

Safety in the Water

Simply having common sense while on and near the water will help ensure you a safe and carefree visit to the lake. Unquestionably, the greatest risk around any lake is not respecting the water when swimming or participating in water sports.

Of all of the drowning deaths in the U.S. each year, a full 50% of those are alcohol related, and up to 75% of boating fatalities can be directly attributed to alcohol. To avoid putting yourself at a greater risk, treat a boat as you would a car. Never boat while intoxicated, and never go in the water or try dangerous stunts when under the influence of alcohol or any other substance. Boating collisions and other careless maneuvers can be vastly reduced by staying sober and remaining alert when on the water.



photo by Ranger Michael Harris

90% of all drowning deaths can be prevented by wearing a personal floatation device, or lifejacket (PFD) while in the water. Whenever going out on a boat or on any remote area of the lake, always carry and wear a PFD, as even experienced swimmers can be incapacitated in the case of a boating collision or other unexpected event. Inexperienced or young swimmers should always wear a PFD, even when swimming close to the shore, as sudden drop offs, boat wakes, and other unexpected dangers can leave a person helpless. When wearing a PFD, make sure that it is tight to your body. Loose PFDs often slip off drowning victims.



There are a number of other precautions that one should take when swimming at Lake Berryessa. Whenever going in the water, it is always good to go with another person who can provide assistance in the case of an emergency, especially when swimming away from the

shore where there are often large waves. Always take care when diving, as it is extremely dangerous to jump into water where ground or rocks are close to the surface. Using common sense is simple enough to do

Boating Safety

The most important thing to remember about boating safety is to have a sufficient number of PFDs for all individuals on board. Many swimmers and water-skiers have been severely injured and killed because of collisions with boat propellers, so the boat engine should be turned off when there is a swimmer near the boat. Never allow anybody to sit on the bow of a moving boat, as rough water can easily toss a person overboard. There is danger of carbon monoxide poisoning when "wake surfing" or riding close to the stern and motor, so this activity should be avoided. Also, keep a UL approved fire extinguisher on board at all times to protect your boat from a fire. Remember, it is your responsibility to know all boating laws and appropriate boat driving techniques.



Heat Stroke and Hypothermia



Another factor visitors to Lake Berryessa should keep in mind is the variation of temperatures. Average summer highs are in the 90's, with temperatures regularly soaring well above 100°F. Heat-related illnesses are common at Lake Berryessa, especially heat exhaustion, heat stroke and serious sunburns. All

visitors should take extra care to stay hydrated, apply lots of sunscreen, wear hats when in the sun, and stay in the shade when possible. Be sure to bring extra bottled water, as there are not always stores open to buy such necessities as food and water. Never attempt to go for a hike in the summer without a sufficient supply of water.

Although Lake Berryessa is not generally regarded as a cold place, hypothermia is not uncommon after swimming, especially in the colder months of October through May. Even if it may seem warm outside, a swimmer can easily get hypothermia when swimming too long, or if exposed to heavy winds when on the water. It's important to always have a towel and dry clothes to wear, especially in windy conditions.

Brochure written by Ranger Bradford Mills

Fire Danger

High temperatures in the summer make for dangerously dry conditions and an extreme risk for wildfires. Lake Berryessa has been hit with several devastating human-caused wildfires that destroyed thousands of acres of oak woodland, killed wildlife, and threatened homes. To avoid such catastrophes in the future, please be extremely careful with any form of fire, including cigarettes and parking in dry grass.



Keep in mind that fireworks and wood fires are prohibited around Lake Berryessa at all times. Portable charcoal stoves are also prohibited around the lakeshore, so be sure to cook with only propane or gas stoves, and keep hot coals off the ground when using the established barbeque pits in Oak Shores, Smittle Creek, and the resorts.

Driving

A significant cause of fatalities at Lake Berryessa is accidents on the winding and unpredictable roads that surround the lake. The narrow roads do not always have guard rails, and drivers should be extra careful to go slowly and avoid passing cars around all blind curves. In addition, drivers should be aware that many deer and other large animals frequently cross the roads, often resulting in collisions. It is important to follow all posted speed limits in order to minimize your risks.



Lake Berryessa is in a fairly remote location, and there are few places to buy car gasoline around the lake. It's a good idea to fill up in the surrounding areas of Angwin, Winters, Napa, St. Helena, Fairfield, or Davis before coming to Lake Berryessa.

Other Considerations

Another thing that visitors should be wary of is broken glass near shoreline areas. People should wear sandals, especially when swimming. For this reason, **glass is prohibited in Oak Shores and Smittle Creek.** The fish in the lake have been found to contain high levels of mercury, so all fish should be eaten in moderation. For more information visit OEHHA's website at <http://www.oehha.ca.gov/fish.html>.

RECLAMATION

Managing Water in the West

Planning for a Safe Visit to Lake Berryessa

The chaparral and oak woodlands that characterize Lake Berryessa's environment make it a beautiful and exciting place to visit. This brochure outlines the various safety issues that may exist at Lake Berryessa. We hope that the experiences you and your family have up here will be memorable, and you will enjoy this lake for years to come. Remember that just a little common sense and proper planning can ensure a safe and enjoyable visit.



U.S. Department of the Interior
Bureau of Reclamation
Mid-Pacific Region

Insects and Spiders

The western blacklegged tick (*Ixodes pacificus*), an inhabitant of high grasses, is a small (.25 inch) blood-sucking insect that attaches to humans, appearing as nothing more than a small black dot at first. Eventually, their backside expands as they fill with blood, appearing as a small shiny bump.



To remove these pests, take some tweezers and gently pull the tick's body repeatedly from the part closest to the skin, waiting for it to release its grip (pulling too hard will leave the tick's head embedded). To avoid ticks, wear long pants when walking through

brush or grasses, and wear insect repellent (which will also protect you from mosquitoes and the West Nile virus they carry). In rare occasions, ticks may transmit a serious illness, Lyme Disease. The classic symptoms of Lyme Disease are a red target-like rash surrounding the site of the tick bite, accompanied by fever, headache, lethargy, muscle pains or inflammation. See a doctor if you suspect these symptoms.

The only dangerous spider that exists at Lake Berryessa is the black widow. It can often be found in cool, dry, and sheltered areas such as storage rooms, or under ledges and thick brush. The black widow (*Latrodectus hesperus*) is identified by its round, shiny body, and an unmistakable red "hourglass" shape on the underside of females. Generally 1.5 inches long, females are the only dangerous black widows.



Photo courtesy of Danielle Ducharme.

To avoid being bitten, avoid picking up spiders and always use work gloves and shoes when working in potential spider habitats. All spiders can bite and some may cause painful swelling or allergic reactions.

Rattlesnakes

One out of more than 10 species of snakes found in the Lake Berryessa area, and the only one that poses a threat to humans is the venomous rattlesnake. The western rattlesnake (*Crotalus viridis*) is one of many species of rattlesnakes that live in the U.S., and it is the only venomous snake native to California. They are an average of 40-60 inches in length, and have a triangular head and a brownish-green or tan body with dark brown bands.

The most distinctive feature of the rattlesnake is the characteristic rattle on its tail, which it shakes violently when it feels threatened. Another local snake, the harmless gopher snake (*Pituophis melanoleucus*), has very similar markings and imitates the rattlesnake when feeling threatened. The gopher snake, however, lacks the distinctive rattle and triangular head.



In general, rattlesnakes are nocturnal, feeding on small animals at night and spending days resting in cool dry places such as the base of a tree, heavy brush, rock pile, or dark corner of a building. In the mornings, they can often be seen sunning themselves on rocks or trails, warming up before they retire to their den for the day. Rattlesnakes are common around Lake Berryessa, and care should be taken when walking in any potential habitat.

Although these snakes are very secretive and bite only on rare occasions, they have been known to strike humans. The symptoms of a bite would include swelling and pain around the bite site, nausea, loss of coordination, fainting, and numbness. In the case of a bite, thoroughly wash the site of the bite, keep the area lowered below heart level, and transport the victim to a doctor immediately.

Although they are potentially dangerous, the rattlesnakes here at Lake Berryessa should be respected, as they play a vital role in the food chain. If you encounter a rattlesnake in Oak Shores or Smittle Creek Day Use Areas, tell a Park Ranger, and they will relocate it away from visitors.

Poison Oak

If you've ever taken a hike along the Smittle Creek Trail, or any other trail around Lake Berryessa, undoubtedly you encountered many areas with poison oak (*Toxicodendron diversilobum*). It is a deciduous plant which causes a blistering rash when it comes into contact with human skin. This versatile plant comes in many forms including vines, shrubs, and bushes and the color of the leaves may vary from light green, to dark green, to red, depending on the season. This plant can be recognized by its shiny, lobed leaves (resembling those of the valley oak), erect branches, and characteristic three-leaf clusters, giving rise to the popular saying "leaves of three, let them be".



Whatever the season, the leaves and branches of this plant are a tremendous annoyance when any hiker comes into contact with them. The cause of the resulting rash is the urushiol oil present in the plant, a sticky substance which is so extremely potent that one gram is capable of producing a rash on one billion people! Urushiol oil can stay active on any surface (including dead plants or clothes) for up to 5 years, so extreme care should be taken to avoid skin contact and wash clothes exposed to poison oak.



Not everybody is allergic to urushiol oil. Nevertheless, all people should avoid contact with poison oak, as allergies can develop at anytime in one's lifetime. In the case of skin contact with poison oak, wash the area thoroughly with cool water (without soap or

washcloth) as soon as possible, as urushiol oil can take from 15 minutes to 2 hours to bond to the skin.

If a rash does occur, relieve the itch with aloe vera gel, warm water, or other anti-itch ointments. Keep in mind that the ooze from the rash is not capable of spreading it, but additional contact with plant oils will. The best way to avoid poison oak is to always wear long pants when hiking, take special care in shady areas, and rinse off exposed skin when finished hiking.

Large Predators

Viewing wildlife and seeing a large mammal are some of the most exciting experiences a visitor may have at Lake Berryessa. Of these large animals, three are capable of threatening humans: the coyote, mountain lion, and black bear.

The mountain lion (*Felis concolor*) has been sighted in many areas around Lake Berryessa, including around the roadside and at Oak Shores Park. Majestic, cunning, and extremely cautious of its surroundings, the mountain lion can grow up to 8 ft long, and feeds primarily on deer. Although fearful of humans, there have been several cases of lions attacking humans across the U.S. Care should be taken when walking in remote areas.



The black bear (*Ursus americanus*) is extremely rare in Lake Berryessa's hot environment. They have been sighted occasionally in remote areas, especially in Cedar Roughs region, which is the last in tact wild black bear habitat in Napa County. These creatures are extremely swift, omnivorous, and generally seen only in the early summer mornings. In the winter, they usually hibernate in a sheltered area, such as a hollow tree, ledge, or cave.



A member of the canine family, the coyote (*Canis latrans*), looks like a tan, medium-sized dog with a bushy tail. These animals have occasionally been known to attack small children, so keep children close by when in remote areas.

All of these predators are rarely seen around Lake Berryessa, so consider yourself lucky if you see one. They are important members of the Lake Berryessa family, keeping prey animals like rodents, deer, and other animals in healthy balance in the ecosystem. Respect them, and keep in mind that they usually fear you more than you fear them.