

## *What can YOU do?* **Get your hands dirty!**

### **Ideas inspired by Roots & Shoots and past Earthwatch Fellows:**

- **Learn about bird species in your area and what they like to eat.** Then build a birdhouse or birdbath for your school or home. Record the birds you see.
- **Make a butterfly garden using native plant species.** Learn as much as you can about the butterfly species that visit your garden, as well as the plants you are growing.
- **Go to a nearby zoo** and learn about the animals that live there. Call ahead to spend part of the day volunteering (for example, cleaning cages or picking up litter).
- **Contact your park service** about volunteering at your local parks (for example, picking up litter, maintaining trails, or aiding in habitat restoration).
- **Create endangered animal puppets** and present a show at the local elementary schools
- **Study an endangered species** or have each child choose a different species to study. Make posters about them to put up around school or in your community center or start an endangered species newsletter. Raise money to help save those species.
- **Find out more about abandoned animals in your area.** Volunteer at your local animal shelter. Organize a fundraiser or pet food drive for this shelter. Develop and distribute pamphlets on how to care for your pets.
- **Learn about the benefits of bees.** Visit a local beekeeper or collaborate with local scientists, farms or organizations to help beekeep – or even begin beekeeping yourself!
- **Make a pet calendar to sell as a fundraiser.** Have a contest in which people submit pictures of their pets. The winners are the main photos and the “runners up” can go around the border so that everyone’s pet is included! Have pet stores and vets take out ads for the back of the calendar to raise additional funds.
- **Organize Earth Day events at your school or in your community.** Invite local environmental experts to make presentations and set up informational booths. Create an Earth Day resource page for kids.
- **Organize a tree- or flower-planting event.** This is not only good for the environment, it can also be a great fundraiser! Make sure you continue to care for what you have planted.
- **Pick up the trash at your playground and on roads, beaches or nature trails.** Become part of the Adopt A Highway program. <http://www.adoptahighway.com/> Make posters about how litter harms animals and the environment.
- **Learn about the pesticides and chemical fertilizers being used in and around the areas you live, work, or go to school.** Investigate alternatives and implement them. Start a petition about the use of chemicals in your environment – give it to the head of the maintenance staff – and offer to aid in the process of switching to non-chemical pest-control methods. Make pamphlets about organic gardening and pest management and distribute them to the community.
- **Organize a carpool hotline** or message board where people can coordinate their trips
- **Learn about any environmental topic** (for example, endangered species, pollution, global warming). Make posters illustrating the problem and telling people how they can help
- **Make a mural that will inspire people** to care about the environment.
- **Raise money for the environmental cause of your choice.** Try to have the product you sell have something to do with the cause. For example, you can make cookies frosted to look like globes, sell trees or flowers, or sell t-shirts or bumper stickers with environmental slogans on them. You can also sell reusable lunch bags or thermoses (you can hold an art contest for the logo).
- **Help local organizations with water sampling in streams, rivers, or lakes**

- **Set up a recycling system** for your school or local community, or in students' homes. Start a composting program and make posters informing people about what they can and cannot compost. Use the compost for your garden or make a new garden with it.
- **Map your local area with GPS systems while taking field trips**
- **Certify local vernal pools**

**You are not alone!** Involving others in your activities can be fun, as well as help you to achieve more. Below are some suggestions of other groups you may wish to work with in implementing your activity and places to find information:

- Students/colleagues
- Local neighbors, family members and friends
- Your fellow teammates from your Earthwatch expedition
- Local non-profit organizations
- Existing groups of which you are a member
- Local businesses
- Community clubs/organizations
- National parks/botanical gardens/local parks departments
- "Green your school" <http://www.ase.org/section/program/greenschl/about/>
- Roots and Shoots "Lessons for Hope" is a web-based, high school curriculum inspired by my Jane Goodall's, *Reason for Hope*. In her book, Jane Goodall shares her optimism for the future and the belief that every individual can make a difference.  
<http://www.lessonsforhope.org/teachers/index.asp>

*Need some inspiration?*

### **Earthwatch Education Fellows Moved into Action**

#### **Patricia Lynn Whilden, Conserving the Pantanal**

"Recently, we had an 'Evening in the Pantanal' night for my students and their families and friends. We cooked Brazilian cuisine all day long in class. Later that evening, they returned to enjoy a PowerPoint slideshow of the Pantanal and the Brazilian feast. The turnout was overwhelming!"

#### **Phoebe Griffith, Coastal Ecology of the Bahamas**

As a result of her experience on this expedition, she realized that she "had begun to care deeply about the work we were doing and about the place itself, and the beginnings of an idea for my oceanography curriculum began to take shape. The oceanography class project has kids working in teams of 4-5 investigating water quality and surveying the populations of land plants, birds, and marine animals and plants at a small beach area at Cove Island Park in Stamford, CT. Each week the students are asked to work together to analyze their findings; as the project progresses, we will cover the basic concepts in ecology. At the end of the field season, the teams will produce reports of their findings and evaluate the area's health."

#### **Mary Barden, Mountain Meadows of the Cascades**

"My students used transect poles to set out a square to identify shoreline organisms on a recent estuary study. I got the idea right from the sampling techniques from my Mountain Meadows experience. My students have also been using field guides to identify trees, shrubs, flowers and grasses in the uplands area of our field site."

### **David Miller, Conserving the Pantanal**

“I developed a unit-long project that mirrors the methodologies and research goals of the Pantanal project, but is focused on our immediate environment here in Los Angeles. The unit will begin with an observation project where students work together to identify the bird species in our area. Then, they will research these identified birds to decide on how best to monitor them. Over the next month, students will observe and document the bird species that visit our school, as well as complete research projects on the history, effects of urbanization, and conservation efforts of these species in the Los Angeles area. The final product of this unit will be a presentation to families and the community that shows the diversity of birds in our area and the factors that account for this, along with a comparison to Dr. Donatelli’s data in the Pantanal.”

### **Linda Keteyian, Peruvian Andes**

We have had a club since 1995 and its mission has changed as new children arrive and share their ideas. Some children have been more interested in gardening, others in cleaning up the environment, some just want to make rockets and other models. When I returned from The Rivers of the Peruvian Andes expedition. I shared the PowerPoint presentation I had created from the trip as well as a short story about the children in the village of Puerto Bermudez. They loved both and began coming up with ideas on how we could conduct a similar study of the water in our area including the Detroit River and the two small ponds in the cemetery next door. We ordered water testing kits and spent the entire year visiting sites and testing the water. The kids gained a great deal of experience in how to analyze the results of our tests. ... The children published a newsletter each month illustrating their studies and also presented to our parent group. In essence, the entire focus of the club that year was driven by the excitement generated by the Earthwatch trip. ...

In terms of Roots and Shoots and Earthwatch it is a natural connection for teachers, scout leaders, church group members and any other people who go on an Earthwatch expedition and want to serve as a bridge between 2 different cultures. Our club has focused on raising money for LaParua School which is one of six schools that Lewa Wildlife Conservancy sponsors. LaParua has its own Roots and Shoots Club. While I was there, I met with club members. They took me on a tour of their garden and chickens and Franklin, one of the club officers, gave me a letter summarizing their needs. My husband and I also took lots of pictures. When I got back to the US, I encouraged several of my senior AP Environmental Students to start a Roots and Shoots club for their senior project. I presented the pictures of Lewa and described the needs of the school to the club members. They very much wanted to help. They spent several meeting planning how they would fund raise. They settled on alternative gift offers during the Christmas Holiday season. For thank you cards, my husband printed up pictures that he had taken in Kenya. This was a big success. We also had some outright donations. We ended up with about \$800 which we are in the processes of sending them now. In addition, the students gathered used textbooks to send to Kenya. Shipping is very expensive so students wrote a grant to Verizon which, along with a matching grant from a parent, allowed us to ship 5 boxes of books to their school in December. They have not received them yet but we hope they will get them soon. As soon as we get feedback on the books, we will collect another 6 boxes or so and send them out in the spring. We have also exchanged pen pal letters which was very exciting!

**Are you interested in starting or joining a Roots & Shoots group?**

**Details on reverse>>>>**



roots&shoots

the Jane Goodall Institute

**When you return from your Earthwatch expedition, you and your students will be ready to:**

## **Inspire, Take Action, and Make a Difference!**

Earthwatch and Roots & Shoots® believe that engaging educators and youth in community service promotes a sustainable future. Founded by renowned scientist and humanitarian Dr. Jane Goodall, Roots & Shoots is a global network and program that emphasizes the principle that knowledge leads to compassion, which inspires action. We are excited to partner with Earthwatch to help your group expand the expedition experience to include hands on service in your local community.

### **Our Mission**

To foster respect and compassion for all living things, to promote understanding of all cultures and beliefs, and to inspire each individual to take action to make the world a better place for people, animals, and the environment.

### **Program Benefits Include:**

- The Coordinator's Manual, with group building and project ideas
- Curricula aligned with national standards and the Earth Charter
- The Roots & Shoots Network Newsletter, with inspiring international stories, photos, and news
- Global contests and projects to broaden your impact beyond the local community
- Annual youth and college summits
- Regional festivals and gatherings
- Support from our regional and national staff
- Partnerships in Understanding, an international correspondence program
- Leadership opportunities such as the Youth Leadership Council
- Meaningful context through which to fulfill school service requirements

### **Get Started!**

- Join the Roots & Shoots Network – a \$35/ group annual membership fee.
- Receive your start-up packet in the mail and review the Coordinator's Manual.
- Recruit youth members and other adult leaders.
- View online curricula and materials.
- Hold your first meeting to discuss local issues and project ideas.
- Conduct a Roots & Shoots Community Assessment.
- Brainstorm your first project.
- Work together to plan and implement your project.
- If you have questions or need support, contact your Regional Coordinator or the National Office
- Track your project with our online Activity Report Form; or mail your report.
- Connect with an international group through Partnerships in Understanding.

To join, visit the Roots & Shoots section of the Jane Goodall Institute website:

**[www.rootsandshoots.org](http://www.rootsandshoots.org)**