

## **Section III**

### **FIELD TRIPS TO THE COAST REDWOODS**

A field trip can provide learning that cannot be achieved in a classroom. Much of that learning is not directly related to California State Content Standards, but is nevertheless important and valuable. Field trips can, however, help students meet several content standards. The lessons and activities in Section IV, which include activities that can be done while on the trip, are standards-based. Field trips are especially useful in addressing the following content standards:

**Grade Four:**

Science: #3: Living organisms depend on one another and their environment for survival.

History: #4.2.1: Describe the major nations of California Indians, including their geographic distribution, economic activities, legends, and religious beliefs; and describe how they depended on, adapted to, and modified the physical environment by cultivation of land and use of sea resources.

**Grade Five:**

Science #6: Scientific progress is made by asking meaningful questions and conducting careful investigations.

**Grade Six:**

Science #2: Topography is reshaped by the weathering of rock and soil and by the transportation and deposition of sediment.

Science #5: Organisms in ecosystems exchange energy and nutrients among themselves and with the environment.

**Grade Seven:**

Science #7a: Select and use appropriate tools and technology to perform tests, collect data and display data.

## Chapter 1

### Field Trip Preparation

Whether you have arranged for someone else to lead your group or you are leading a group yourself, the following suggestions will help make your trip a success.

**It is highly recommended that the teacher or trip leader visit the site before the trip and meet with a ranger, naturalist, interpreter, or other person familiar with the area. Work with such an expert to decide on specific goals and learning expectations for the trip.**

Be sure to find out about:



Safety issues, including poison oak: It may be a good idea to bring a plastic bag and garden pruning tool to collect a sample of what poison oak looks like just before the trip date. (Turn the bag inside out, use it like a glove, grasp the specimen, then turn the bag right side out and seal.) At least find a place where you can point out poison oak soon after arriving.) (Note: Since it is generally illegal to collect anything in the park, talk to a ranger or do this outside of the park.)

- ✓ Boundaries...Where may students go and where may they not go? Obtain maps and give copies to parent leaders.
- ✓ Unique or particularly interesting things to see or do there
- ✓ Equipment: What can they provide and what should you bring?
- ✓ Contacts: Whom should you contact if you will be late or need to change the date at the last minute?

Consider taking pictures and using them to preview the trip for the students and chaperones. Pictures can be used to:

- ⇒ Warn about any dangers or anticipated problems such as poison oak.
- ⇒ Preview sites where activities will be done.
- ⇒ Point out things to watch for.



Be sure that all participating parents and other trip leaders are aware of safety issues, boundaries, and expectations. Consider whether children should be in a group led by their parent or if it would be better to separate child from parent.

Be sure to communicate with parents about appropriate clothing, including shoes. No open-toed shoes or flip flops should be allowed. Wear boots or athletic shoes.

Have a backpack containing the following:

- First aid supplies, including fine tip tweezers for removing ticks and any medicines or other emergency needs such as epipens for bee sting
- Medical forms and signed releases
- Field guides for identifying organisms
- Cell phone and a list of phone numbers such as the school and bus company
- Laser pointer
- Camera...digital? (Check or charge the battery before the trip!)

Student equipment might include:

- Magnifiers (I recommend 2-way magnifiers...see the resources section)
- "Bug Boxes"
- Plastic bowls for holding organisms while examining them (margarine tubs?)
- Plastic forceps for picking up small organisms
- Clip boards (can be made from cardboard or particle board and a binder clip)
- Pencils (work better than pens when it is damp)
- Camera...digital?
- Binoculars
- Gloves (disposable or reusable) for picking up litter

Section IV of *Redwood Ed* includes a number of standards-based activities that can be done prior to visiting a redwood park or forest. Consider doing one or more of them.

Section IV also includes activities to do while on the trip and activities for after the trip.



Go over safety issues and expectations with the students **beforehand**.

Trips are generally more successful if students have some specific goals in mind before arriving at the site. See Chapter 3 below.

If you can arrange to have one or more digital cameras, be sure that people know how to use them and that their batteries are charged.

Park rangers or docents may be available to visit the classroom before the field trip. This visit can help introduce activities and also help the students understand the need for rules to protect both the environment and the students, and is highly recommended.

## **Chapter 2**

### **How to Arrange for and Set up a Field Trip**

Get in touch with the park or forest service staff or other contact person well ahead of time. It is a good idea to have several dates in mind. Different agencies and companies will have different policies and procedures, and those may change. The guidelines below apply to school groups wanting to visit most state parks in the redwood region.

1. Check with your principal about procedures and forms, and obtain funding and approval. Follow all school/district policies.
2. Arrange for transportation.
3. Contact the park or other destination and ask for a reservation request form, or whatever procedures they use at that particular site. (See the list of contacts in Appendix III.)
  - ✓ You might check potential dates during this initial contact.
  - ✓ Find out about allowable numbers of students and student:adult ratios.
  - ✓ Make arrangements to visit the site and meet with a ranger, interpreter, or naturalist. Consider whether you want them to help lead your group. At least have a park representative meet and greet the group upon arrival. Some parks may give priority to groups that are going to be led by park staff or a volunteer.
  - ✓ Also find out about "cooperating associations." These are groups of volunteers who help the parks in numerous ways. If you have a docent, he or she is likely working with a cooperating association. Find out if there are upcoming opportunities for students or families to become involved with activities. See Appendix III.
4. **Visit the park and work with the interpreter to plan the trip:** Where will the students go? What will they see and do? What are the safety issues? What about lunch?
5. Before the trip, be sure that both students and chaperones understand the goals and activities.
6. When planning activities, I recommend planning some "down time" during which the students (and chaperones!) can quietly relax and experience the environment.

## Chapter 3

### What Students Should Know Before the Field Trip



The first thing that all visitors should understand is the need for safety. While redwood parks are generally safe, there are some potential safety issues.

Visitors can be dangerous to the parks, too! Be sure that students and parents understand the safety procedures to be followed on the trip and are familiar with the organisms described on the *Watch Out for Me!* (see following page). Consider using *Redwood Forest Safety Procedures* and *Watch Out for Me!* as handouts.

Before the trip, be sure both students and chaperones understand the goals, rules, and safety procedures.

Students are generally more focused if they have some assignments or goals before they go. It is a good idea to develop a scavenger hunt or worksheet for them to use on the trip.

Consider forming investigative teams to work together. Who will be the recorder (carry clip board and pencil)? Microbiologist (carry the magnifier)? Botanist (carry a plant guide)? Safety officer (watch for poison oak)? Litter Getter (has a plastic bag for litter)? Photographer? Other roles will depend on the activities that you plan.

## Redwood Forest Safety Procedures

**Safety for Students:** Safety begins before leaving home or school.

**Proper attire** is important. Wear clothing that is comfortable and durable... You will be walking in the woods!



- ✓ Wear closed-toe shoes that will protect your feet and give good traction...no "flip flops!"
- ✓ Dress in layers...It may be foggy in the morning, but it may be warm later.
- ✓ You may want to wear light colored clothes to make spotting ticks easier. Also, wearing long-sleeved shirts and pants is good prevention.
- ✓ Check the weather forecast...Is rain gear advisable?

Learn to recognize the organisms on the ***Watch Out for Me!*** page.

**Watch out for** broken glass, jagged sticks, fishhooks, or other hazards.

**Respect** each other and other people...

- ✓ No running...it is unsafe, and you will miss seeing what you came to see.
- ✓ Stay on designated trails unless otherwise directed.
- ✓ Keep the noise down...Keep the redwood forest peaceful. Act as if you are in someone else's home, because you are. (The quieter you are the more you will see.)

**Stay with your group and obey your adult leader.** If you have to use a restroom, ask your adult leader first and always go with a "buddy."

### ***Safety for the Environment***

**Stay with your group and on the designated trails.** Watch for signs that indicate "habitat restoration" areas and stay out of them.

Unless given permission, **do not pick any plants.** When examining plants, be careful not to break them.

**When examining animals, be careful not to injure them.** Always return them to the exact place where you found them...How would you like to be picked up by a giant and set down somewhere unfamiliar to you?

Only turn over logs or rocks if your leader has given permission, and if they do give permission, be sure to **carefully replace** them exactly as you found them.

**Do not litter.** If you find litter, carefully pick it up and dispose of it properly.

You may come across logs, trees, or rocks on which people have scratched their names or initials. **Don't be a vandal**, even if someone else was!

**Don't take anything with you.** Leave everything where it belongs in nature, both for the animals that depend on it and so that other people can see and enjoy it. It is illegal to take plants, animals, or even rocks from parks without permission!

***Take nothing but pictures, memories, and learning; leave nothing but footprints!***

## Watch Out for Me!

The plants and animals below are sometimes found in the redwood forest and parks.

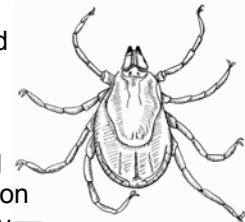
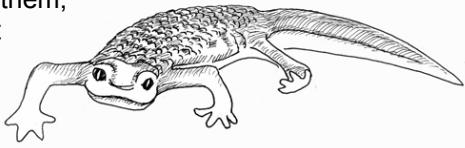
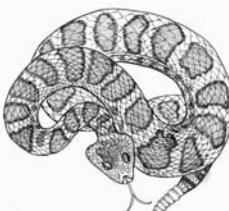
<p><b>Poison Oak</b> is common in the redwood forest. It looks different at different times of year, so ask your group leader to point it out. Wash your hands as soon as you can after the trip.</p> <p style="text-align: center;"><b>Leaves of three, let it be!</b></p>	 <p><b>Stinging Nettles</b> are common along streams, roads, and other open areas. If you brush against them you may be "stung" by the needle-like hairs on the leaves, but the itching will soon stop.</p> 
<p><b>Yellow Jackets</b> can be very aggressive. If you are allergic to bee stings, be sure your group leader knows and that you have your epipen with you.</p> 	<p><b>Ticks</b> can carry disease, but most don't. If you find one crawling on you, simply brush it off. If it has burrowed its mouth parts into you, ask your group leader to help remove it with tweezers. Be sure to tell your parents, and watch for any signs of infection or flu-like symptoms that may indicate a need to see a doctor.</p> 
<p><b>Centipedes</b> have a poison spine near their head end, and some can "sting" people. Use a leaf, stick, or tweezers when picking one up.</p> 	<p><b>Rough Skinned Newts</b> can secrete an irritating fluid from their skin. Wash your hands immediately after handling them, and don't rub your eyes!</p> 
<p><b>Rattlesnakes</b> can be found in some areas. Always look where you walk or sit, and don't step over logs or rocks without looking.</p> <p><b>Don't run down trails!</b> (Give them time to hear you and get out of your way!)</p> 	<p><b>Raccoons, squirrels, deer, and other mammals</b> may hurt you...Remember, <b>all park animals are wild</b>, even if they seem tame! Don't feed or approach them, and store your food properly. Squirrels and birds may have learned how to get into backpacks or bags of food!</p> 

Figure 108

## And Take Care of Me!

Sometimes deer, raccoons, chipmunks, Steller's jays, and other park animals get used to people and seem almost tame. They may even approach you looking for food. **DO NOT FEED THEM!** Human food is not good for wild animals, and if they get used to people they are more likely to be hit by a car or otherwise injured. Deer may seem tame, but may kick with sharp hooves. Raccoons, chipmunks, and other animals have sharp teeth. Also, a wild animal that does not run away may be sick and could hurt you. **So...DO NOT FEED THE WILDLIFE!**

## Chapter 4

### Conducting the Trip



Be sure that both students and adults understand the goals, rules, and safety procedures. Establish boundaries as to where the students may go and what they may do. Safety—for the student and for the environment—is the most important issue. Be sure that both students and chaperones know the time schedule.

Students must stay with their group and chaperone. It is generally a good idea for each student to have a buddy, selected before the trip. Students should never go anywhere alone, even to the restroom.

Each group should have a student "litter getter" with a plastic bag or plastic bucket. Consider having students take turns with this "job," and maybe the chaperone can take the first turn to demonstrate that it isn't demeaning. Consider having one bag or bucket for trash and another for recyclable materials.

Have learning activities planned, but be flexible enough to take advantage of "teachable moments." Students will learn more and are less likely to get into trouble if they have plenty to do. See Section IV for some activities that can be done on the field trip.

Consider forming investigative teams to work together. Who will be the recorder (carry the clipboard)? Microbiologist (carry the magnifier)? Botanist (carry a plant guide)? Safety officer (watch for poison oak)? Litter Getter (has a plastic bag or bucket for litter)? Photographer? Other roles will depend on the activities that you plan. Schedule times to change roles so that students won't be arguing about who is to do what.

Before leaving the parking lot to begin the activities, review safety procedures for both the environment and the students, as well as expectations for behavior, lunch plans, and departure time and procedures.

Be sure to include some time for students to just relax and enjoy the environment.

At the end of the trip, build in time to share experiences among the groups, and thank the docents, rangers, parents, and others who may have helped. The ranger or docent may be able to suggest ways that the class or individual students or families can help with park projects. There may be planned park events in which families can participate. If handouts are available, be sure to get copies for interested students or parents.

Also, remind students to wash up as soon as they get home, and to have their clothes washed to get rid of oils from poison oak. Also go over tick removal procedures.

## **Chapter 5 After the Trip**

The students should write thank-you notes to parents, rangers, interpreters, docents, and whoever helped with the trip. These can be individual notes or perhaps an illustrated group picture "card."

Reviewing what was seen, experienced, and learned can help with retention. Consider doing some of the lessons suggested in Section IV, Chapters 3 and 4.

If ways were suggested that students can participate in park activities, follow up on those.

If you took pictures, consider a class slide show, making a display for the classroom, hallway, or display cabinet, and having an evening slide show for parents.

## NOTES