

# THE NATURALIST

## Set off on Adventure

There is nothing like exploring the world, hands-on. And doing it with good friends only makes the experience better. On an Earth Explore Adventure you learn about your planet, its cultures, and how it all works together. We go to the most spectacular places on Planet Earth to explore the diversity of environments that makes our world so special.

Our partners are true experts, and the activities and learning adventures they provide are *available only to Earth Explore participants*. That means on our adventures you can

walk jungle trails and climb temples in Belize, hike into a volcano and meet elders in Hawaii, explore the ruins of Pompeii and the art of Michelangelo in Italy, view wild grizzlies and walk on a glacier in Alaska, measure geysers and dig for dinosaurs in Wyoming, and kayak with sea otters and cruise with whales in Monterey. And



that's just for starters. Designed to our specifications, for our participants only, each activity is sure to excite and inspire our students. And that's really what Earth Explore is all about. To learn more, go online to [earthexplore.com](http://earthexplore.com).

## Grab some credit!

How about earning some academic credit on your Earth Explore program? Scores of students do it each year. Earth Explore works with the Pacific Studies Outreach Center to make high school-equivalent credit available to every student who wants to earn it. Check out the article inside this newsletter for more detailed information.

## Leaders-A Great Resource

In order to have a successful, rewarding program, you need to have the best adult leadership available. That's where our Educator/Leaders come in. Each Earth Explore Leader is a unique person. He or she must be an active classroom educator who is recommended to us by a parent. All of our Leaders are great with kids and enjoy sharing time with them. They are also adept at providing the proper supervision and guidance through the trip.

Here is what Leaders Amber Reue and Michele Pecori had to say about their experiences:

*"Thank you so much for the wonderful opportunity that Earth Explore gave me. It was truly a trip of a lifetime! Everything was well planned out and very smooth. I was very impressed with each aspect of the trip; from the food to the lodging to the activities. Way to go!"*  
Amber Reue, TX Leader

*"I had a great time. I feel as though each of the children learned and grew enormously on this trip, which was wonderful to see. I loved watching the students and the leaders absorb and master so much information at each location. We had amazing discussions."*  
Michele Pecori, VA Leader

## Rockies Adventure Timeline

### What happens when?

#### August-February

During this part of the year, Earth Explore accepts registrations from teachers and students, and the majority of groups form. Many of our Adventure destinations will reach capacity during this period. Students receive quarterly copies of the program newsletter, *the Naturalist*, as well as a study guide called the *Adventure Guide*. For many groups the initial Preparation Session may take place during this period.

#### February-April

In the early part of this period additional teacher registrations may be accepted, depending upon available space in our Adventures. The final groups will form early in this period. All students take part in program Preparation Sessions during this period, during which the spring edition of the program newsletter, *the Naturalist*, is received. Health Forms are sent to all enrolled students, completed and returned to group leaders.

#### May-July

During this period students receive their program caps, photo credentials, T-shirts, field journals, and other travel-related materials. In May, a detailed day-to-day itinerary is mailed to each family, which lists all accommodations, activities and daily scheduling. Final groupings take place, and air tickets are forwarded to leaders in late May or early June. Final Preparation Sessions for most groups occur at this time as well. Groups depart on their programs generally between June 10th and July 15th.

## Wolves, other wildlife studied

Led by Yellowstone Institute naturalist Nathan Varley and others, Earth Explore students spend two days of their program probing the secrets of the park's endangered wolves and other animals. During hikes and trailside discussion groups within the spectacular Lamar Valley and other locations, students learn about wolf tracking, grizzly bear habitat, bison activity, and the unique plants of the Yellowstone ecosystem. Many past participants have hiked to Trout Lake, to witness a rare natural wonder; hundreds of Cutthroat trout spawning in a high mountain stream. Using spotting scopes, students are able to locate and identify animals ranging from wolves to endangered and threatened species like grizzly, moose, bison and Rocky Mountain bighorn sheep.



## Parents' Perspective

*"The program exceeded my son's expectations. The first night home he wished he was still in Utah and Wyoming with his Earth Explore delegation. He really missed all the activities."*

*"My son saw and did so many different types of experiences. It exceeded our expectations. The program was well laid out."*

*"I feel that my daughter grew educationally, socially and in problem-solving. She shares many thoughts, things she learned, experiences that indicate her growth."*

*"His level of independence grew tremendously. He also learned some valuable money skills and travel skills. Our son had a wonderful time. We would recommend the program."*

*"She had to learn to take care of herself without relying on us and know the importance of responsibility. She expected to have fun and learn something at the same time and had a wonderful time."*

*"I think this program is wonderful. It helps them to begin to focus on the future and what's available to them."*

*"His confidence has increased and he seems more considerate of other's feelings. He was very pleased with the program."*

## Academic Credit

As part of their participation in the Earth Explore learning experience, every accepted student has the opportunity to earn high school credit for their work. In a program funded by Earth Explore, one Carnegie credit (the equivalent of a semester-long high school course), as well as up to 40 service learning hours, are awarded to students who successfully complete their research and journal assignments. Entitled *Exploring Planet Earth*, the curriculum has been specially designed by the Pacific Studies Outreach Center to enhance and complement the hands-on learning available on the program. Complete information on the credit option is available online for interested participants at [www.earthexplore.com/academiccredit.html](http://www.earthexplore.com/academiccredit.html)



Students travel in style on luxury motorcoaches

## Action-packed adventure on the Shoshone River

Exceptional river conditions along Wyoming's Shoshone River ensured a wet and wild adventure for this year's Earth Explore Naturalists. Students rated their half-day river adventure as one of the single most exciting experiences of the program. Dressed in splash suits and life vests, students learned about navigating Western rivers while hearing stories of frontier and Native American history related by their expert guides. Due to its popularity, Earth Explore extended the river adventure this past summer, giving students more of a chance to enjoy the red rock canyon, the thrill of the gentle rapids, and the company of friends. After a hot day on the water, many students enjoyed a bracing plunge in the cool river waters.



**Here is a bit of what our students had to say about their experience on the river:**

*"Rafting down the Shoshone was the most fun. We hit rapids and splashed each other, and saw many birds and bird's nests."*

*"The river rafting was exciting for me because I don't usually like boats. So for me it was stepping out on a limb and trying something new, and I loved it!"*



Adventures in the Rockies

## Studies in the Tetons

Amazing views await our groups while studying and exploring with naturalists of the Teton Science School. As you can see in the picture to the left, the spectacular outdoor setting provides a great setting to learn about topics like glaciers and mountain building, endangered species, and the Greater Yellowstone Ecosystem. Students will explore the outdoor environment in small groups, to maximize learning and instructor interaction.



## Leader reflections

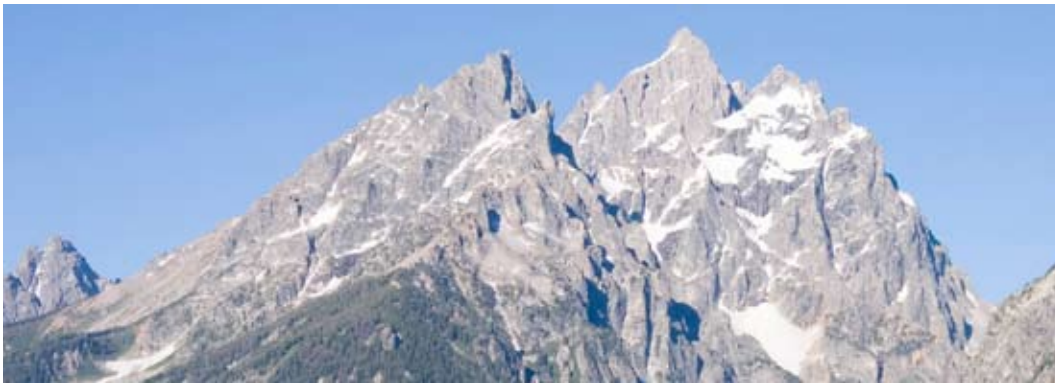
As educators, each Earth Explore Leader brings something special to the program, and hopefully takes something special away as well. Leaders Alina Henninger of Dumfries, Virginia and Marie Gehrig of Beach Park, Illinois, sent these impressions:

*"This program encompasses all things that I would wish or hope for any child. Each of us came to Earth Explore a bit timid and anxious, but soon found ourselves a part of a family away from home. We depended upon one another, shared knowledge and experiences with each other, and grew together during our adventures. The students really seemed to build their confidence, independence and knowledge base."* **Alina Henninger**

*"I wanted to personally thank Earth Explore for selecting me to chaperone the June trip to the Rocky Mountains. I can't describe what a wonderful experience I had. The students were great and the leaders were wonderful. It was an experience I will never forget. This trip was the perfect example of what hands-on learning can do for students. The knowledge I saw these students acquire was amazing."* **Marie Gehrig**

## Fundraising...Just do it!

Mrs. Esther Cooper's daughter Gabrielle participated in the Science Discovery program from New Jersey: *"I called for the fundraising packet, and ended up learning so much more than I could have ever dreamed. On March 1st, I started our first fundraiser. I set up a candle sale, a sub and pizza sale, and a bowlathon. Gabrielle and I made up information packets from your web-site, explaining about your organization and the trip itself...we included a letter about Gabrielle and her desire to be able to attend this once-in-a-lifetime opportunity. By the end of March, I was able to pay over half the tuition. I breathed, slept and ate fundraising. It was during this time that I started to realize that I was learning a lesson about life, and people and caring. My daughter and my son were learning that anything in this world is possible if you really want it and are willing to work to get it. The outpouring of generosity and offers for help just amazed me. There are no words to express my gratitude for the incredible gift this adventure has given my child. Thank you all at Earth Explore for the lessons and confidence I have gained from this. Now when I'm asked if I think I can do it, my answer will be, of course I can!"*



# Selected Partners

## Wyoming Dinosaur Center Big Horn Basin Foundation

In partnership with Earth Explore, WDC scientists and Big Horn Basin Foundation educators have assembled an active learning experience for our students. Here we will dig for actual dinosaur bones, while

learning about paleontology from experts. Besides having lots of fun, students will emerge with a better understanding of how fossil bones are unearthed, how they are identified, and how they are prepared for exhibit.

## Teton Science School

In the shadow of the majestic Grand Tetons, we make our home at the Teton Science School campus outside Jackson Hole. Dedicated to understanding and protecting the magnificent natural wonders of the region, the Science School is an amazing place to learn about the natural world, while in the company of experts. Here we view wildlife, enter fragile ecosystems to make casts of animal tracks, and discover the complexity of a world few others ever witness.

## Yellowstone Association Institute

Earth Explore works directly with the Yellowstone Institute inside Yellowstone National Park on an unforgettable two day program of discovery. The curriculum includes wildlife viewing, trailside talks, and hands-on activities, all based in the Mammoth Hot Springs area. We also witness eruptions at Old Faithful, and go behind the scenes at the Upper Geyser Basin.

## Hunter Peak Ranch

Louis and Shelley Cary, the owners of Hunter Peak, have been hosting Earth Explore students and teachers for almost a decade. Their hospitality is legendary, and the food homecooked. High in the spectacular Absaroka Mountains, the ranch is full of activities for the students, from nature study, to horseback riding, to free time pursuits like volleyball. One of the favorite activities is the big evening bonfire under the stars.

## Buffalo Bill Historical Center

Under the direction of Earth Explore, educators at this world-class facility have fashioned an exciting and diverse program. Students will discover the wild west of Buffalo Bill Cody, Native American history and culture, and learn about the cultures of the west as they exist today. The curriculum includes multimedia and hands-on activities.

## Students find dino bones

Earth Explore students working on the Warm Springs Ranch in Thermopolis Wyoming have been credited with some significant and exciting finds. Dozens of students have uncovered sauropod fossil bones in the Jurassic-era quarry.



## Fossil Lab is Cool!

As part of their program at the Wyoming Dinosaur Center, students have a chance to work on actual sauropod (longneck) fossils in the on-site fossil lab. Donning masks, Naturalists learn firsthand how scientists clean and prepare bones for study and display. After their work

Most of the bones uncovered in the rich Morrison formation site have been those of large Jurassic plant eaters like Diplodocus, whose bones were carried downstream and covered-up by ancient stream channel deposits.

Steph Hardiman, a student from Illinois summed up the feelings of many students. "Digging for bones was the most fun because you never knew what was under that one layer of sand; it could be an entirely new species." Several students received credit for their finds. Although Naturalists are not permitted to take vertebrate material from the site, they can take a sample of fossilized plant material from the Jurassic era.

## Rodeo Under the Lights

Much of the country that we visit on the Rockies Adventure program was part of the true "Wild West," filled with cowboys and gunslingers through the late 1800s. That tradition is kept alive nightly at the world famous Cody Nite Rodeo. Cowboys from all over Wyoming and Montana flock to the Rodeo to show off their skills, and complete for prizes. The rodeo tradition is still strong in this part of the West, kept alive to a fierce spirit of independence and a ranching culture that survives to the present day. These are real cowboys, who make their living on horseback just like their forebears did 150 years ago.



preparing specimens, group members take part in casting exercises, in which they learn how experts duplicate actual fossils for later museum display. Best of all, at the end of the day students get to take a cast replica of an actual dinosaur bone with them. Quite a souvenir of a memorable day!

## Hotels roll out red carpet

When our students arrive at their hotels at the end of a busy day, they find everything prepared for a comfortable and relaxing stay. Our staff inspect all accommodations, and our hotel partners go the extra mile to make sure students are well taken care of at all times. Students stay two or three to a room, depending upon the area, and enjoy the "grown-up" responsibility of sharing a hotel room with a roommate. Generally there is free-time for journal writing, swimming or just relaxing with friends.



# Leader profiles

## What does it take to be an Earth

**Explore Leader?** We rely on energetic, enthusiastic teachers to lead local Preparation Sessions, and help guide students on their summer learning adventure. Let's meet a few!

**Linda Dailey** attended a fall meeting in Doylestown, Pennsylvania along with her daughter Joelynn. Linda's enthusiasm and upbeat personality immediately identified her as a teacher who cares, and makes a difference. Here's what she had to say about her Earth Explore experience: *"This was an excellently organized program. I am amazed at the things I learned and what I can share with my students. Everywhere we went we met awesome people who interacted with our students in such a positive manner ...asking questions, challenging them, and making each experience a memorable one."*

**Sharon Steckel** came to Earth Explore as the result of a parent recommendation at a meeting in the greater Chicago area. Her experience working with her school's Outdoor Education program and five years leading day and overnight trips in challenging terrain in Maine caught our attention. She describes her Earth Explore experience: *"Our program was exciting, well-organized, fun, educational and involving. My most rewarding experience was watching the students get excited about a*

*new discovery. They became totally involved in the program."* Sharon says that while students grew educationally and emotionally during their program, most of the Leaders did as well. *"Yes, I grew as a result of my participation... I have a deeper appreciation of our history (and) our earth's history."*

**Jon Vondrasek** from Livonia, Michigan has over 8 years experience at the elementary level, teaching students in an experimental, get your hands dirty style of teaching. His love of nature and the outdoors along with his positive outlook guaranteed his placement with Earth Explore. Here are Jon's impressions of his Earth Explore experience:

*"We had a tremendous time playing and learning together. We developed a closeness as a group - sharing new experiences. I have grown in my appreciation of the West and have gained confidence as a Leader. It kept me on my toes! It is an unforgettable and not-to-be-missed opportunity."*



# Yellowstone Park Behind the Scenes

When Earth Explore groups are in Yellowstone, they see all of the big sights, and lots of other very special things as well. Accompanied by Yellowstone Institute naturalists, our students are taken to the finest wildlife viewing spots, from Lamar Valley, to Tower, to Hayden Valley, and use special scopes to view bison, grizzly, moose and wolves. At Old Faithful, we get a "behind the scenes" tour, that reveals the "plumbing" that makes the Upper Geyser Basin the world's most active.



Students do things like measure the temperature of hot springs, and venture off the beaten path to discover fascinating geothermal features that others miss. We also visit spectacular Yellowstone Falls, Bridge Bay on Yellowstone Lake, and Mammoth Hot Springs. At each location our guides provide a "behind the scenes" look at the park that makes the experience unforgettable. Traveling with the experts definitely has its advantages!

One of our recent Travel Managers was Neva Im. According to a fellow Leader, "Neva was wonderful in every way. She jumped right in and helped out in any way she could. She made suggestions about what to do based upon her experience. The kids loved her and so did we!"

## Travel Managers Keeping things organized

Our on-site Travel Managers play a key role at Earth Explore. They are staff members or teachers appointed by the National Office who travel with each group to handle all logistical details during the program, leaving Leaders free to devote their time and energy to the students. That means carrying a cell phone, coordinating check-in at the hotels and program venues, and keeping the group on the tight schedule provided by the National Office.



## Living Western History Stand with Mountain Men

The epic journeys of western pioneers takes on new meaning for students participating in Rockies Adventure. While in Wyoming, students will have the opportunity to stand in the footsteps of Oregon Trail immigrants and Mountain Men. At Cody and South Pass Wyoming, students will hear tales of the exploits of Buffalo Bill Cody and other frontier explorers, and have a chance to image what life was like almost 2 centuries ago. At South Pass Wyoming, most groups pause to gaze upon the site where westward traveling wagon trains finally crossed the continental divide, the midway point of their 6 month journeys to Oregon and California.



## In Grand Teton Smaller is definitely better!

The Teton Science School takes our students "behind the scenes," to show them things other visitors don't see. Part of the secret is in keeping things small. When this year's groups of students arrived, they immediately were split up into smaller "trail groups" of about 8 to 10 students. The smaller groups allow each student a more intimate, personal experience, and greater contact with the instructor while hiking, examining ecosystems, and sighting wildlife. In this setting students learn more quickly, and have a greater appreciation of the spectacular natural surroundings. As Student Naturalist Chelsay Nordtved said "I thought it was rewarding

because everything we did there was a lot of fun, but at the same time we were learning."

