaho

Box Item	Grade Level	Strand	Lesson
<u>BOOKS</u>			
The Wild Watch Book	Primary	Ecology	L2, Extensions
	Primary	Skills	L1, Extensions
	Middle School	Ecology	L3, Background
	Middle School	Ecology	L4, Extensions
Wilderness America: 25 Yrs	Middle School	Overview	L2, A1 (reference)
My Side of the Mountain	Middle School	Aesthetics	L4
NOLS Wilderness Cookery	Elementary	Skills	L2, A2
	Middle School	Skills	L2, A1, A3
Signs Along the River	Primary	Aesthetics	L1, A4
	Primary	Ecology	L2, A1
	Elementary	Aesthetics	L1, Extensions
Sharing Nature W/ Children	Primary	Aesthetics	L1, Extensions
	Primary	Ecology	L2, Extensions
The Lorax	Primary	Connections	L1, Extensions
	Primary	Skills	L1, Extensions
	Elementary	Ecology	L1, A4
	Elementary	Connections	L1, A2
Wilderness Visionaries	NO REFERENCE IN CURRICULUM		
Lost Lake	Primary	Skills	L1, Extensions
	("Read Lost Lake" -- no activity)		
The Other Way to Listen	Primary	Aesthetics	L1, A3
	Elementary	Aesthetics	L1, Extensions
The First 75 Years	Middle School	Perspectives	L3, A2-reference
Public Lands, Publ. Heritage	Middle School	Perspectives	L3, A2-reference
Centennial Mini Histories FS	Middle School	Perspectives	L3, A2-reference
Women in Nat. Resources, Vol. 11, No. 3	Middle School	Perspectives	L3, A2-reference
Words for the Wild	Middle School	Perspectives	L3, A1, A2
A River Ran Wild	Primary	Perspectives	L1, A1
	Primary	Connections	L1, Extensions
	Elementary	Connections	L3, A3
Living Treasure	Elementary	Ecology	L1, reference
The Last Bit Bear	Primary	Connections	L1, Extensions
	Elementary	Ecology	L1, A4
	Elementary	Connections	L3, Extensions
	(Note: Always "Read Last Bit.." - no activities)		
The Book of Fire	Middle School	Ecology	L4, A1-2
Rocky Mtn. Flower Finder	NO REFERENCE		
Rocky Mtn. Tree Finder	Middle School	Ecology	L2, A2
Mountain State Mammals	Primary	Teacher Info	(end of Primary)
	Elementary	Ecology	L3
	Middle School	Ecology	L1, A1
Audubon Bird Guide	Elementary	Ecology	L1, A1
	Middle School	Ecology	L2, A3

BOOKS - continued

Wilderness Ways	Middle School (Note: Reference Only)	Ecology	L3, Background
Zoobooks			
Bear	Primary	Ecology	L3, A2
Eagle	Primary	Ecology	L3, A1
Wilderness Quote Book	No REFERENCE		
Soft Paths	Middle School	Skills	L4

(Note: Soft Paths is substituted for "Wilderness Ways")

Additions for Montana and Idaho:

Montana Wildlife	Elementary	Ecology	L3
	Middle School	Ecology	L1, A1
Flight of the Nez Perce	Middle School	Perspectives	L2, A1, Reference
Lewis & Clark Expedition	Middle School	Perspectives	L2, A1, Reference
Montana Wildflowers	Reference		

These books will have lessons written for them

- Crow and Weasel
- Voices of the Wild

POSTERS

Rocky Mountain (beaver)	Primary	Ecology	L2, A1, A3
	Elementary	Ecology	L2, A2
Fire's Role in Nature	Middle School	Ecology	L4, A1-2
30th Anniversary Wilderness	No Reference		
Wilderness Wolf	Primary	Overview	L1, A3
	Primary	Perspectives	L1, Extensions
Habitat Poster	No Reference		
Backcountry Skills Posters	Middle School	Skills	L4, A2
	Note: could easily be used for elementary also		
Water Cycle	Elementary	Connections	L3, Extensions
	Middle School	Connections	L2, A2
Leave No Trace	All Levels	Skills	

MAPS

National Wilderness Pres.	Elementary	Connections	L2, A2 & L3, A2
	Middle School	Overview	L2, A1
	Middle School	Perspectives	L4, A3
National Forest Maps	Middle School	Perspectives	L4, A3
	Middle School	Connections	L3, A2
Topographic Maps	Middle School	Overview	L1, A1
	Middle School	Connections	L2, A3
	Middle School	Skills	L1, A1-2
State Wilderness Map	Elementary	Connections	L2, A2, L3, A2
	Middle School	Overview	L1, A2
State Map	Use as Reference		
Agency Maps Park, BLM	Use as Reference		

SKULLS & PELTS

Beaver Skull	Primary	Ecology	L2,A1
Skulls	Primary	Ecology	L2,Extensions
	Elementary	Ecology	L3
Beaver Pelt	Middle School	Ecology	L1,A1
	Elementary	Perspectives	L1,A1

AUDIO-VISUAL MATERIALS

National/State Wilderness Slides

	Elementary	Overview	L1,A2
	Middle School	Overview	L1,A2
Animal Slides	Primary	Ecology	L2,Extensions
Wolf Transparency	No Reference		
A Kid for the Wild tape	Primary	Ecology	L3,Extensions
	Primary	Ecology	L1,A2, L2,A2
	Primary	Overview	L1,Extensions
	Primary	Aesthetics	L1,A3
	Primary	Connections	L1,Extensions
The Last Parable Video	Elementary	Aesthetics	L2,A1,A4
	Primary	Aesthetics	L1,Extensions
	Primary	Ecology	L2,Extensions
	Elementary	Overview	L1,A3
	Middle School	Overview	L1,A3
Soft Paths/Leave No Trace Video	Primary	Ecology	L1,A2
	Primary	Ecology	L3,A2
	Elementary	Skills	L4,A2
	Middle School	Skills	L4,A3
The Green Scene Video	Middle School	Aesthetics	L1,A3
	Middle School	Connections	L3,A2
	Middle School	Perspectives	L4,A3
Wild By Law Video	Middle School	Perspectives	L3,A2, L4,A2
	Middle School	Connections	L3,A2
Battle for Wilderness Video	Middle School	Perspectives	L3,A2, L4,A2

Additions for Montana and Idaho:

Come Walk with Me Video -- Jim Stoltz sings wild songs with kids
 Conviction of the Heart -- short, inspirational video by the NPS
 Camp Nhizhona -- done by kids, implementing the Wilderness Box

PUPPETS & MISCELLANEOUS

Puppets	Primary	Ecology	L1,A1-2, L1 Extensions
	Primary	Ecology	L2,A1,A3
Compasses	Middle School	Skills	L1,A3,4,5,6
Contour Plastic Model Kit	Middle School	Skills	L1,A2
Wild Bag	Primary	Ecology	L2,A1
	Primary	Aesthetics	L1,A1
Rock Collection	Middle School	Perspectives	L1,A2

Wild Flannel Board & parts	Elementary	Perspectives	L1,A3
Animal Postcards	Primary	Ecology	L2,A2
	Elementary	Ecology	L2,A2
Oh Wilderness Game	(No Reference)		

CURRICULA & PAMPHLETS

Wilderness Act (phrases) Cards	Middle School	Perspectives	L4,A1
Green Scene Curriculum	Elementary	Perspectives	L4,A1
	Middle School	Aesthetics	L1,A3
	Middle School	Perspectives	L4,A3
	Middle School	Connections	L3,A2
Woodsy Owl Education Kit	Primary	Connections	L1,A1-2
Leave No Trace Brochure	Primary	Skills	L1,Extensions
	Elementary	Skills	L4
Wilderness Mgmt in Rockies	Elementary	Perspectives	L2,A1

Additions for Montana and Idaho:

Selway Bitterroot Primer - Fun, Wilderness-specific guide
 Teaching for Wilderness - Wonderful lessons
 Camp Nizhona in the Wilderness Curriculum

L - Lesson

A - Activity

Teacher Handouts for Wilderness Box Workshop
July, 1995

In letter to workshop participants, just prior to workshop:

- Revised agenda
- Wilderness Act
- An Enduring Resource of Wilderness
- 16 Principles of Wilderness Mgmt
- Participant List

At registration:

Folder with contents:

- Workshop agenda and objectives
- Pre-test
- Teacher workshop evaluation
- List of workshop activities referenced in curriculum
- List of R-1 Wildernesses
- National Wilderness map
- Wilderness Quote book
- Participant and Instructor List

Copy of Wilderness and Land Awareness Box curriculum

At the conclusion of the workshop:

- Wolf pins
- Leave No Trace posters
- Montana Wilderness map
- Montana Wild Story map activity
- National Geographic Wilderness packet
- List of locations/contacts for Wilderness Boxes to date
- Leave No Trace bookmarks?
- Handouts on individual wildernesses?? (or maybe make available on resource table)

WILD ACQUAINTANCES!

FIND SOMEONE WHO:

- * Can use one word to describe wilderness:
Word: _____
- * Can tell what piece of legislation was passed on September 3, 1964.
The _____.
- * Has slept in a leaky tent.
- * Has visited the Bob Marshall Wilderness Area.
- * Can describe a favorite outdoor place.
Place: _____
- * If they could be a plant or animal, can name the plant or animal they would like to become.
Animal or plant: _____
- * Drove over 200 miles to attend the teacher workshop.
From where? _____
- * Can name the author of this quote, "The clearest way into the Universe is through a forest wilderness."
Author: _____
- * Can name their favorite season.
Season: _____ and why? _____



PRE/POST WILDERNESS EDUCATION TEST

1. Name a wilderness closest to your home.

2. The Wilderness Act defines wilderness as "an area where the earth and community of life are untrammelled by man..." What does the word untrammelled mean?

A. No tram cars shall be allowed to operate within wilderness boundaries.

B. Hikers and horses shall not trample the vegetation in the wilderness.

C. An area uncontrolled by people where natural forces dominate.

D. No trails will be built.

3. What government agency takes care of Wilderness Areas?

A. United States Forest Service

B. National Park Service

C. United States Fish and Wildlife Service

D. Bureau of Land Management

E. All

4. In the United States (including Alaska), approximately what percentage of the land base is designated wilderness?

A. 15 per cent

B. 4 per cent

C. 1 per cent

D. 35 per cent

5. _____ of the entire wilderness system, is in the eleven western states. (This does not include Alaska).

A. One-third

B. One-half

C. One-eighth

D. Two-thirds

6. Besides recreation, Wilderness is valuable for many reasons, list three.

7. List 3 "Leave-No-Trace" practices

. A designated Wilderness is the only natural area which provides a place for experiences such as hiking, camping, and horseback riding.

- .. True
- . False

. Name a past champion for the Wilderness idea. _____

0. According to the Wilderness Act of 1964, check off what is allowed in wilderness:

	<u>YES</u>	<u>NO</u>	<u>SOMETIMES</u>
permanent roads	___	___	___
horses, mules, llamas, & goats	___	___	___
collecting antlers	___	___	___
rock bolt climbing routes	___	___	___
scientific research	___	___	___
noxious weed control	___	___	___
dams and water development structures	___	___	___
helicopter rescues	___	___	___
native fish stocking	___	___	___
cellular telephones	___	___	___
trail signs	___	___	___
logging	___	___	___
mining	___	___	___
oil & gas development	___	___	___
cattle grazing	___	___	___
motorbikes and four-wheelers	___	___	___
chainsaws	___	___	___
hunting	___	___	___
fishing	___	___	___
trapping	___	___	___
mountain bikes	___	___	___
backpacking	___	___	___
historic cabins & lookouts	___	___	___
lightning-caused fires	___	___	___
camping	___	___	___
dogs	___	___	___
wheelchairs	___	___	___
snowmobiles	___	___	___
commercial outfitters	___	___	___
low level aircraft flights	___	___	___
filming Hollywood movies	___	___	___
equipment caches	___	___	___
airstrips	___	___	___

According to the Wilderness Act of 1964, check off what is allowed in wilderness:

	<u>YES</u>	<u>NO</u>	<u>SOMETIMES</u>
permanent roads	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Usually not
horses, mules, llamas, & goats	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Almost always
collecting antlers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Not commercial
rock bolt climbing routes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Under study
scientific research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
noxious weed control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
dams and water development structures	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
helicopter rescues	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
native fish stocking	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
cellular telephones	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
trail signs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
logging	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
mining	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Pre-existing claims
oil & gas development	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Pre-existing claims
cattle grazing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Pre-existing claims
motorbikes and four-wheelers	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Rescues, ANILCA
chainsaws	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Fires, rescue
hunting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Except NPS
fishing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
trapping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
mountain bikes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> By special order
backpacking	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
historic cabins & lookouts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
lightning-caused fires	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> If PNF plan meets prescription
camping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
dogs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Not NPS
wheelchairs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
snowmobiles	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Except by special permit
commercial outfitters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
low level aircraft flights	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
filming Hollywood movies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Maybe with permit
equipment caches	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
airstrips	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Unless pre-existing

PRE/POST WILDERNESS EDUCATION TEST KEY

1. Wildernesses near our home - the Bob Marshall, Great Bear, Scapegoat, Mission Mountains, Cabinet Mountains, Rattlesnake, Selway-Bitterroot, Welcome Creek, Anaconda-Pintler, Gates of the Mountains, Lee Metcalf, Absaroka-Beartooth, UL and Medicine Lake.
2. C is the correct answer. According to the 1964 Wilderness Act...wilderness is "an area where the earth and community of life are untrammelled by man...where man himself is a visitor who does not remain...undeveloped Federal land retaining its primeval character and influence...generally appears to have been affected primarily by the forces of nature...has outstanding opportunities for solitude or a primitive and unconfined type of recreation..."
3. The United States Forest Service (USFS), National Park Service (NPS), Bureau of Land Management (BLM), and United States Fish and Wildlife Service (USFWS) all take care of Wilderness.
4. 4% of the land base in the United States is designated Wilderness. This includes Alaska.
5. One-third of the entire wilderness system, is in eleven western states. (excluding Alaska)
6. Wilderness is important for many reasons: reservoirs of biological diversity, scientific value, watersheds, life support systems, historic and cultural values, spiritual, aesthetic, recreation, refuge, educational values.
7. 3 "Leave-No-Trace" practices:
 - Pack it in, Pack it out
 - Stay on designated trails
 - Keep groups small and carry lightweight equipment
 - Select a campsite that has enough feed for your stock
 - Keep stock 200 feet or more from lakeshores
 - Use hitchlines, hobbles, and pickets to constrain pack animals
 - Bring pellets, grain or weed-free hay to areas where feed is limited or grazing is not allowed
 - Select a campsite 200 feet or more from trails, lakes, streams, and wet meadows
 - Don't dig ditches around the tents
 - Use designated or already impacted campsites when appropriate
 - Use a lightweight stove rather than building a fire
 - Do all washing away from camp and water sources
 - Obtain special guidelines for Grizzly Bear country
 - Dig cat holes 200 feet or more from camp, trails, and streams
 - Use existing fire circles in heavy-use areas, scatter the ashes and naturalize the area before leaving
8. False. These activities are allowed on all national forest lands. National Park lands have more restrictions due to the large numbers of people visiting these areas.
9. Champions of the Wilderness Idea:
John Muir, John Wesley Powell, Bob Marshall, Howard Zahniser, Aldo Leopold, Arthur Carhart

Tips on Talks

1. Know what you are going to try to put across -- don't ramble.
2. Your audience is going to be diverse, with all sorts of preconceptions about their upcoming experience. Bring all their minds together at the beginning of the talk by emphasizing one or more concepts around which your talk will revolve. This will unite the group and get everyone off to a good start.
3. Organize your data in a logical sequence around your major concepts -- make it easy for the listener to absorb and remember.
4. Be sure of your facts -- research your material. Don't just "think" what you say is right. !!!
5. Outline your talk: it will help to keep your thoughts in order. You will be surprised how well you remember what you wrote. Limit your outline to no more than 5 major points.
6. Don't grind on and on with facts; intersperse with examples and stories.
7. Practice your talk/ presentation !! Practice with a fellow interpreter, a tape recorder, a video camera, a mirror, etc.
8. Be sure that you plan the talk for a reasonable length of time, allow time for questions and discussions.
9. Your attitude is extremely important. Assume a friendly, confident, and enthusiastic attitude.
10. Speak up to make yourself heard in the back row, but don't shout.
11. Don't try to memorize your talk. Just know how the talk is supposed to flow, and what your key points are.
12. Never Apologize !! Don't say "Sorry I'm not prepared"

