



January 2006

**"THE ULTIMATE  
TEST OF A  
MORAL SOCIETY  
IS THE KIND  
OF WORLD IT  
LEAVES TO ITS  
CHILDREN"**

– Dietrick  
Bonhoeffer

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## WATERSHED STEWARDSHIP ACTION KIT



# Safety and Fun in Your Watershed

There are several important things to remember when you are working outside. If you follow these safety tips, you will have a fun and enjoyable experience.

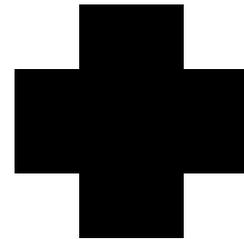
### BEFORE YOU GO

Remember to tell a friend or relative the date, time, and location of your watershed activity. Work with a partner so if you are injured, someone can go for help.

Find the phone number and location of the nearest medical center to your work site. Carry a cellular phone with you and note the location of a pay phone. Remember that cell phones do not always work in rural areas, so do not rely on them at all times.

### Bring a first aid kit that includes these items:

- Adhesive and cloth bandages
- Antiseptic spray or ointments
- Surgical tape
- Hydrogen peroxide
- Tweezers
- Cotton balls
- Aspirin or non-aspirin pain reliever
- Bee-sting neutralizers



Review safety rules and tips with everyone in your work group before each outdoor project.

### SAFETY RULES

The League recommends that groups never get into a stream when the water is at flood stage or is flowing much more swiftly than normal. It is better to delay monitoring or cleanup projects than to risk personal harm. Water should always be below the knee level of the people who will be in the water. Remember that the knee level of children may be much lower than the knee level of adults. Avoid steep and slippery banks.

When in contact with water, keep your hands away from your eyes and mouth, as not all pollution can be seen or smelled, and waterborne diseases are often transferred by way of eyes or mouth. Always wash your hands thoroughly with soap and water after being in contact with stream or river water. You may also want to bring antibacterial hand gel to the field site for use immediately after water contact.

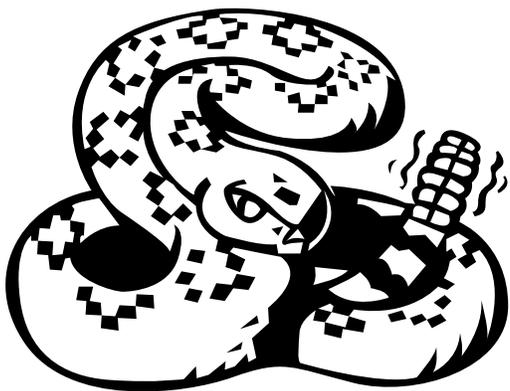
If the water is posted as unsafe for human contact or appears to be severely polluted, (strong smell of sewage or chemicals, unusual colors, lots of dead fish) do not touch the water. If these signs of severe pollution are not present, but you are unsure of conditions or would like additional protection, take the following precautions:

- Wear rubber boots high enough to keep water from coming in contact with your skin.
- Wear heavy rubber gloves that go up to your shoulders (available at most automotive supply stores). Surgical gloves will not work. They can be punctured easily by snags or sharp objects, and they are not long enough to protect your arms.
- Wear a protective covering for your mouth such as a painter's mask (available at most drugstores or hardware stores). You can get sick if you breathe in vapors from sewage-contaminated water.
- Report any pollution problems to your state's water regulatory agency.

## OTHER AREAS OF CONCERN

**Snakes:** Snakes can be a concern when you are in an aquatic environment, especially slow-moving waters with overhanging vegetation. To avoid an encounter with a snake, observe the following rules:

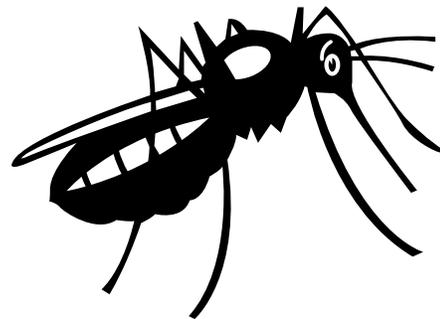
- Check rocks, logs, and stubs for snakes. Snakes must get out of the water to dry their skin and will lie on flat surfaces exposed to sunlight.
- If you have to approach the water through high grass, thump the ground in front of you with a stick. Snakes will feel the vibrations and move away. Snakes are deaf and respond only to vibrations.



- If you come upon a snake at close range, simply move away. The snake probably will leave the area when it no longer perceives you as a threat. Remember, you are much bigger than the snake, and it is more afraid of you than you are of it. Allow the snake a chance to back off, and it usually will.

Most snakes associated with aquatic environments are not poisonous. However, because it's difficult to distinguish between poisonous and non-poisonous snakes without getting too close, the best advice is to stay away from them all. If a snake bite does occur, follow these simple steps:

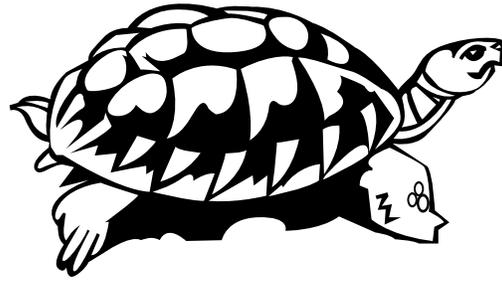
- Elevate the bitten area. Do not apply ice or a tourniquet to the wound. Do not cut the wound open or attempt to suck out the venom.
- Remain calm. Take a few deep breaths and keep movement to a minimum. Walk calmly to your vehicle and have your partner carry your equipment.
- Remove all watches and jewelry if bitten on the hand or arm. Snake venom will cause the bitten area to swell.
- Seek immediate medical attention.



**Insects:** If you are allergic to any type of insects, bring your antidotes or medicines. Ask other members of your group about their allergies before you go to the site. If a volunteer gets an insect bite that swells up to an unusual size or has severe redness, seek medical attention immediately.

Many people have concerns about West Nile virus. Female mosquitoes transmit the virus primarily among birds. Occasionally, mosquitoes transfer the virus from birds to humans, most of whom experience no symptoms. About one in five infected people

develop West Nile fever, which resembles the flu. Infections can be fatal in people with weak immune systems, but this is rare. To avoid mosquito bites, wear long sleeves and pants. Avoid areas of standing water during dawn and dusk, when mosquito activity is at its peak. Consider using mosquito repellants that contain DEET. Do not spray DEET underneath clothes. For more information on West Nile virus, see the U.S. Environmental Protection Agency factsheet “Wetlands and West Nile Virus” online at [www.epa.gov/owow/wetlands/facts/WestNile.pdf](http://www.epa.gov/owow/wetlands/facts/WestNile.pdf), or contact the Izaak Walton League.



**Bears:** Black bears and grizzly bears live in forested areas around the United States. Black bear encounters are more prevalent in the eastern United States, while grizzlies may be encountered in the Northwest.

**Ticks:** Ticks are prevalent in grassy or woody areas. It is important for volunteers to check their bodies for ticks. Feel along the scalp for any loosely attached bumps. If it is a tick, do not pull it out. Yanking the tick may cause an infection if its head remains in the scalp. Grasp the tick with tweezers and gently twist it counterclockwise for several rotations until the tick is free. Swab the area with hydrogen peroxide to clean the area. If you want to kill the tick, burn it with a match or suffocate it with nail polish or petroleum jelly after it has been removed from the skin.

One type of tick, called a deer tick, can carry a serious illness called Lyme disease. Deer ticks resemble common ticks except they are much smaller (only a few millimeters across.) Symptoms of Lyme disease include chills, malaise, and fever. Often the first sign of Lyme disease is a bull’s-eye shaped mark on the skin, but this is not always present. Treatment requires a shot of prescribed antibiotics. If not treated, this disease can remain in your body for a lifetime. If you exhibit any of the symptoms, it is recommended that you see your doctor and ask for a Lyme disease test.

**Alligators and turtles:** In southern states, you may encounter alligators and large aquatic turtles. These animals are not dangerous if left alone. Alligators under 18 inches in length are juveniles and may be near their mothers. Female alligators are very protective and may be dangerous. If you see alligators, leave the area immediately. Snapping turtles and soft-shelled turtles usually will move out of an area if the water is disturbed. Although turtles are not poisonous, treat a turtle bite with the same care as a snake bite.

- When in an area with the potential for bear encounters, make sure you stay with a group of people and make noise to alert the bear of your presence. It is also a good idea to carry bear pepper spray, just in case.
- If you see a bear and it does not see you, quickly leave the area while keeping your distance from the bear, giving it plenty of room to escape should you startle it.
- If you encounter a bear and it sees you, do not run. You cannot outrun a bear. Stay calm and slowly back away from the bear. Look for an escape route that gives the bear plenty of space; try to stay out of its “comfort zone” and avoid direct eye contact.
- Climbing trees to escape is a common suggestion, but be aware that bears can follow you up a tree.
- If a bear should charge you, do not run. Drop to the ground and cover your head, face, and neck with your arms for protection. If you are wearing a backpack, make sure it faces the direction of the bear so it can absorb punishment from any attack. Bear attacks are often “hit and run” and don’t last very long. Lay motionless and give the bear time to leave the area. Seek medical treatment as soon as possible for any injuries.
- If you feel an attack is predatory, disregard the above strategy and fight back with everything you have. This also applies to mountain lion attacks. Seek medical treatment immediately and report the attack to wildlife authorities.
- Never go near a cub because the mother bear is always nearby and will become very aggressive in trying to protect her young.