

TABLE OF CONTENTS

Introduction	ii-iv
Topics Covered During the Rainforest Project	v
UNIT ONE Pollution Solutions	1
UNIT TWO Rainforests: The Earth's Lungs	15
UNIT THREE Volcanoes	29
UNIT FOUR Global Warming	45
UNIT FIVE Ocean Life	60
Illinois State Standards and Objectives	75

WHERE TO BEGIN?

The first step toward using the features of the Wilderness Classroom's website is to log onto our website: <http://www.wildernessclassroom.com>. The homepage can get to all of the adventures, lessons, and activities to use in the classroom. In the upper left hand corner of the page, you will find a navigational menu that will allow you to get to the contents of the website.

Our full updates will appear every Monday, Wednesday, and Friday. To access our updates click on:

The Rainforest Project (Fall 2003)

This will take you to the **Rainforest Project's Base Camp**. Inside the **Base Camp** are buttons to reach the Expedition Updates, Maps, Calendar, Library, and the Collaboration Station.

EXPEDITION UPDATES

- **Notes From The Trail** – Our journal entries, photos, and daily data.
- **Tico Times** – Interesting facts and profiles about the people who live in Costa Rica or people we've met along the way.
- **Critters of Costa Rica** – Each day a new animal of the rainforest will be featured. Find out where it lives, what it eats, and other interesting facts. Photos included.
- **Video Clips** – You will need Windows Media Player to access the video clips.
- **Mystery Photo** – Each update, students can use their investigative skills to solve a mystery. Clues are provided and responses are sent to the adventurers.
- **Cast Your Vote** – Decide where Eric and Dave go, what they do, what they study and eat by casting your vote on our online polls. Please use the maps to find out more about the options presented. Encourage students to submit their reasons why they voted for a particular destination.

MAPS

A very informative look at the geography of Costa Rica. This can be a great tool for making the best decisions on the weekly polls!

CALENDAR

The Calendar has information about the previous updates. So if you missed an update or can't remember the date we visited the Arenal Volcano or the date Green Sea Turtles were the day's Critters of Costa Rica, the Calendar will provide you with answers.

COLLABORATION STATION

The Collaboration Station is where students can communicate with Dave and Eric while they are on the trail. You will need your Username and Password to enter the Collaboration Station.

Chat Room: Eric and Dave have scheduled real-time chats. Each chat will last one hour. We will give you advanced notice of the chat times on the homepage and in the Notes From The Trail. *Each chat will be designed to talk about a specific theme. Please have your students adhere to this, because sometimes we have scheduled special guests to be in the chat room with us as well to answer questions. Also, please log your class on as one user. With multiple classrooms in the chat room at the same time, it can become difficult to answer and monitor each student. An LCD projector works very well for this. You may project the Chat Room onto a screen for the whole class to see.*

Question and Answer: Occasionally, Eric and Dave will ask questions in their journals. This is where students can respond to those questions. Students can also post their own questions. It can be a wonderfully motivating tool to prompt students to research the answer to their own questions, or help solve other questions. Please have students look at the previous questions to make sure they aren't duplicating a question already asked!

Daily Dilemma: Each day, Dave and Eric are presented with dilemmas. We will talk about the dilemmas in our Notes From The Trail. We want your students to use their higher-order thinking skills to help us make the best decision.

LIBRARY

Rainforest Library: The Rain Forest Library is a wealth of information for you and your students. Included are useful facts and pictures about the different animals, plants, and people who make the rainforest home. It is intended as a quick reference guide and supplement to the information provided at the beginning of each unit.

Lesson Plans: The Teacher's Lounge is where all of the lesson plans for the Rainforest Project. It contains the same units as the printed Teacher's Manual, as well as some quick activities (most with worksheets) to use in conjunction with Notes From The Trail, Critters of Costa Rica, Mystery Photo, and Tico Times. You may download the plans and print it out for additional reference. The lessons are available in pdf format for printing, or HTML for online browsing.

Links: An index of links that we find helpful to educators, scientists, adventurers, historians, and conservationists.

Getting the Most from Wilderness Classroom

For over three years, The Wilderness Classroom has been developing and refining its approach to online education. We've found that the students and teachers who benefit most from its content are those who use it on a regular basis.

After careful planning with teachers who have used our Previous Learning Adventures, we've come up with a list of helpful hints for you to take into consideration.

- ❖ Do some of your own investigation to the site! The more you know about where to go and what's there, the better you can answer your students' questions. It won't take more than a half an hour to memorize the whole website.
- ❖ Build time into your weekly or daily lesson plans to do one or more of the Unit's activities. They are very flexible by design to meet your individual needs! Amend them any way you see fit. Then email us and tell us what you did, and how it went.
- ❖ Read each Unit Introduction with your students.
- ❖ Computer Labs or LCD projectors help get more students on the website. An LCD projector is as easy as an overhead projector and can inspire great classroom discussions. Read the journals together as a class, or post a message on the message board.
- ❖ If your school has a computer lab, try to use it! Have students work in pairs. Keep your students focused on one task at a time, rather than just letting them browse the site on their own.
- ❖ Come to a chat session. Meet other teachers and students who are following along, and find out how they are using the Wilderness Classroom. The LCD projector is a great tool for the Chat Room.
- ❖ If you can't send everyone to a computer lab or don't have an LCD projector, assign a student to visit the journal or message board and report back to the class.
- ❖ If your computer time is limited, print out the journals before class and read them together.
- ❖ Create a Wilderness Classroom bulletin board! Print the journals out and display them in the hall or classroom for students investigate on their own.
- ❖ Keep a running line graph of the weather conditions and the distance traveled.

**Topics to be Covered Specific to The Rainforest Project
October – November 2003**

Science

- Rain forests
- Cloud forests
- Volcanoes
- Marine Ecology
- Habitats and Biomes
- Predator Prey relationships
- Animal and plant biology
- Carnivore, Herbivores, and Omnivores
- Food webs
- Global warming
- Pollution
- A day in the life of a scientist
- Sea Turtles
- Scientific method
- Weather
- Natural Resources

Social Science

- European exploration/colonization of the Americas
- Comparisons between life in Illinois vs. life in Costa Rica
- Indigenous Rainforest cultures
- Map reading
- Geography's effect on societies
- Humans effect the environment
- Latin American Culture past and present

Math

- Reading tables and graphs
- Producing tables and graphs
- Units of measurements
- Organize and predict from existing data (inc. weather patterns for both Costa Rica and Illinois, distance traveled)

English Language Arts

- Word analysis
- Enrichment of literacy skills through reading journals and other on-line information
- Composition of expository writing for publication
- On-line submission of questions for guides via Message Board, Chat Room, Cast Your Vote, and Mystery Photos
- Interpretation of outside sources
- Higher order thinking skills applied to real-life situations
- Composition of letters to members of Congress and other government agencies on behalf of environmental and cultural preservation
- Communication with other students from different schools, cities, and countries