



THE TRACKER

Monthly Newsletter of the Inland Empire Search and Rescue Council

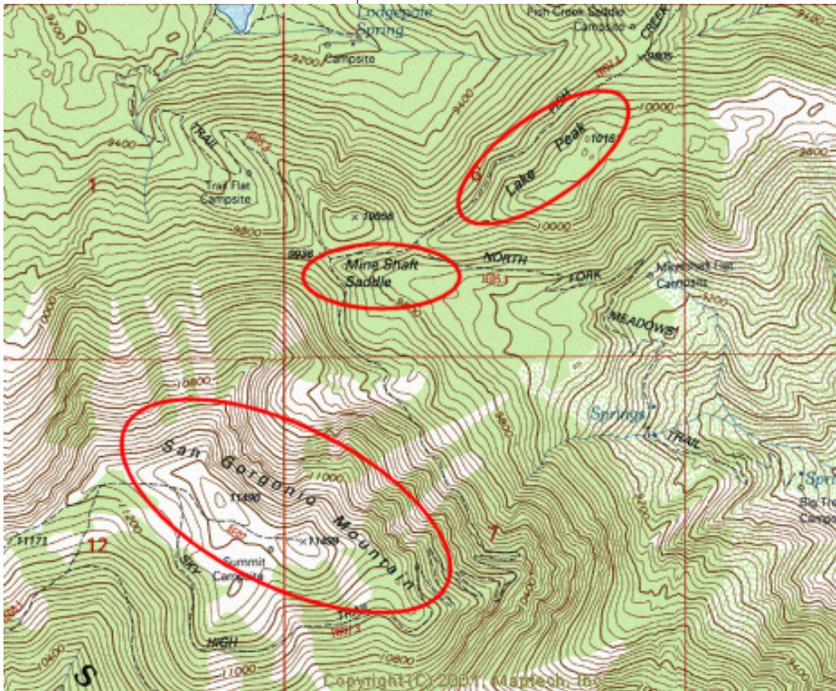
September 2005

Volume 14 Number 9

Missing Near Lake Peak

Shannon Kovich, San Gorgonio SAR, Oak Glen SAR, and Valley of the Falls SAR

The word "Teamwork" can mean different things to different people. When I think of teamwork, it makes me think of this search in particular.



road.

I made all of the notifications, and then started the calls to those needed for that same morning. Warren was described by family as an avid hiker, and somewhat experienced. Unfortunately he had planned for a day hike, having only 4 liters of water and a sandwich, dressed in a white t-shirt and blue jeans. Warren had prepared for his trip by downloading directions off of the Sierra Club website, including a topo map of the area, which he had left at home the day of the hike.

Our Department's new Eurocopter B3 helicopter was the first on scene, working the point last seen (PLS), then working some common areas confused by hikers. As the search grew, resources from all over the county came to search for Warren. His family stayed near to the command post waiting to here good news. After an exhausting thirty-seven hours of searching, with OHV's, mounted units, and ground SAR, Warren was located by our B3 helicopter on a north-facing slope just north of Mineshaft Saddle.

Warren had become confused right from the start, and with no map, it just got worse. He wandered the area the whole time, near what he thought was Lake Peak, spending the nights moving to stay warm. Once rescued, Warren was treated by the West Valley Wilderness Medical Team and fed a delicious steak dinner by our culinary specialist from the jail.

Family and friends were grateful for our efforts, even though at times, they

See "Warren" on p. 3

In This Issue

- San G Missing 1
- Mtn Hardwear 2
- SAR "Finds" 3
- Micro-Cooties 4
- The Numbers Game..... 5
- Calendar 7
- Classifieds..... 8

Let me explain the circumstances. Dispatch was called Tuesday 16 Aug 2005 by a frantic girlfriend telling of an overdue hiker. The hiker, Ronald Warren, from Sherman Oaks had left their home early Tuesday with the plans of making it to the top of Lake Peak in the San Gorgonio Wilderness. I drove out to the trailhead at Fish Creek to check for the vehicle, which is a process I have done many times, mostly finding the hiker had just run late. This time was different; the vehicle was still there. It had been parked 1 mile short of the trailhead, due to the condition of the



OFFICERS

Council Director Mike Ward
rockywinds@aol.com

Assistant Director Shirley Keebaugh
skeebaugh@aol.com

Treasurer Dave Northrop

Secretary Tom Schneider
tom_kasey@eee.org

Member At Large Don Welch
ww26sar5@aol.com

Standing Committees & Projects

Communications Wes Podboy &
Bill Maclay

Newsletter Editor Jeff Lehman
editor@thetracker.info

Volunteer Forces Lt. Glenn Grabiec

www.thetracker.info

The Tracker is published by the Inland Empire Search and Rescue Council. Copyright 2005 by the Inland Empire Search and Rescue Council. All Rights Reserved.

The opinions expressed herein are those of the Editors and contributors, and do not necessarily reflect those of the San Bernardino County Sheriff's Department. Reviewed prior to publication for content.

Use of the NASAR logo does not constitute endorsement by NASAR of any product, service, or opinion presented in this publication, nor does it imply official NASAR policy.

Original articles in The Tracker may be reproduced provided proper credit is extended to the original author. A copy of the reprint should be sent to the address below.

San Bernardino County Sheriff's Department
655 E. Third Street/Volunteer Forces Unit.
San Bernardino, CA 92415-0061
Attn: The Tracker

(909) 387-0686 / (909) 387-0667 FAX
editor@thetracker.info

Mountain Hardwear Ordering Information

Bob Nagy, BST Sports

This week I stopped by the office to meet Dave Pichotta and had a chance to talk with him about the ordering process of Mountain Hardwear products. The primary goal of the company is produce and market high quality, innovative products and deliver them to the market on a timely basis. Most consumers are not familiar with the extent of the process which goes on behind the scenes.

The 18 month process begins with the idea of new products. Next patterns are made and the first prototypes are produced. Revisions are made and salesmen's samples arrive. Accounts are shown the next season's offerings and orders are placed. Production is beginning about the same time as the first showings based on preliminary forecasts. If possible 3 production runs are scheduled with the first 2 going to fill dealer pre-season and the last one for at once reorder.

For the last 10 weeks I have been showing accounts and now have all the orders booked for delivery next summer: February to July. This long process of design, fabric and material acquisition, ordering, production and delivery are the reason why products are not available at some times. So the

bottom line, despite knowing the process, is when can you get the product you want.

There are 2 periods when the extra production that has been made for reorder is available. For the fall/winter period this is from October through December and for spring/summer this is from May through July. There is always an effort to keep the most popular styles and colors in stock at all times. We now have access to detailed information on all planned production so when an order is placed if an item is not in stock we can see a date of when it will be.

For those who might be attending SAR City in October I will be there with a selection of product and catalogs. It would be an excellent time to answer any individual questions you would have on product. Overall production at Mountain Hardwear has been increased by over 30% in the last year. Most equipment styles are in stock and a fairly high percentage of core styles and colors in clothing. We remain committed to supplying you with the gear needed on an at once basis and will communicate back any delays along with availability dates. ☺

SAR "Finds"

John Amrhein, Emergency Operations/Volunteer Forces

For those of you of advancing years-like myself-remember what it was like spending hours wandering through a real army/navy surplus store? Ahh the smell of waxed canvas and cosmoline-not to mention all the things that you didn't know what the original use was but knew that you could find some use for-and still have it in your garage-somewhere-unused-still packed in cosmoline. Well now you can wander the isle from your computer (sorry, you'll have to conjure up the smells from your memory). All right enough of my traveling down memory lane-here's where to find this bonanza of outdoor adventure, survival, tactical, camping, hunting gear and of course military surplus: www.major-surplusnsurvival.com . You can find everything from Tush Wipes (don't ask but check

out stock # 18-5078-1) to a Ducati Swiss Military Motorcycle and even a Marine Gamma Goat amphibious 6 wheel drive truck for only \$9500.00 -it even has Calif. Plates, but it doesn't come in international orange. While we're talking surplus stores here is another one that may have that "watcha ma call it" that you've been looking for: www.cheaperthandirt.com .

Now for some fun. Check out this site to test your survival skills and maybe learn a few. Live or die at: www.equipped.com/stayalive/index.html .

PLEASE send your SAR finds to: jamrhein@sbcscd.org

An item appearing in this column does not constitute an endorsement by the SBCSD, the IESC, or the Staff of the Tracker. The content of this column is meant to be informational only and the reader should verify all claims, accuracy etc. for themselves.

Continued from p. 1

Warren

thought that enough resources were not being used to help the search effort.

The Sheriff's Chaplain Corp kept her updated with the latest information related the effort, keeping the family calm, most of the time.

The one thing I mentioned in the beginning about teamwork, was that the management team, and SAR resources worked together like a finely oiled motor. Communication between the different positions like IC and Ops was outstanding. I just want to tell those involved in the mission, that I appreciate their talents and their assistance.

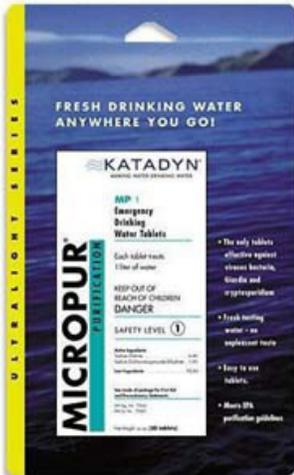


Just Say "NO" to Micro-Cooties

Jeff Lehman, Cave Rescue Team



www.msr.com



www.katadyn.com



www.steripen.com



www.aquamira.com

Sonny's article last month on the MSR MIOX, and subsequent conversations on the topic with fellow SAR team members became the makings of a Tracker article. Since I spend a fair amount of time dealing with the fascinating world of chemistry, I am a sucker for anything that cleans water or makes fire.

Traditionally, water purification has been accomplished by a trusty filter. These filters are available from a variety of vendors, and all do an admirable job of removing micrococyties such as giardia. There are even some filters that fit in a squeeze-type water bottle and filter when you squeeze the water from the bottle.

Filters, however, are not capable of removing viruses, but that really isn't a problem in North America. To tackle viruses, filters are often teamed with a filter section that can be placed inline that contains iodine. As the water passes through the packing in the anti-virus section, the iodine kills the viruses. One filter embeds silver in the filter matrix and studies show that this will kill viruses as well. Viruses are too small to be filtered. Filters can be heavy, but they are rather simple, and very effective. In North America the big concern is giardia, and, to a much lesser extent, cryptosporidium. An appropriate filter can remove these effectively. There are other options, however.

Rather than removing the microbes that will cause you grief, how about killing them outright? This can be accomplished with the appropriate chemical compounds. A common method uses iodine. You can buy iodine tablets or solutions and place a small amount in your drinking water (www.potableaqua.com and www.po-

larequipment.com). After anywhere from 15 minutes to 30 minutes depending upon the temperature and what you are killing, the water will be ready to drink. There are a couple of drawbacks with iodine treatment, however. First, it is not recommended for extended use. Your body requires a certain amount of iodine, and too much is not a good thing. Of course, on the typical SAR mission this is not an issue (unless you are allergic to iodine). Also, there is a taste that many find unpleasant. The taste can be somewhat neutralized by the addition of vitamin C (ascorbic acid), however. An advantage of iodine



www.potableaqua.com



www.mcnett.com

treatment compared to the filter is weight and volume. Carrying enough iodine to treat several liters of water requires only a few grams in your pack. This is a significant advantage to the SAR team member. A disadvantage is that there is no filter to remove particulates from your water. If you are required to purify a source with a lot of silt or other solid material in it, the purification process won't remove the particulates; you could use a bandana for a rudimentary filter. Also, iodine is not effective against cryptosporidium. If you already carry iodine tablets, be aware that the little bottle of iodine tablets you purchased has a shelf life. Check the container to find out when you should dispose of them.

Another chemical option is chlorine dioxide. The Katadyn Micropur chlorine dioxide tablets (www.katadyn.com) and the Aqua Mira (www.mcnett.com) solutions both treat water with ClO₂. The Micropur tablets are individually wrapped and will each treat 1 L of water. Fill the water

See "Water" on p. 6

The Numbers Game

Sonny Lawrence, Cave Rescue Team

I bet many of you swim in numbers after taking TRBC. People are discussing newtons and pounds and slugs or breaking strengths as related to a static system safety factor. It can give you such a headache you want to “slug” them right back. In many ways, this is virtual reality. It seemingly has virtually nothing to do with reality, yours at least.

Until you fall.

Then all of a sudden, in a nanosecond, it has completely to do with you. In the blink of an eye the forces are applied to your

body. Your neck whips around. A weird creaky sound is generated by tied nylon knots as they set or rope stretches. Pieces of metal contort while your stomach is pulled upward into your rib cage and diaphragm. There is a whiff of smoke that catches the eye before the smell of superheated, melting nylon catches the nose.

Ignorance was bliss before TRBC. You didn't know much about these potential failings of knots and pulleys. Fortunately we have standards to go by. Certain sizes of ropes or rated carabiners are used for this and that. In many ways, it makes life easier, although not easy, in the technical SAR world. When the adrenaline is flowing, it becomes a reflex to reach for a 30 kN rated biner.

But now you are off to Yosemite or Zion, playing on the rocks and canyons.

This gear appears similar to that which you beat into your unconscious mind. It is made of metal and has a screw gate. But it is missing the magic markings stamped with the breaking strength. What do you do?

Enter into the eternal debate. There is no correct answer. There are just rocks and cliffs and canyons and anchors all providing opportunities to extract yourself from a mystical adventure via rappelling off such a piece of hardware. Paul Stovall, also from the Cave Rescue Team, and I decided to look at one such piece. We obtained very cheap hardware store screw links. These are small by SAR standards; 6 mm diameter and 5.7 by 2.6 cm in size. Their only markings were “china.” China is a mighty big country, these must be strong. But then there is fragile “China” dinnerware that we eat off of, not so strong. Who knows what they are actually rated. One thing is certain, I have seen many such screw links in the mountains. Doubtless I will see them again.

Paul, as a mechanical engineer, has access to a big toy that can pull things apart with great force. So we broke 10 of these screw links. On average they broke at 16.1 (range 9 to 21.4) kN. Eight out of ten of these had the threads pop and the gate open. For two of them, the gate held and the end was ripped off. After the gate opened, we continued to apply force on the long axis of the link. It held about 2.5 kN while it slowly stretched open. The photograph reveals these three results: end popping off, threads stripping and link stretching open.

Humm.....I wonder if this handful of numbers will change how I play the mountaineering game?



Water

bottle, open the tablet, and drop it in. Like iodine you will have to wait (15 minutes to 4 hours), but the result is water that doesn't have the characteristic iodine taste. They come in packages of 30 tablets, and are very easy to use. I think that these are the best option for water purification in the SAR world. They are simple, light, and effective against just about anything (viruses and cryptosporidium included). Similar to the Micropur tablets is Aqua Mira. Aqua Mira is a product where two solutions are mixed in order to create a purification cocktail, and then are added to the water to be purified.

By far, the coolest device from the chemistry geek perspective, is the MSR MIOX. Anything that uses an electrolytic cell to produce a cocktail of ClO_2 and other microbe and virus-killing compounds certainly pegs the geek meter. If you are purifying large quantities of water, the MIOX is the way to go. A small amount of water is passed over rock salt, making a salt solution. This solution is then electrolyzed to produce the "mixed oxidant" (MIOX) cocktail. The cocktail is then poured into the water and allowed to react. The use of the MIOX is fairly simple. It has settings for the volume of water that you want to purify. Push the button once and you make enough to purify one half liter, twice for one liter, 3 times for two liters, and 4 times for 4 liters. The trouble that I have run into, is getting the correct salt concentration in the water. I must be impatient since I regularly get the "low salt" warning, and have to pass the water over the salt multiple times before I get the "green light" for sufficient salt concentration. Still, it is much easier than pumping. On a recent trip I was able to purify 15 L of water at a time without much effort. It made water gathering much less of a chore. The MIOX only weighs a few grams, and requires 2 CR123 lithium batteries. Don't forget to take a couple of spares. Dead batteries means you take your chances with the drinking water. In over a year of use I am on my second set of batteries.

Chemical treatment is fine, but what

about zapping the nasties with ultraviolet light? UV light has been used for many years to purify water, but it has only recently made its way into the outdoor market. Two products currently use UV radiation to kill microbes and viruses: the SteriPEN by Hydrophoton (www.steripen.com), and the UV AquaStar (www.uvaquastar.com) by Meridian Design. Both of these devices use an ultraviolet lamp to irradiate the water and kill microbes and viruses. The SteriPEN uses 4 AA batteries and a smaller lamp that is slowly stirred through the container of water. The larger UV Aquastar is designed to work only in a Nalgene water bottle, treats a larger volume of water at a time, and runs on 2 CR123 lithium batteries. Both devices time the dose of UV to make sure that you have provided sufficient time to kill everything. Due to its size and form-factor, the SteriPEN can be used to purify water in a variety of containers, while the UV Aquastar is only designed to work in a Nalgene bottle. These purifiers won't alter the taste of your water nor will they remove any sediment. In fact, you have to make sure that there isn't too much sediment floating in the water or else the UV light will not be effective. In talking to the manufacturers, however, just about anything that most folks would consider "drinkable" will be easily purified. The UV purifiers are, by far, the easiest to use. This is especially true of the UV Aquastar. Fill the bottle, push the button, and wait about 1 minute. Once the lamp shuts off it is ready to drink (no waiting for chemicals to work). Due to its size, the SteriPEN requires a bit of stirring while working, but it is still easier than any filter. The lamp in the SteriPEN is programmed to last for 5000 doses (approximately 2500 L worth of water) and the lamp in the UV Aquastar is rated at approximately 2000 hours (approximately 90,000 L worth of water). Both the SteriPEN and UV Aquastar are lighter than any water filter on the market, and about the same weight as the MIOX.

Continued on p. 8

Calendar

For information or to submit an event, contact the editor at editor@thetracker.info. Appearance of items in this section does not necessarily imply endorsement by the SAR Council or the County of San Bernardino. Call if you have any questions about a particular listing. To save space, persons to contact and numbers for multiple listings of *Department-approved training providers* are consolidated in one place at the bottom of this page.

2005

April

Apr 16—Personal Vertical Skills Check-off
Hosted by West Valley SAR. Contact Bob Gattas (rgattas@earthlink.net) for information.

Apr 30—West Valley SAR 9th Annual Run for Rescue & Safety Fair
Visit www.thetracker.info/calendar/FlyerRun&Fair05.pdf for more information.

May

May 14-15—West Valley SAR Training
Rope Training. Contact Bob Gattas (rgattas@earthlink.net) for information.

May 18—IESARC Meeting
19:00 in the main conference room at SBSH HQ.

June

Jun 4—West Valley SAR Training
Night ELT exercise. Contact Bob Gattas (rgattas@earthlink.net) for more information.

July

Jul 2—Valley of the Falls SAR Pancake Breakfast and Raffle
Visit thetracker.info for more information.

Jul 16—West Valley SAR Training
Rope rescue training. Contact Bob Gattas (rgattas@earthlink.net) for more information.

Jul 16-17 & 23-24—Technical Rescue Basics Course
Contact Mike Schlax at VFU (mschlax@sbcsl.org) to sign up. A \$50 deposit is required.

Jul 20—IESARC Meeting
19:00 in the main conference room at SBSH HQ.

August

Aug 12 & 13—Air Rescue Team Fundraiser
“Hollywood Bowl Style” concert in La Verne. Tickets are \$55.00, which includes food. Contact stephen.miller39@verizon.net for more information.

Aug 20—West Valley SAR Training
Rope rescue training. Contact Bob Gattas (rgattas@earthlink.net) for more information.

Aug 24—Central Mountain Rescue Annual Fundraiser, “An Evening at the Improv”.
Visit thetracker.info for more information.

September

Sep 17—West Valley SAR Training
Search exercise. Contact Bob Gattas (rgattas@earthlink.net) for more information.

Sep 21—IESARC Meeting
19:00 in the main conference room at SBSH HQ.

October

Oct 1-2—Morongo Basin SAR 26th Annual Desert Run Fundraiser.
This exciting event is held on Soggy Dry Lake in the Johnson Valley OHV. This is a fun family event, not a race. There will be food, music and prizes. So bring your motorcycle, quad, buggy or 4x4 and have enjoyable weekend. For more information call (760) 369-9999.

Oct 3—San Geronio Search and Rescue Team Calvert & Johnston Memorial Golf Tournament
Golf Tournament and fundraiser 12:00pm-7:00pm Shandin Hills Golf Club. See registration flier and sponsor information at www.thetracker.info.

Oct 7-9—SAR City
Hosted by Barstow Desert Rescue Squad. Visit www.sarcity.org for more information.

Oct 14-16—West Valley SAR Training
Map & Compass training. Contact Bob Gattas (rgattas@earthlink.net) for more information.

Oct 15—Personal Vertical Skills Check-off
Hosted by the Cave Rescue Team. Sheriff's Aviation in Rialto. Contact Mark Kinsey (mkinsey@caverescue.net) for more information.

Oct 22—West Valley Softball Tournament
At The Epicenter in Rancho Cucamonga. For information call 909-207-2444 or 909-605-1341. Download the flyer at www.thetracker.info

November

Nov 19—West Valley SAR Training
Night scenario. Contact Bob Gattas (rgattas@earthlink.net) for more information.

*Course / Provider

BSAR / Vol Forces
CMC Rescue School
On Rope1
Rigging For Rescue
Ropes That Rescue
TRBC, PVSC, NCRC / Vol Forces
Mountaineering / Vol Forces
West Valley SAR Training

Contact Name

Dave Pichotta
John McKentley
Bruce Smith
Mike & Joanie Gibbs
Reed & Jayne Thorne
Don Welch
Frank Hester
Bob Gattas

Phone

(909) 387-0678
(800) 235-5741
(423) 344-4716
(970) 325-4474
(520) 282-7299
(760)244-7340
(760) 242-0855
(909) 980-8820

email/URL

dpichotta@sbcsl.org
www.cmcrecue.com
www.onrope1.com
www.riggingforrescue.com
www.ropesthatrescue.com/
ww26sar5@aol.com
flhester@aol.com
boobali@gte.net

Continued from p. 7 "Water"

So, the choices for water purification have grown in the last few years. Make sure that you check out the manufacturer's websites for more information. I think the best bet for your SAR pack are the iodine tablets or chlorine dioxide tablets (Katadyn Micropur) since they are still lighter and occupy less space than any other device. I personally prefer the Micropur tablets for their convenience and less-apparent odor and taste. For your next backpacking trip or your home, emergency preparedness supplies, take a look at the new options. 

Articles Wanted!

The Tracker needs you! Please send articles to share with your colleagues. Send in a mission report or a trip report. Write an article about a team training. The Tracker has a wide national audience. Anything related to search and rescue is worthy of publication. Please send submissions to:

editor@thetracker.info

Hug-A-Tree

NASAR has taken over the Hug-A-Tree program, and they are in the process of updating the program. They are interested in contacting any past presenters. If you are a past presenter, or are interested in becoming a presenter please contact NASAR at :

hugatree@nasar.org

Classifieds

Contact the Editor to place or remove any item.



SBSD Commuter cups with star and motto. \$16. Features generous 16 oz. capacity, stainless steel construction, double-walled insulation and fits virtually all auto cup or mug holders.



SBSD Search and Rescue decals. \$5. The decals are 3.5" X 3.5" and can be stuck on the outside of just about anything or on the inside of a window. The price is \$5.00 each and can be purchased by contacting SarDesertRun@aol.com or calling 760-369-9999.



Earrings (1/2") \$10 and **Lapel Pin/Tie Tacks (5/8")** \$8. Fund-raiser for Morongo Mounted SAR Team. For ordering info contact Kim Miller at millerkm@29palms.usmc.mil or call Kim at (760) 367-1148 or (760) 367-1148 evenings.

SBSD Coffee cups \$5. High-gloss ivory coffee cups with gold-colored SBSB star on the side is microwavable. Available at Volunteer Forces.

SBSD SAR Pens \$10. High-quality, refillable ink pens with SBSB star and "Search & Rescue" on side. Great gift idea! Available at Volunteer Forces.

Garmin Offers NASAR Members Discounts. NASAR has an agreement with Garmin to distribute its entire line of consumer GPS products and a handful of its aviation products to the SAR community. Join NASAR at www.nasar.org, and shop the store at www.nasar.org/garmin/default.php.

Air Rescue Team. The Air Rescue Team is selling T-shirts and baseball caps. To purchase them contact Diana at VFU (909-387-0641) or Kathy at Aviation (909-356-3800). Go to www.cafepress.com/helicopter2classifieds to purchase these items.

Subscribe to The Tracker

To get on the email distribution list send an email to:

tracker-subscribers-subscribe@sbsar.org

Current issues, back issues, supplementary materials, the calendar of events, and IESARC

minutes are available at:

www.thetracker.info