



Testing for E. coli in Oak Creek  
by Susan Vitek

Who wouldn't like a plunge in crystal clear, cool water on a hot Arizona day? It's so inviting--but danger lurks there, too. Unseen danger announced by the presence of high E. coli counts. That's why members of the Friends of the Forest (FOF) Water Sampling Committee are so diligent.

"Clearness doesn't equal cleanliness," said Barbara Saul, head of the committee for the last nine years. Each Tuesday, May through September, members pick up trash as they make their way to assigned water testing sites at Grasshopper Point, Crescent Moon, Mormon Crossing and Spring Creek.

Barbara, a retired nurse, and husband Richard, a retired radiologist, slowly select their path down to the water at Grasshopper Point in Oak Creek Canyon. Some of the rocks here are wobbly, so one must step carefully. Trash can be up in trees or far off the trail stuffed under bushes, making it even harder to pick up.

After holiday weekends, they've filled as many as four large green garbage bags. There's a huge trash can at the parking lot, as well as containers for recycling plastic and aluminum cans. So there is no excuse for the public's lack of manners.

Barbara wears a pack around her waist with blue ice inside. Richard has placed a thermometer in the stream to check the water temperature. A sample is then collected into a sterile specimen bottle, and Barbara slips it back into the blue ice container until she gets back to her car. Then she puts the sample into a hand-held cooler.

Like all committee members, they take the sample to a ranger at Slide Rock State Park. The ranger checks the water's temperature. If it's the same or lower than when the sample was collected, he signs the "chain of custody" form.

Then he carries the sample to the Slide Rock laboratory to begin the incubation process. Eighteen hours later, a count is done of the E. coli., which can be an indicator of other of biological contaminants. If it's higher than allowed by the Arizona Department of Environmental Quality for swimming and wading, the area is closed.

Friends of the Forest, a volunteer group that assists the Forest Service, started water sampling about 9 years ago. Traditionally, the Forest Service doesn't have a lot of funding, and in April of 1998, they asked FOF volunteers for help. The people who do this work are quietly dedicated in their efforts to protect people from getting sick. Giardia, Cryptosporidium, conjunctivitis, diarrhea and infected open body wounds are some of the problems from contaminated water.

The laboratory at Slide Rock State Park is in one room of the former home of Frank L. Pendley, his wife and nine children. Pendley arrived in the canyon in 1907 and formally acquired the land under the Homestead Act in 1910. Imagine the fun the children must have had growing up with this area as their personal playground! (That would be after all their many chores were done.)

Contamination is caused predominantly by animal feces upstream. When animals defecate on land, snow melt and monsoon rains propel feces into the creek. Raccoons are high on the list of animals contributing to the E.coli problem. After their feces (scat) dries on land, rain can push it into the creek and the E. coli are once again reactivated.

Add that to all the other animals who defecate directly in the creek, plus some “donations” by people (dirty diapers), and problems with contamination can run rampant when lots of visitors stir up the water and the silt. Red “Swim at Your Own Risk” signs, paid for by FOF--are out when the water isn’t safe at Grasshopper Point and Slide Rock.

Yes, the public is disappointed when these fun areas are closed, but they’d be much more upset if they get sick. All volunteers on this FOF committee deserve many thanks from visitors and locals. Longtime and past members of this committee include the Sauls, Dennis Parker, Dick Eibeck, Al & Ruth Cornell, Rick Zabor, Julie Pawelak, Bill & Evelyn Rowland and Larry & Shermain Frei. Thank you all so much!

Please see our website: [www.friendsoftheforestsedona.org](http://www.friendsoftheforestsedona.org), and help us make a difference in our community.



Barbara Saul delivers her weekly water sample to Slide Rock State Park Ranger Steve Pace.