



Placer
Nature
Center



Watershed Explorations



Swimming Salmon

3



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About Us & Our Programs

Started as a project of the Placer Land Trust in 1991, today Placer Nature Center functions alone as non-profit organization. We share our 60-acre Auburn site, which is owned by the State of California, with the California Conservation Corps.

Placer Nature Center's mission is to provide educational programs that evoke a sense of discovery and wonder about our place on earth. The work of Placer Nature Center helps us understand that our daily choices impact the environmental, social and economic well being of the planet. This is essential, because a healthy world means the world to us.

Upon request, Placer Nature Center will provide schools with field trips to Placer Nature Center's campus, meet you out in the field and/or deliver presentations in the classroom.

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Program Overview

A team of trained docents use a holistic perspective to present our programs. That is, the total environment – living and non-living – will be studied while students weave together the disciplines in relation to their program theme (represented schematically in Figure 1).

The Placer Nature Center provides a three-part program, including:

- ❖ Pre-visit activities
- ❖ Field trip
- Exhibit Hall theme orientation
- Hands-on activities
- Nature Walk
- ❖ Post-visit activities

Plus other relevant information is also provided to enhance the student's field trip experience.

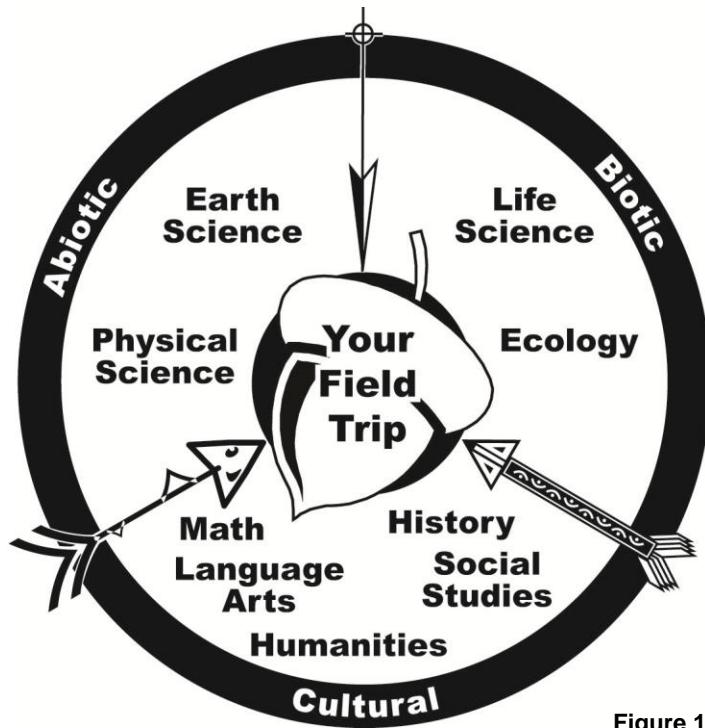


Figure 1.

Poison Oak

Description

Poison oak is a native shrub of the foothills and the Nature Center has many fine examples throughout the nature trail area and even atop the granite outcrop in our courtyard. Because many people react to the plant oil, it is important for our visitors to be able to identify this plant.



New Spring buds on Poison Oak,
pretty but not nice to touch!

Poison oak is not actually an oak although its leaves have an oak-like appearance. It is commonly found among oak trees. The species name, *Rhus diversiloba*, was well chosen as it describes the diversity of lobe shapes and sizes one can find on a leaf. Here is an identification checklist for poison oak:

1. Stems are smooth, with no spines.
2. Each leaf stem has three glossy leaflets.
3. Where the three leaves meet, there is a red spot.

A Nature Center docent will help you to identify this plant. Get to know the poison oak in all its forms: shrub, vine and seasonal variations (more pictures on the next page).

Foothill fauna depend on this native plant: deer browse on it; birds eat its berries; others den, burrow, nest or roost in it. Poison oak is an important part of the foothill ecosystem.

Reactions

Apparently only humans (and not all humans) react to urushiol, an oil found on the plant's stems, leaves, flowers and berries. Contact with this oil can result in a rash. The oil remains active for a long time. Thus, it can pass first onto clothing or animal fur before skin contact and still be capable of forming a rash.

The best prevention against contracting poison oak is to:

1. Learn to identify the plant
2. Avoid touching the plant
3. Wear long sleeves and long pants
4. Stay on the trail
5. Wash thoroughly and immediately upon returning home, both skin and clothes



Leaves of Three, Let them Be!

What Poison Oak looks like in each season**Fall**

Mostly red – from bright crimson colors to brown dying leaves.

**Winter**

A little more tricky to spot! Look for bunches of straight, upright twigs growing near rocks, trees and amongst other shrubbery.

**Spring**

After the pretty red buds (see previous page), leaves turn a shiny green. May be inter mixed in black berry bushes and other shrubs, hiding under Oak Trees and around rocks.

**Summer**

Various shades of green, yellow and red all mixed together in the same bush and sometimes on the same leaf!

Pre-Visit Information

Before you arrive... Please take the time to go over the pre-visit information and activities. It helps the students and docents enjoy a more successful program!

In The Classroom

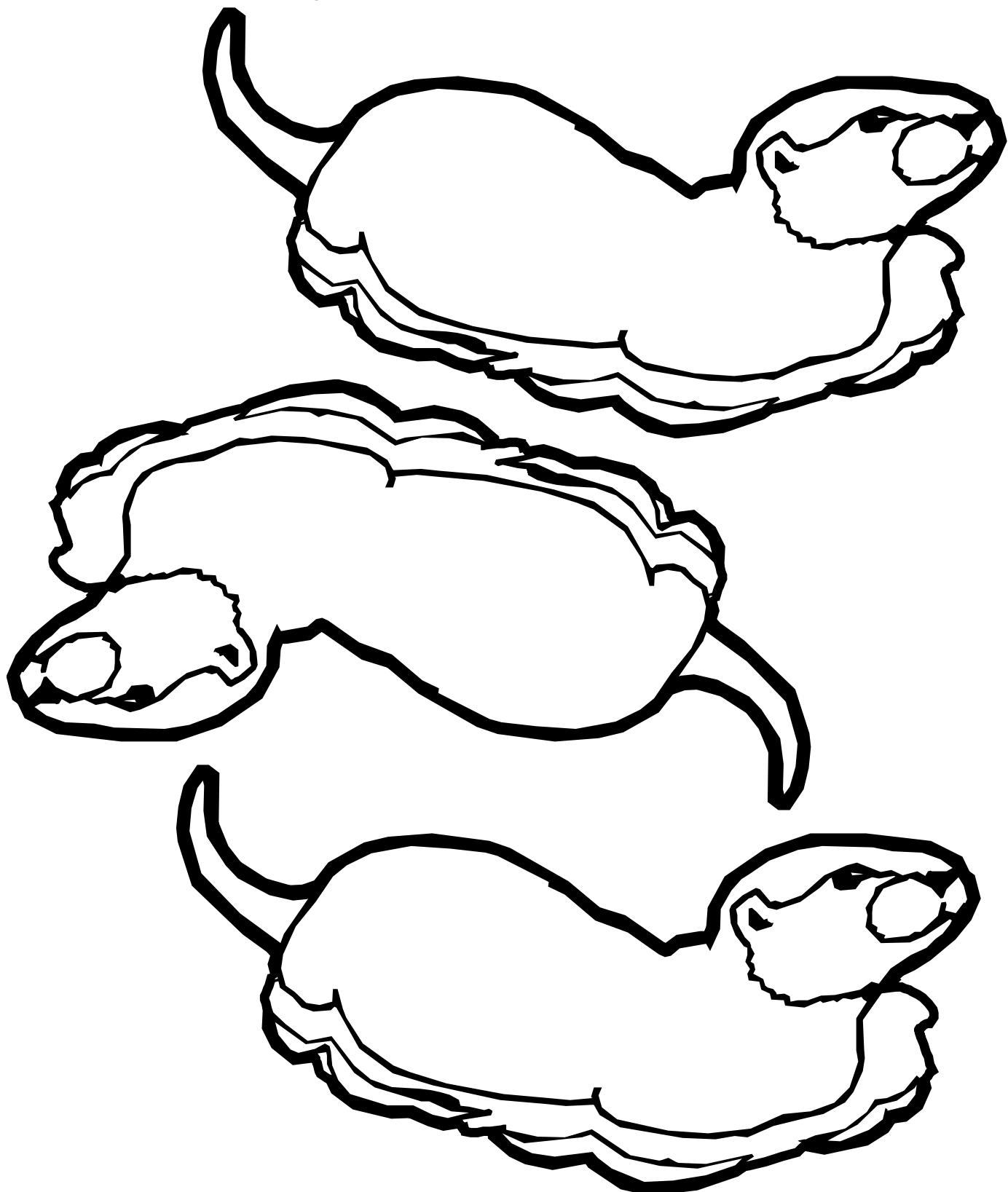
- 1) If there is a special needs student in your group, let us know how we can best meet her/his needs.
- 2) Divide your class into groups of 10-12 students with one adult each if possible. Make sure the students know which group they are in so they can be divided quickly after exiting the bus/car.
- 3) Make name tags and wear them to the Nature Center (see Activity #1)
- 4) Have students do the Word Search and Word Match to familiarize themselves with the theme and new vocabulary words. (see Pre-Visit Activities)
- 5) Review the information and accompanying sketch of poison oak. Although the docent will identify this native shrub for the students, it helps if they are aware of it before arriving.
- 6) Remind students to dress for the weather. The program will be conducted rain or shine. Closed toe walking shoes (no sandals) are a must.
- 7) Have a payment envelope ready to hand the docent as soon as you arrive. If possible, make payment by check. We are not able to make change.
- 8) If you choose to have lunch on site, all related garbage must leave with you. The Nature Center does not have a disposal service.
- 9) Please arrive 15 minutes before your scheduled time.

On The Trail

- 1) The docent will lead the group at all times on the trail, with a parent or other adult taking up the rear.
- 2) Stay on the trail.
- 3) No picking of plants or rocks or anything. Take only memories. Leave only footprints.

We are excited to share an enjoyable, educational experience with you and your students at the Nature Center. Have fun with the pre-visit activities!

Activity #1: Name Tags



Pre-Visit Activities

Warm up your students to Swimming Salmon by doing a few of these pre-visit activities.

Activity #2: Water Riddle

See if they can answer the riddle:

How is a house like a watershed?

- Roof (mountain ridge or divide)
- Rain gutter (valleys)
- Downspouts (streams and river)
- Water Collection Barrel (sea or ocean)



Activity #3: Understanding Water

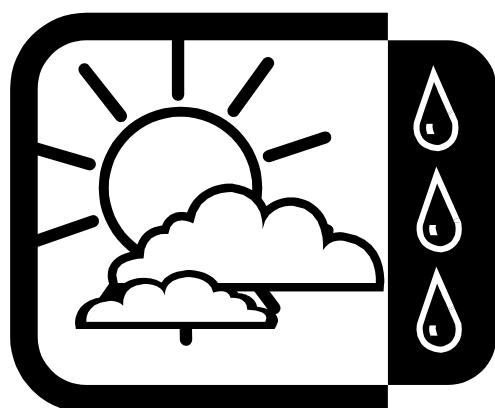


Ask your students how much of their material and food depends on water?

Have them try the attached activity that has them list items that need water to be made or grown!

Activity #4: Water Word Match

The attached Water Word Match will warm them up to some of the vocabulary words we will be using during the program.



Answers:

- | | |
|------|-------|
| 1. E | 8. G |
| 2. B | 9. C |
| 3. H | 10. K |
| 4. I | |
| 5. F | |
| 6. A | |
| 7. J | |

Name: _____



Understanding Water

Look around you classroom or house.

Make a list of things that need water to be made.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

Helpful Hints!



A baseball glove is made of leather. Leather comes from animals. Animals drink water. What else do you see that is made from leather?

Wood comes from trees. Trees need water to grow. What do you see that is made of wood?

Steel and other metals are made using water. What do you see that has metal or steel parts?

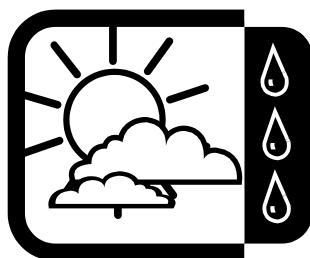


Name: _____

Water Word Match

Write the letter of the correct match next to each problem.

- | | |
|------------------------|--|
| ____ 1. watershed | A. Wise use of our natural resources |
| ____ 2. water molecule | B. Made of two hydrogen atoms and one oxygen atom |
| ____ 3. water cycle | C. An area that is flooded during some part of the year |
| ____ 4. adaptation | D. The area of land that receives and distributes rainwater into a stream, lake, or river system |
| ____ 5. erosion | E. The wearing-away of land |
| ____ 6. conservation | F. Rain or snow that is not absorbed into the ground |
| ____ 7. migration | G. Evaporation, condensation precipitation |
| ____ 8. runoff | H. A behavior or structural trait that helps a plant or animal survive in its habitat |
| ____ 9. wetlands | I. The movement of an animal usually seasonally for raising young or for food. |
| ____ 10. water user | J. A person that uses water for recreation, food, industry, business, or any other reason. |



Your Field Trip at a Glance

Common Core: RL4, W1a, SL1a,c, SL3

Next Generation Science Standards: 3-LS1-1, 3-LS4-2, LS3.A, LS1.B

A team of docents will meet your class in the parking lot, lead the group to the Nature Center courtyard, and point out restrooms and drinking fountain. Each docent will take a group of 10-12 students and begin their program at one of the following stations: WaterShed Exhibit Hall and Picnic Area for hands-on activities to reinforce the theme, or Nature Walk. The docent will rotate through all stations to complete the program. Following is an outline of what to expect at each station for your program at the Placer Nature Center.



WaterShed Learning Center Exhibits

20 minutes

After defining watershed, students will enter the WaterShed and follow a drop of water through the watershed model. Panel exhibits illustrate how nature and people use water. Adaptations of plants and animals depicted in the exhibits will be highlighted. Exhibits will illustrate the many uses of water by people from agriculture, recreation, in home and commercial use and how it can be conserved.

Discovery Room Activity – Salmon Adaptations

20 minutes

After discussing the salmon life cycle, students will be introduced to a number of “tools” that represent part of the salmon’s life cycle or adaptations. Students have to make the association between the tool and the part of the life cycle or adaptation.

Outside Activity- All for 1-water conservation

20 minutes

Students represent a water-user and discuss how they would use water. Then each student “hooks up” to the common water and by communication and collaboration successfully lift the water and transport it to a destination illustrating the need for give and take in addressing water issues.

Nature Trail

60 minutes

Students will visit our pond site and our intermittent stream and observe and identify aquatic plants and healthy stream characteristics. On the trail adaptations of the foothill plants and animals will be discussed as we discover their tracks and other signs.

Post-Visit Activity

Have students internalize the lessons learned at Placer Nature Center by doing the following writing activity. Using the water drops provided on the following page, have students write descriptions on one of the following topics or a topic of your choice from the field trip.

- Water conservation
- Salmon Adaptations
- Aquatic environments and their inhabitants
- Water users and common water

