Water — Cool, Clear Water!

Men have killed over a well — They have died searching for water — Songs have been written about the lack of water.

Water — just plain old H_2O — it is easy to forget it's importantance to any survival situation. We plan, starting in this issue, to examine the different facets of obtaining and purifying water.

In this article we will examine some inexpensive items to aid your hiking and camping experiences. They give you an entry-level into water purification at a minimum of expense.

The first item at which we looked was called the SteriPEN. At first it was hard to believe this simple little device would actually purify water. We soon learned it was an excellant way to purify drinking water, while back-packing.

SteriPEN harnesses the brilliant power of ultraviolet light to make water safe to drink. It's the same technology used by leading bottled water manufacturers, as well as major cities in the U.S., Europe and Asia, to purify water.

Extensive microbiological and structural testing by independent laboratories across the U.S. and Canada has proven SteriPEN to be safe and effective; confirming the fact that SteriPEN's UV light technology eliminates over 99.9% of bacteria, viruses and protozoa that cause water-borne illness. As a result, SteriPEN has earned the Water Quality Association's Gold Seal, certifying that SteriPEN purifies water safely and effectively.

SteriPEN purifies 16oz. (0.5L) in just 48 seconds; 32oz. (1.0L) in just 90 seconds. All without any pumping, time-keeping, or any added aftertaste or chemical odor.

SteriPEN products use ultraviolet (UV) light technology to purify water. The method has now been used for over one hundred years, and is currently used to purify drinking water by some of the largest cities in the world, including Seattle, New York (scheduled soon), Tempe, AZ and many others in North America, Europe and Asia. Ultra Violet light is also used by leading bottled water manufacturers to purify their source water.

The EPA officially recognized the use of ultra-violet as a proven, viable technology in 1996: "Ultraviolet (UV) radiation has been found to be an effective disinfectant…. a useful small systems disinfection technology option." UV purification works as the ultraviolet energy emitted by the light is absorbed by the cells of the microbe, preventing cell enzymes from 'reading' its DNA. Without intact DNA, microbes can't reproduce to make you sick. The process is simple but effective, destroying over 99.9 percent of harmful microorganisms.

Purifying water with UV light offers many advantages. In addition to being safe and effective, UV light does not alter the taste, pH, or other properties of the water, and works without the introduction of chemicals to the water.

The unit we tested came as a kit containing the SteriPEN unit, 2 battery packs and a battery charger. The charger works with either a plug in transformer or it's own solar panel. This unit can go with you where no power line exist.

With the SteriPEN, you do have to supply your own water container. This container must have an opening large enough to allow insertion of the UV light and the two contact points. (One point is showing in photo)

Since you may be dealing with water with particulants floating in it, you should have a means of filtering such material from the water before using the SteriPen. This can be a clean hankerchief or, better yet, coffee filters and a small plastic funnel. This can, also, be used with the purifier on the next page

Sport Berkey Portable Water Purifier bottle is the ideal personal protection traveling companion — featuring the IONIC ADSORPTION MICRO FILTRATION SYSTEM. The theory behind this innovation is simple. The

bottle's filter is designed to remove and/or dramatically-reduce a vast array of health-threatening contaminants from questionable sources of water, including remote lakes and streams, stagnant ponds and water supplies in foreign countries where regulations may be substandard at best.

This advanced technology was developed, refined, and proven through diligent, investigative research and testing performed by water purification specialists, researchers and engineers. The media within the filter element, removes contaminants by a surface phenomenon known as "adsorption" which results from the molecular attraction of substances to the surface of the media.

As the bottle is pressed, the source water is forced through the filter. The quality and volume of media used, determine the rate of adsorption. The flow rate or time of exposure through the filter has been calculated to yield the greatest volume removal of toxic chemicals caused by pollution from industry and agriculture. This exclusive filter element is impregnated with proprietary "absorbing" media that promotes IONIC "absorption" of pollutants within the micro-porous element, such as aluminum, cadmium, chromium, copper, lead, mercury, and other dangerous heavy metals.

The "Tortuous Path" structure of these pores gives it its unique characteristics. The Sport Berkey Portable Water Purifier offers a convenient and portable filtration system using medical grade technology.

Care and Use

Fill the Sport Berkey Portable Water Purifier with water, screw on cap and tighten securely to eliminate leaks. Flush water through filter by pulling down lever, so that straw is exposed, and squeeze water through filter and out the straw. Repeat this flushing process twice before drinking. This removes excess process dust from the filter. After 2 flushes, rinse the bottle & cap. Your filter bottle is now ready for use. Enjoy!

Maintenance & Storage

The Sport Berkey Portable Water Purifier has a shelf life of 50 years. When the filter system will not be used for an extended period, flush the unit with a chlorinated solution of 1/4 tsp. per one half gallon of water. Allow to dry thoroughly with bottom cap removed. Re-assemble and stow. Do not allow filter to freeze, do not place in microwave oven and do not run hot water through the filter.

Refill Capacity

Water From Any Source: 160 Refills
Municipal Water: 640 Refills

These great, self-contained filter type purifiers use a replacable element as shown in the photo below.

The complete unit costs about $25.00 and the replacement elements run about $17.00. Therefore, it would be just as well to buy extra units as opposed to the replacement filter element.

Lots of people use these filters to drink tap water, removing all the junk the city adds.

When filling the bottle from creeks, ponds etc., you should filter the water with a cloth or coffee filter set-up as mentioned on the previous page.