

ENJOYING

STRAWBERRY CREEK

SAFELY

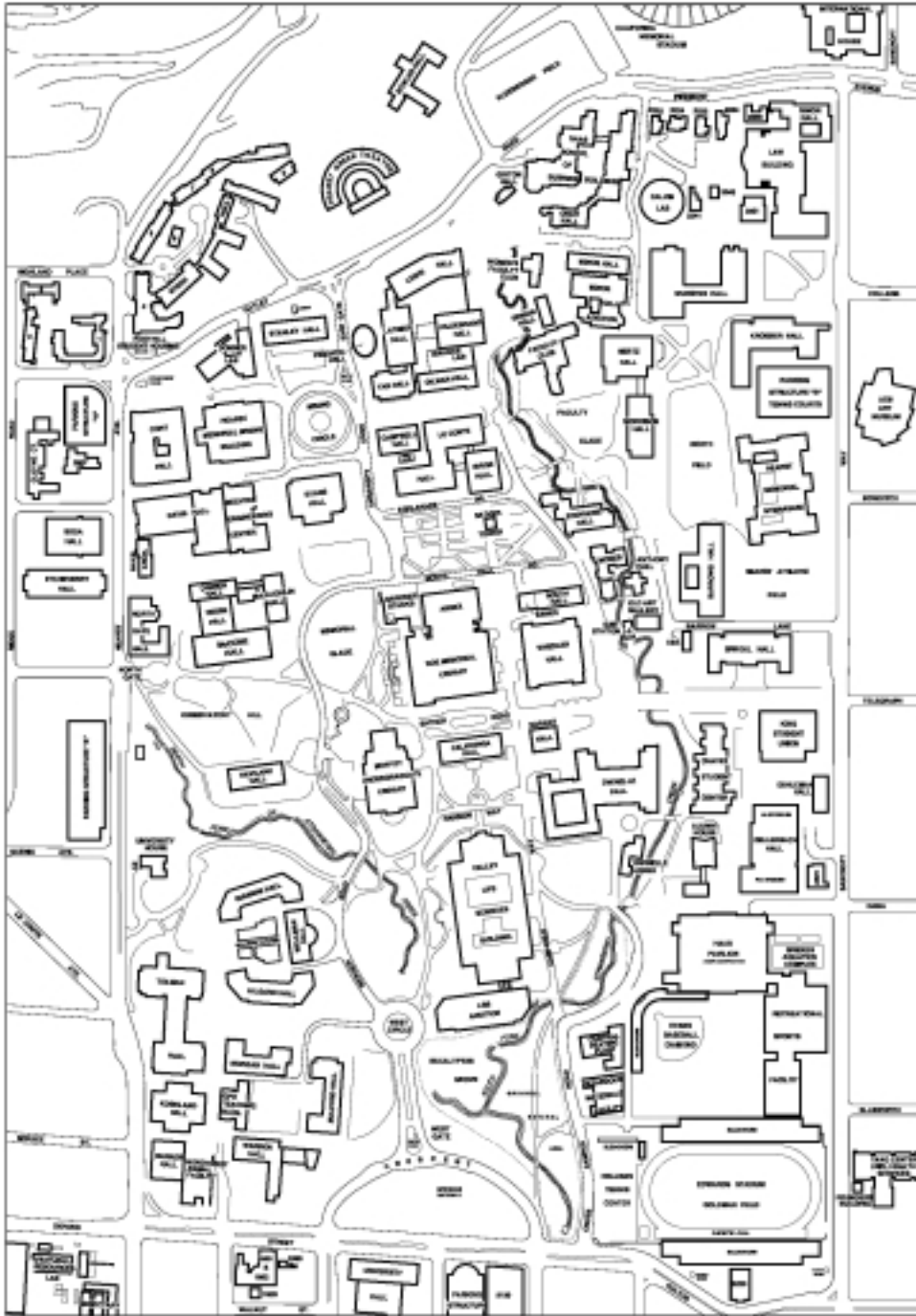
UNIVERSITY OF CALIFORNIA, BERKELEY

STRAWBERRY CREEK RESTORATION PROGRAM

GENERAL HEALTH AND SAFETY GUIDELINES

A GUIDE FOR
STUDENTS,
INSTRUCTORS,
VOLUNTEERS,
AND VISITORS.





Map of Campus Showing Strawberry Creek 1999

ENJOYING STRAWBERRY CREEK SAFELY

INTRODUCTION

Strawberry Creek is a major landscape feature of the University of California, Berkeley, and it was one of the main reasons the site was chosen in 1860 as the location for the campus. Strawberry Creek has two forks, the North Fork and South Fork, that drain Strawberry Canyon and meet in the Eucalyptus Grove. The creek exits the campus into a city culvert at Oxford Street (see map).

Strawberry Creek is an urban creek. The creek watershed consists of natural areas, the parklike campus grounds, institutional facilities, and northside residential and business areas in the city. Urban creeks are increasingly valued for the aesthetic and recreational benefits they bring to a city. Strawberry Creek has been the focal point of educational activities for years. More than 3,000 university students, and many elementary and high school students from surrounding communities, use Strawberry Creek each year as an outdoor laboratory for subjects as diverse as environmental studies, landscape design, engineering, and art.

Urban creeks also provide storm water drainage and serve as a flood control system to prevent damage to the urban environment through which they flow.

Strawberry Creek is home to a growing number of native animals and plants. Fish, newts, banana slugs, crayfish, and small creatures such as mayflies, water striders, and snails are common. Egrets occasionally fish in Strawberry Creek. As you visit the campus, tune in to the diverse sights and sounds of the Creek.

UC Berkeley encourages you to enjoy the beauty of Strawberry Creek and to take advantage of its amenities. This guide provides information about possible health and safety hazards you may encounter while working in or playing around this urban creek. It also makes recommendations that will allow you to use the creek safely and minimize impact to sensitive parts of the ecosystem.

WATER QUALITY—SEWAGE AND OTHER POLLUTANTS

A variety of potentially harmful microorganisms (bacteria, viruses, and protozoa) can live in “natural” surface waters such as streams, lakes, and rivers. Even though the water may look clear and clean, some invisible microorganisms, such as *Cryptosporidium* and *Giardia*, may lurk there and cause illness in humans if swallowed.

Never drink directly from a “natural” body of water, including Strawberry Creek

Strawberry Creek is located in a densely populated urban area and is subject to periodic contamination from sewage or other pollutants that are dumped improperly into storm drains. Irrigation and rainwater runoff can become contaminated with household pesticides, automotive fluids, or feces of dogs, cats, and wild animals. In addition, antiquated sewer lines periodically leak sewage into storm drains that lead to creeks. Drinking the water or putting your fingers in your mouth after you’ve touched the water could expose you to these pollutants.

Always wash your hands after contacting creek water

If your visit to Strawberry Creek requires contact with the water, we recommend that you wear waterproof gloves and rubber boots. Whether or not you wear gloves, standard good hygiene practices minimize your risk of contracting diseases. Always wash your hands before eating or putting your fingers into your mouth. If you observe a discharge of sewage or pollutants, please call EH&S (642-3073) or Physical Plant—Campus Services dispatch (642-6556) immediately.

HAZARDOUS MATERIALS

Occasionally, improperly discarded objects are found in or around Strawberry Creek, such as containers of used oil and

paint or hypodermic needles. These items can be hazardous.

Do not pick up hazardous materials or sharp objects

Leave them in place and make a note of where they are located. Call EH&S (642-3073) for pickup and disposal.

CONFINED SPACES

Culverts and pipes

Culverts and drain pipes are common along Strawberry Creek. Culverts or pipes should not be entered. During rainstorms, culverts can fill completely with storm water in a few minutes. In addition, it is possible, though not likely, for culverts to contain hazardous vapors. Culverts are confined spaces that should not be entered without proper air monitoring and communications equipment. For more information on confined spaces, contact EH&S at 642-3073.



PHYSICAL HAZARDS

Trip and slip hazards

Watch your step! Rocks and banks can be slippery, especially under eucalyptus trees where marble-like seeds cover the ground. Numerous tripping hazards, such as sprinkler heads, can be hidden in underbrush and ivy. In the hill area, creek banks are steep and can be unstable and subject to sliding. Pay attention to where you step to avoid slipping.

Sharp objects

Broken glass and discarded sharp metal objects may be hidden in the creek or on its banks. Watch out for sharp objects and wear sturdy shoes or boots. Cuts and puncture wounds should be treated immediately. Spores of tetanus bacteria can enter open wounds and cause a potentially fatal disease, so check with your personal physician to be sure your tetanus shots are up to date if you get a puncture wound.

PUBLIC SAFETY HAZARDS

Crime

Unfortunately, the wooded areas that make Strawberry Creek an aesthetic focal point on campus also provide hiding places for potential criminals. The Grinnell Nature Area at the west end of campus near the Eucalyptus Grove has historically been one of the most dangerous areas on campus. Always be aware of your surroundings. If there are suspicious people in a secluded area, do not enter it. It is recommended that any work performed in secluded areas or after dark be done with a partner. Report any suspicious activity to the UC Police Department (9-911 from campus or 911 from an off-campus phone).

Traffic

Many roads traverse Strawberry Creek. Automobiles, delivery trucks, and bicycles use its paths. When you are around roads and paths, look out for vehicles and bicycles. Any creek-related activities that occur on roadways, such as storm drain stenciling, should be done with at least one person providing traffic control. Dayglow vests are also recommended when working beside a roadway.

Homeless encampments

Homeless persons often camp along urban creeks. Avoid strangers, and do not remove or disturb any obvious personal belongings (sleeping bags, for example). Report any threatening activity to the UC Police Department.

NATURAL HAZARDS

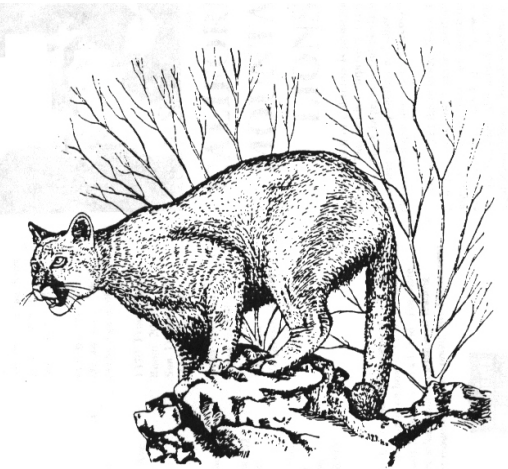
Plants and animals

The Strawberry Creek watershed is located at an urban—wild land interface. Wild or feral animals, some of them potentially dangerous, live in the watershed and neighboring parks. While the potential for hazardous encounters with animals and plants is greatest in the canyon hill areas, some of these animals occasionally live in or visit central campus. Unless an animal is being studied for research purposes, it is best to avoid contact and not disturb any wild animals. Following is a summary of possible hazards.

Mammals

Mammals known to reside in the watershed include foxes, skunks, bobcats, deer, raccoons, opossums, squirrels, rats, mice, coyotes, bats, dogs, cats, and mountain lions. Some of these animals carry rabies, and a bite from an infected animal can pass on the generally fatal disease. Any wild animal can be dangerous and may bite, especially if it feels threatened or is protecting its young or food.

- Avoid contact with wild animals, particularly sick or dead ones.
- Don't stick your hand into animal burrows.
- If confronted by a mountain lion, make noise and try to appear as large as possible by standing upright and waving your arms. Do not turn and run.
- If an animal bites you, perform first aid and seek medical attention immediately.



Snakes

Several species of snakes live in the Strawberry Creek watershed. Most snakes are harmless, and all are beneficial inhabitants. Rattlesnakes are present in the canyon, especially in the hotter, drier areas of the hills, where they generally stay under shady brush. To avoid contact with rattlesnakes, walk in open areas, wear heavy boots, and, as you walk, use a stick to disturb the brush in front of you. If confronted by a coiled and rattling snake, back away slowly. If a snake bites you, seek medical attention immediately.

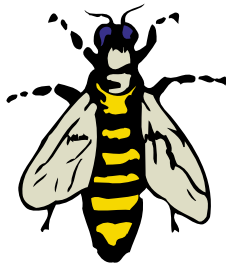


Insects, spiders, and ticks

A variety of invertebrates that can cause painful bites or disease are present on campus and in the hill area.

- Bees, wasps, hornets, and yellow jackets may be attracted to the scent of food and to dark colors and flowered prints. All can inflict stings that are painful and possibly fatally allergic to some people. If you know you are severely allergic, it is advisable to carry your emergency sting kit with you.

- Yellow jackets make nests in the ground. They tend to prefer shady, ivy covered areas, which are abundant along Strawberry Creek. Many yellow jacket nests are found

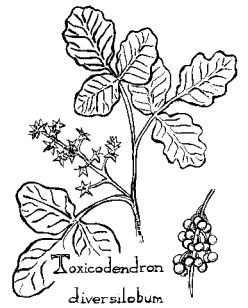


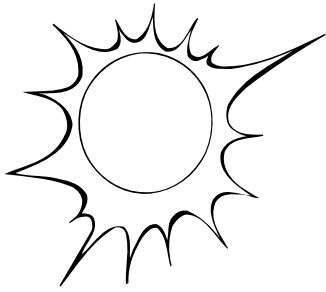
each year on campus. If you see yellow jackets, watch for signs of them going into the ground and avoid that area. If you step on a nest, it is likely that the insects will attack you. Leave the area immediately and warn anyone else around you to leave. Yellow jackets are active from spring through fall with activity peaking around September and October. If you are stung, apply a cold pack or ice and perform first aid. If you are allergic to bee stings, seek medical attention immediately. Please report yellow jacket nests to Pest Management (642-0878).

- Fleas and ticks commonly inhabit animals and their nests and trails. Both are bloodsuckers, and their bites can spread diseases such as bubonic plague (flea) and Lyme Disease or Rocky Mountain Spotted Fever (tick). In general, ticks are not found on the central campus but are present in brushy canyon areas. When outdoors, wear clothing of tightly woven materials, tuck pants into boots, and stay on the widest part of paths and trails. When you return home, check for ticks.

Plants—poison oak

Poison oak is a common plant in the Strawberry Creek watershed, especially in the hill and canyon areas. All parts of the plant contain a potent allergen (urushiol) that can cause an uncomfortable skin rash anywhere from several hours to two weeks after exposure. The oily allergen is spread by the plant itself, inhaling smoke from burning poison oak, touching other objects or animals (dogs) that have touched a plant, and touching other areas of the body after touching the plant. To prevent exposure, learn to recognize the plant and wear long pants and long-sleeved shirts. If you come in contact with poison oak, wash clothes and skin with soap and water as soon as possible. A commercial product is available that can be applied prior to entering poison oak areas and is recommended for extremely sensitive people.





EXPOSURE TO THE ELEMENTS

Sun

Excessive exposure to the sun can cause sunburn and eventually lead to skin cancer. Use sunscreen and wear a hat and long-sleeved clothing if you expect to do field work during midday.

Excessive heat or cold

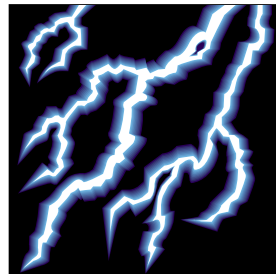
Heat exhaustion is caused by prolonged physical exertion in a hot environment. Symptoms include fatigue, dizziness, nausea, and cool, clammy, pale or flushed skin. Heat stroke is a life-threatening condition with symptoms including reddish and hot yet dry skin. To prevent heat exhaustion or heat stroke, drink plenty of liquids—water is the best but, remember, not from the creek— and take frequent rest breaks.

Prolonged exposure to excessive cold can lead to hypothermia, a lowering of the body temperature. While it is unlikely to occur in Berkeley, it is still wise to wear adequate clothing to stay warm and dry in order to work attentively and avoid accidents.

Water Safety—Rain and floods

During most of the year, Strawberry Creek is a small creek with a very low flow rate. Nevertheless, even working around shallow water can be hazardous. It is recommended that most creek work be done with a partner, especially in secluded areas where a single person in trouble may not be spotted until it is too late. It is especially important to closely supervise small children.

During heavy winter rainstorms, the creek channels and culverts of Strawberry Creek fill extremely quickly, and

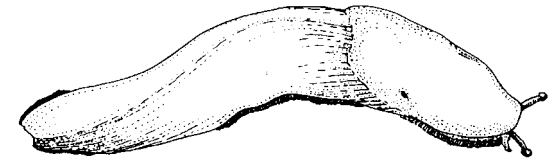


the creek can become a deadly torrent. Avoid wading into the creek during floods. Never enter culverts during the rainy season. Flood conditions can develop in a few minutes during heavy downpours.

HAZARDS TO THE ECOSYSTEM

You may be a hazard to Strawberry Creek creatures

While educational activities on the creek are encouraged, the activities of more than 3,000 students per semester can have a detrimental impact on the creek habitat. Heavy traffic in sensitive areas can trample native vegetation, dislodge rocks or logs used by aquatic animals as habitat, lead to siltation of the water, or frighten away animals, such as nesting birds. Restoring Strawberry Creek is an ongoing effort. Please join in this effort by treating the creek with sensitivity and care:



- Minimize disturbance of downed wood, plants, and rocks.
- Try to minimally impact the vegetation, the banks, and the creek itself by only walking where it is necessary and appropriate. Walk on rocks and in established pathways where possible. Please keep out of any areas specially marked as protected.
- Avoid stirring up sediments excessively and clouding the water. If possible, step on rocks in the creek bed rather than soils.
- Take time to absorb its natural beauty while helping to maintain the creek by not littering and by picking up trash if you get a chance. Try to leave it looking better than it did when you arrived.

TO REPORT HAZARDOUS CONDITIONS
OR FOR MORE INFORMATION CALL:

Office of Environment, Health & Safety: 642-3073

Physical Plant—Campus Services:

24-hour Service: 642-6556

Pest Management: 642-0878

Grounds: 642-6515

Emergencies—Ambulance or Police:

Call UCPD at 9-911 or 911

Prepared by:

Office of Environment, Health & Safety

University of California, Berkeley

317 University Hall—1150

Berkeley, CA 94720

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