

Section III

FIELD TRIPS TO THE CONIFEROUS FOREST

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, beginning on page 165, 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.
- Science #6: Scientific progress is made by asking meaningful questions and conducting careful investigations.
- 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.
- Science #7: Scientific progress is made by asking meaningful questions and conducting careful investigations.

Grade Seven

- Science # 5: The anatomy and physiology of plants and animals illustrate the complementary nature of structure and function.
- 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.

The teacher or trip leader should definitely visit the site before the trip and meet with a ranger, naturalist, interpreter, or someone else familiar with the area. Work with them to decide on specific goals and learning expectations for the trip. Ask what trails, facilities, and other resources will be available to help meet your goals.

Caution



Be sure to find out about *safety issues, including poison oak*: Consider bringing a plastic bag and pruning tool to collect a sample of what poison oak looks like just before the trip date. A relatively safe way to do this is to turn the bag inside out, use it like a glove, grasp the specimen, cut it, then turn the bag right side out and seal. If you are unable to collect a specimen, 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.
- ✓ The location and condition of **restrooms**
- ✓ Unique or particularly interesting **things to see or do at the site**
- ✓ **Equipment**: What can the park personnel 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? Parent cell phone numbers should be on the forms.

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.

Caution



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 both parents and students about appropriate clothing, including shoes. No open-toed shoes or flip flops should be allowed. Wear boots or athletic shoes.

Name or wrist badges, colored shirts, or hats can help identify and find your students.

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Involve the students in planning the field trip. Not only will they learn from the planning experience, but they will be more invested in the whole experience. They can learn from being involved with financial planning, development of field trip rules (a behavior contract?), planning the travel route, materials needed, logistics such as equipment and food, and other aspects. The Internet can be useful for this (Carroll, 2007). Be sure to discuss clothing that is appropriate for the expected weather and conditions such as mosquitoes, steep trails, poison oak, or thorny bushes.

Planning might include the development of a K-W-L chart, or perhaps a **K-W-H-L-N** chart (what do they **Know**, what they **Wish** to find out, **How** they will find out, what they **Learned**, and any **New** wonderings—new questions).

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 stings
- medical forms and signed releases, including parent contact numbers
- 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 two-way magnifiers) and/or “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)
- binoculars
- gloves (preferably reusable) for picking up litter

Section IV, beginning on page 165 includes a number of standards-based activities that can be done prior to visiting a 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.

Caution



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

When planning the trip with the students, discuss safety issues. Students, teachers, and parents can become “partners in safety” (Carroll, 2007).

Trips are generally more successful if students have some specific goals in mind before arriving at the site. See Chapter 3 on page 163.

Performance tasks for during and after a field trip can increase learning and also help the teacher evaluate the trip and make improvements in future trips (Carroll, 2007).

If you bring a digital camera, be sure that the 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 when you call. 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.

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. (Go to www.parks.ca.gov. 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? Restrooms? Water? How much time will be needed?
5. Before the trip, be sure that both students and chaperones understand the goals, rules, and activities. Involving students in trip planning will help the students become “invested” in the trip.
6. When planning activities, include some “down time” during which the students (and chaperones!) can quietly relax and experience the environment. Use your knowledge of your students to determine how much down time they can handle without getting into trouble.
7. Be sure to point out to both students and chaperones the need to protect and preserve not only the natural history features of a park but also the cultural history features, which may include artifacts from Native Americans and more recent history such as pioneer, gold rush, and logging days.

CHAPTER 3

What Students Should Know Before the Field Trip

Caution

The first thing that all participants should understand is the need for safety. While 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 Safety Procedures and Watch Out for Me! pages (163–164). Consider using these as pre-trip handouts.

Students are generally more focused if they have 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 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.

CHAPTER 4

Conducting the Trip

Caution



*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. **Show** (don't just tell) students and chaperones where to meet at the end of the trip and in case of emergency.*

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.

Both students and chaperones should know the time schedule. Chaperones should have a written copy.

Each group should have a student “litter getter” with gloves and 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 while on the field trip.

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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. Remind students and chaperones of the need to protect both the natural and cultural treasures in our parks.

Again: Be sure to include some time for students—and adults—to just relax and enjoy the environment.

Assessment: Assessment isn't just for after the trip. During the trip you should be checking to see if the students are learning what you want them to learn. Doing such **formative assessment** will enable you to adjust the trip activities to help assure that they get what you want from the trip. You might develop standards-based questions prior to the trip. Kathleen Carroll, in *A Guide to Great Field Trips* (2007), suggests many formative assessment strategies.

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

Too often the return to the school is the end of a trip. Students need to see the trip to a forest as part of their learning, not just a day away from the classroom. Planning for trip follow-up can help the students maximize their learning, and will also help set the stage for future trips.

The students should write thank-you notes to parents, rangers, interpreters, docents, and whomever 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 3–4, pages 261–322.

If ways were suggested that students—and their families—can participate in park activities, follow up on those. If you took pictures, consider making (or having students make) a class slide show, making a display for the classroom, hallway, or display cabinet, and having an evening slide show for parents.

Assessment: How will I know what they learned? And how will **they** know?

The first step of assessment is deciding what to assess...What do you want to know? Presumably you have goals for your trip...What do you want the students to learn, know, or be able to do? Design your assessment to find that out. Suggestions for assessment are included with most of the activities in Section IV.

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Forest Field Trip Safety Procedures

Caution

Safety for students 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 cold in the morning, but it may be warm later.
- ✓ You may want to wear light colored clothes to make spotting ticks easier.
- ✓ Long-sleeved shirts and pants help protect from ticks and scratches.
- ✓ Check the weather forecast...Is rain gear advisable?

Learn to recognize the organisms on the **Watch Out for Me!** (page 164).

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 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.** Be careful not to injure plants.

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 recycle or 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! Take good care not only of the plants and animals, but also of the items that show the park’s history.

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!

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Watch Out for Me!

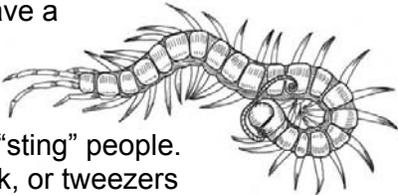
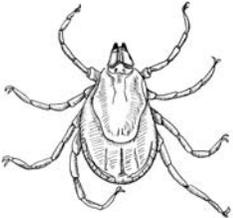
<p>Poison Oak is common in some forests. It looks different at different times of year, so ask your group leader to point it out. Wash your hands with a strong soap immediately after the trip. Leaves of three, let it be!</p> 	<p>Yellow Jackets can be very aggressive. If you are allergic to bee stings, be sure your group leader knows and that you have your epipen with you.</p> 
<p>Rattlesnakes can be found in some areas. Always look where you walk or sit, and don't step over logs or rocks, or walk by low bushes, without looking. Don't run down trails! (Give them time to hear you and get out of your way!)</p> 	<p>Centipedes 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>Ticks can carry disease, but most don't. If you find one on you, simply brush it off. If it has burrowed its mouth parts into you, ask your leader to remove it. 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>Squirrels, deer, and other animals may hurt you...All park animals are wild, even if they <u>seem</u> tame! Don't feed or approach them. Store food properly. Animals may have learned how to get into backpacks or bags of food!</p> 
<p>Other things of which to be aware: Our parks and forests are generally safe, but one must be aware of their environment. A little common sense goes a long ways!</p> <ul style="list-style-type: none"> • Rivers and creeks can be dangerous...Follow your leader's instructions about water. • It is often easy to get sunburned while in the mountains. Wear sunscreen and a hat. • Rain and cold weather can develop rapidly. Stay dry and wear layers of clothes. • Stay on trails. "Cutting" switchbacks or going off trails is dangerous and causes erosion. • Do not run...Not only is it dangerous, but you will miss many interesting things. • Stay with your group, and with your "buddy." Don't lag behind, run ahead, or wander. • Bring drinking water. 	

Figure 224.

And Take Care of Me!

Deer, raccoons, chipmunks, Steller's jays, and other animals get used to people and may 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!**