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Founded in 1984, AdventureCORPS, Inc. is an athlete-run firm producing and promoting ultra-endurance and extreme sports events, lifestyle, and media. Adventure is our way of life, so we are pleased to host the 35th anniversary Badwater Ultramarathon, known globally as “the world’s toughest foot race,” on July 16-18, 2012.

A true “challenge of the champions,” this legendary race pits approximately 95 of the world’s toughest athletes from 18 countries and 19 American states – runners, triathletes, adventure racers, and mountaineers – against one another and the elements. Covering 135 miles (217km) non-stop from Death Valley to Mt. Whitney, CA in temperatures up to 130F (55 centigrade), it is the most demanding and extreme running race offered anywhere on the planet.

The start line is at Badwater, Death Valley, which marks the lowest elevation in the Western Hemisphere at 280’ (85m) below sea level. The race finishes at Mt. Whitney Portal at 8,360’ (2533m). The Badwater course covers three mountain ranges for a total of 13,000’ (3962m) of cumulative vertical ascent and 4,700’ (1433m) of cumulative descent. The Portal is the trailhead to the Mt. Whitney summit, the highest point in the contiguous United States.

Now in its thirteenth year producing this race, AdventureCORPS is pleased to welcome the support of race sponsors Nathan Performance Gear, Caring House Project Foundation, and ZombieRunner.com. AdventureCORPS also appreciates the support of the Furnace Creek Inn and Ranch Resort, Stovepipe Wells Resort, Panamint Springs Resort, Seasons Restaurant of Lone Pine, Pizza Factory of Lone Pine, Dow Villa of Lone Pine, the community of Lone Pine, CA, and other generous companies and individuals.

Additionally, we salute the National Park Service, U.S. Forest Service, Inyo County, California Department of Transportation, and California Highway Patrol, whose staff - and permits - oversee this event.

We wish everyone - racers, crews, staff, sponsors, media, and fans - a safe and successful race this year. May this truly be a life-changing experience for everyone.

Sincerely,

Chris Kostman

Race Director and Chief Adventure Officer

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Front Cover: Oswaldo Lopez and crew notch their first victory. Dave Nelson photo.

Inside Front Cover: Runners and crews make the pilgrimage up the Portal Road: Dave Nelson photo.

Page 1: Women's champion Sumie Inagaki en route to Furnace Creek: Dave Nelson photo.

Page 3: RD Chris poses with Chris Roman, Tony Portera, and Brenda Carawan: Jeff Bell photos.

Page 40: Final finishers Connie Dockendorf and Eberhard Frixe: Jeff Bell photos.

All photos by Chris Kostman, unless otherwise noted.
Design and Layout by Kevin Fung, kevin@kfungdesign.com

GENERAL INFORMATION

MANDATORY RUNNER CHECK-IN:

10:30AM-12:30PM, Sunday, July 15, 2012, Held in the Death Valley Visitors Center Auditorium, Furnace Creek. Every runner, along with their designated Crew Chief only, must personally attend at some point during the two hour timeframe. Photo identification is required for all runners. Please bring the completed Runner Check-In Form, Medical History Form, and both types of signed Liability Waivers for all crew members and the runner. All paperwork must be complete before walking in the door. Be sure to pay your \$20 per car Park Entrance Fee at the Furnace Creek Visitor's Center (and bring proof of same) BEFORE Runner Check-In.

MANDATORY PRE-RACE MEETING:

Either 200-300PM for 600am Wave, 300-400PM for 800am Wave, or 400-500PM for 1000am Wave on Sunday, July 15, 2012. All runners will attend one of three Pre-Race Meetings in the Death Valley Visitors Center Auditorium, Furnace Creek. The specific meeting is based upon the Wave Start assigned for each runner. Every runner must attend the entire designated meeting with his or her Crew Chief and exactly two or three crew members.

MEDIA MEETING: There will be a brief, mandatory meeting of all journalists after the final Pre-Race Meeting in the auditorium.

SUPPORT CREW TRAINING:

5:00 to 8:00PM, Sunday, July 15, 2012, outside near the cabins at the front of the Furnace Creek Ranch: No matter how many ultras you've crewed, this informal session will help you with tips and tricks to make sure you, your runner, and the rest of your crew have a great time in Death Valley. We'll cover common mistakes, give an overview of race rules, and even help with ideas to organize your van and be prepared for almost anything. Hosted by Cory Linkel (7-time crew and 5-time race official at

Badwater) and CHP Scott Wall (1-time crew and 7-time race official at Badwater).

SUNRISE / SUNSET: Civil Twilight (AM): 5:18am | Sunrise: 5:47am | Sunset: 8:06pm | Civil Twilight (PM): 8:35pm.

STARTING TIMES: 6:00AM, 8:00AM, and 10:00AM, Monday, July 16, 2012. Runners may attend only their assigned start time. Runners must check in, ready to race, 30 minutes prior to their start.

ENDING TIME: The event is officially over 48 hours after each starting group, so ALL runners MUST leave the course by either 6:00AM, 8:00AM, or 10:00AM, July 18, 2012.

POST-RACE GET-TOGETHER: 12:00PM, Wednesday, July 18, 2012, Lo-Inyo Elementary School, Multi-Purpose Room, 223 East Locust Street, Lone Pine, CA. (north end of town; east of Hwy 395). Pizza and drinks will be served. No charge for all staff, racers, and up to six crew members with each racer.

PERMITS: This event is held under permits from the Inyo National Forest, Death Valley National Park, California Department of Transportation, and Inyo County. (If one of them won't issue us a permit, this race is history. So don't screw up!)

COURSE RECORDS: Men's: Valmir Nunes, 2007, Brazil: 22:51:29. Women's: Jamie Donaldson, 2010, USA, 26:16:12.

DRIVING DISTANCES:

Las Vegas Airport to Furnace Creek:

140 miles

Los Angeles Airport to Furnace Creek:

250 miles

Lone Pine to Las Vegas Airport: 240 miles

Lone Pine to Los Angeles Airport: 210 miles



LISA SMITH-BATCH: A 17-YEAR JOURNEY AT BADWATER

By Chris Kostman



Lisa Smith has been synonymous with the Badwater Ultramarathon since the mid-90s when she was competing at the front of the race and appearing on magazine covers. As an athlete, she has blazed trails across the globe, winning races like Marathon des Sables, and inspiring others to chase their own dreams. She set the precedent for competing with the top men, paving the way for later standouts like Pam Reed and Jamie Donaldson.

Lisa's name pops up regularly in the essay section of the race application as the person who inspired the applicant to run, or to compete in Badwater. Coaching athletes is another way Lisa touches athletes across the globe and her students compete every year at Badwater. Likewise for her work as a race promoter; Lisa knows what the athletes need and want in a classic race, and she delivers that with aplomb through Dream Chaser Events, the company she runs with her husband Jay Batchen. Naturally, they met through running and they ran the 2000 Badwater together as newlyweds.

Lisa's reach extends even further, far beyond sport, as she's raised hundreds of thousands of dollars for AIDS Orphans Rising, an effort recognized in person by Pope John Paul II at the Vatican.

As an athlete, coach, event promoter, philanthropist, and inspiration, Lisa is an ideal role model and ambassador for the Badwater Ultramarathon. She's been a shining light at our race for 17 years, and though she has retired from competitive ultrarunning, she will no doubt be a welcome asset to the race for many years to come.

Q&A WITH LISA

Why Badwater: *The challenge, the people; the desert is where I feel most at home. I love the course and I love Ben and Denise Jones who have inspired me since my first day in Death Valley in 1995. Also, AdventureCORPS always has the most amazing volunteers. As a race director myself, I know all the time, effort and dedication that goes into putting on a successful event. They are very much appreciated!*

Funniest moments? *Laughing so hard with my crew until I threw up. Sand storms where you are being thrown backwards and all you can do is laugh. Many moments when you would rather cry but choose to laugh: getting a flat tire, hearing people use all kinds of swear words when in there every day life they never swear.*

Coaching: *I have coached so many people for Badwater: I am coaching four for this year's race and I have coached every year. My coaching started years ago with coaching high school, then college, and it grew and grew as I learned and learned and learned: Not just through experience but through education. I*

have coached many of the top runners at Badwater, even Marshall Ulrich and Ray Zahab! I love to coach and even more so now that I have retired from racing!

Badwater Life Lessons: *Badwater was my first ultra and my last. I went from a marathon to 135 miles. I fell in love with endurance and distance running. Badwater taught me that it is not really about the race, yet a journey that will stay with you for the rest of your life. I have learned to trust other people who are there to help you, I have learned that most of the time you can work through about anything. I have learned that a "DNF" does not mean you did not finish, it means "MTRC": Made The Right Choice and learn to race another day. There are reasons people don't finish a race. We all start a race with the intention and desire to finish. Something goes wrong along the way and you must make a choice that is right for you! Marshall Ulrich got me into my first Badwater and he is still one of my best friends, more like a brother to me. The relationships and bonding with people that really do care about you will stay in your life forever.*





Ron Jones Photo

LISA'S BADWATER HISTORY

1995: 2nd female and 4th overall in 41:24:31.

1997: 1st female and 3rd overall in 37:01, a new women's course record.

1998: 1st female and 4th overall in 37:33.

1999: Featured in the film, "Running on the Sun." Finished unofficially in 48:24 after receiving IV fluids.

2000: 3rd female and tied for 17th overall with her husband Jay in 43:23:56.

2001: Crew for Marshall Ulrich during his Death Valley Quadruple Crossing ("I ran over 350 miles with him.")

2002, age 41: 4th female and 10th overall in 40:28:22.

2003, age 52: 11th female and 33rd overall in 52:11:39.

2006, age 45: 13th female and 55th overall in 49:23:49. Ran a Badwater Double.

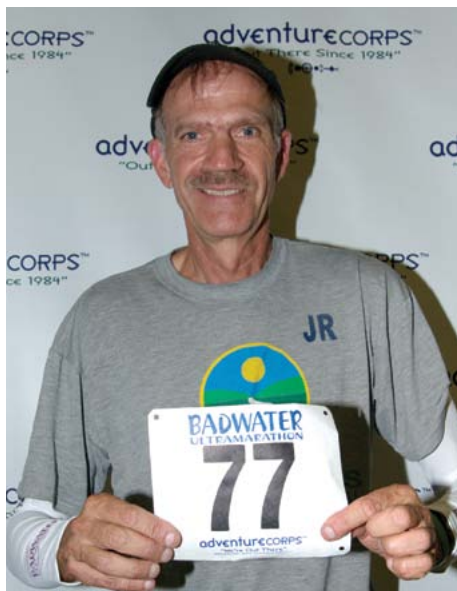
2007, age 46: 8th female and 43rd overall in 41:54:17.

2008, age 47: 20th female and 67th overall in 47:17:30. (*"This was the year I ran from Las Vegas to the race start. I had the 2nd fastest time up the Portal Road, the last 13 miles, of any male or female who only did the race. I then ran up Mt. Whitney for a total of 306 miles."*)

2011, age 50: Hoping for her 10th finish, Lisa DNF'd. She announced prior to the 2011 race that it would be her last Badwater, regardless of the result that year. (*"Yes and after five days in the hospital for almost killing myself, I realized that I have done 10 Badwater races and it is OK for myself to give myself credit for my DNF in 1999, the year I got an IV, because I did go on to finish!"*)

More about Lisa: www.runhope.com and www.dreamchaserevents.com





Ron Jones Photo

A SALUTE TO JOHN RADICH, TEN-TIME FINISHER

By Chris Kostman

John Radich lives and breathes his personal motto, “Do The Right Thing.” He’s been a quiet, unassuming, generous, and kind-hearted member of the Badwater family since his first finish in 1997. After a five-year hiatus, he became a regular at the race from 2002 to the present, except for 2010 when he, ahem, ran across America. All of John’s running efforts support The Way to Happiness Foundation, “an organization dedicated to helping youth live better lives without drugs, gangs and intolerance, creating better brotherhood.”

In 2012, we salute John for his ten Badwater finishes. He joins Marshall Ulrich, Scott Weber, Jack Denness, and Arthur Webb in this distinction. Even among such an illustrious crowd, he stands alone in having no DNF’s or unofficial finishes on his Badwater record.

1997: 51:07:00, 16th, age 43
2002: 43:01:54, 17th, age 48
2003: 43:14:12, 16th, age 49
2004: 49:17:20, 43rd, age 50
2005: 46:53:43, 42nd, age 51
2006: 33:38:33, 11th, age 52
2007: 33:08:58, 15th, age 53
2008: 38:09:50, 23rd, age 54
2009: 44:02:19, 71st, age 55
2011: 41:46:25, 60th, age 57

Badwater has become like family with me. Running in 120 plus degree through Death Valley in July is nuts, as we all know and hear so often. As any Badwater runner will tell you, it’s the challenge of pushing your limits, self discovery, and busting through the low points and relishing the high ones. It all about Body, Mind and Spirit and perseverance and courage. One of my joys and a privilege is meeting fellow veteran Badwater runners, being along the road with them and first timers giving advice and encouragement to them. You are truly inspired by each runner out there, their struggles and triumphs - you feel them too – it’s totally amazing and even learn ideas from them!. You may be feeling horrible and having a “bad patch” and all seems “doom and gloom,” but trust me, there’s someone having worse! You do come out of it and the finish at the Whitney Portal Road and Chris presenting you your medal and buckle makes it all worth it. May Badwater 2012 be good for all of you. Be safe! -JR



THE DANGERS OF RUNNING IN THE HEAT

By Jason Hodde, MS, ATC/L

Running in hot weather can pose many dangers to ultrarunners. Although most runners are aware of the dangers of running for prolonged distances in hot and humid weather, many are also inadequately prepared for the intense stress placed on the body during these hot weather runs.

Scott Jurek takes one of many ice baths in 2006.

In July 2002, I participated in the 25th anniversary of the Badwater Ultramarathon, a 135-mile trek from the lowest place in the continental United States (Badwater Basin), through Death Valley National Park, and to the foot of Mount Whitney, the Whitney Portals, at an altitude of 8,360 feet (2,548 meters). The run was held in the middle of one of the most severe heat waves southern California has ever seen. In preparation for the run, I made sure my crew was aware of the signs and symptoms of heat illness, as well as how to treat me should problems occur. Here are some of the dangers of ultrarunning in the heat, and preventative measures that can be taken to avoid potential problems.

The Heat Index

The heat index is the apparent temperature felt by the body due to the combined effects of actual temperature and humidity. Most people understand that as the air temperature goes up, so does the heat index, but humidity also plays a role. As the humidity rises, the body is unable to efficiently evaporate the sweat it produces. Therefore, the perceived temperature is much higher than the actual air temperature. The loss of cooling efficiency thus makes exercise extremely dangerous.

Although it is convenient to use a single number to describe the apparent temperature your body feels, keep in mind that heat and hu-

midity affect everybody differently. Several assumptions are made to calculate the heat index measurements in the table below. Specifically, the heat index assumes the body to be:

- 5' 7" (170 cm) in height
- 147 pounds (67 kg) in weight
- Caucasian
- At 98.6° F (37° C) body temperature
- Clothed in long pants and a short-sleeved shirt
- In shade
- Walking at a speed of 3.1 mph (5 kph)
- In a breeze of 6 mph (10 kph)
- Not dripping with sweat

Changing any of these factors can either increase or decrease the heat index from those shown in the table. Be aware that heat index values of over 100 significantly increase your risk of heat-related illness.

Relative Humidity	Air Temperature (Degrees F)										
	70	75	80	85	90	95	100	105	110	115	120
	Heat Index										
0%	64	69	73	78	83	87	91	95	99	103	107
10%	65	70	75	80	85	90	95	100	105	111	116
20%	66	72	77	82	87	93	99	105	112	120	130
30%	67	73	78	84	90	96	104	113	123	135	148
40%	68	74	79	86	93	101	110	123	137	151	
50%	69	75	81	88	96	107	120	135	150		
60%	70	76	82	90	100	114	132	149			
70%	70	77	85	93	106	124	144				
80%	71	78	86	97	113	136	157				
90%	71	79	88	102	122	150	170				
100%	72	80	91	108	133	166					

Data from the US National Weather Service

Heat Illnesses

There are three major heat illnesses—and all of them can be exacerbated by ultra distance running and prematurely end an ultrarunner's race. In all cases, the main reason that runners experience heat illness is dehydration. If you replace lost fluids and electrolytes and are able to train your body to process a high volume of fluid in a short period of time, you significantly decrease the risk of experiencing these race-ending medical emergencies.

Heat cramps: Exercising in hot weather can lead to muscle cramps, especially in the legs. This is usually caused by imbalances or deficiencies in your body's electrolyte stores. A cramp is characterized by sharp, stabbing pain in the muscle and rarely works itself out on its own. On a training run earlier this year in Death Valley, many runners complained of cramps in their legs; I suffered from cramps in my diaphragm and had difficulty breathing for more than an hour! Cramps become less frequent with heat training, but for those of us unaccustomed to such extreme conditions, maintaining adequate hydration and electrolyte balance is critical to avoiding them. To eradicate cramps, you should stop running, drink fluids containing electrolytes, cool your body with wet towels, and immediately get out of the sun.

Heat exhaustion: Losing fluid and electrolytes through sweat leads to dizziness and weakness if the lost fluids are not replaced. Heat exhaustion is characterized by a moderate rise in body temperature, dizziness, nausea and vomiting, and a headache. You might also experience weakness, lack of coordination, heat cramps, heavier than usual sweating accompanied by moist and cold skin, and “goose bumps.” Your heart rate may rise and you won't be able to run as fast due to fatigue. Many runners—even those who are well trained—will suffer from mild heat exhaustion after running for several hours in hot and humid conditions. If you experience the signs of heat exhaustion, stop running immediately and drink fluids containing electrolytes, cool your body with wet towels, lie down and elevate your feet a few inches above your heart, and immediately get

out of the sun. Since heat exhaustion can lead to the most severe form of heat-related illness, heat stroke, seeking prompt medical attention for heat exhaustion is also highly recommended.

Heatstroke: In extreme cases heat can upset the body's thermostat, causing body temperature to rise to 105 degrees F or higher. This is a life-threatening situation that requires immediate medical attention. While it is common for untreated heat exhaustion to rapidly progress to heatstroke, heatstroke can (and does) occur without the signs of heat exhaustion being apparent. Symptoms of heatstroke include lethargy and extreme weakness, confusion and odd or bizarre behavior, disorientation and unconsciousness. Because heatstroke is a complete failure of the body's temperature regulation system, sweating ceases and the skin becomes hot and dry. Convulsions or seizures can occur as the brain begins to shut down. Coma and death are also possible in extreme cases. Heatstroke is a medical emergency that requires immediate medical attention. Call the emergency response system immediately! Get the runner out of the sun, remove all clothing, and immediately rub their body with ice or immerse the runner in cold water.

By staying properly hydrated and recognizing the early warning signs of heat illness, as a runner you can prevent a heat-related problem from becoming a life-threatening situation. As a volunteer, recognizing these heat-related dangers may one day help you save the life of a runner who has underestimated the intensity of the surroundings.



About the Author:

Jay is a nationally Certified Athletic Trainer (ATC) licensed to practice in Indiana. He holds Master's degrees in Exercise Physiology and the Basic Medical Sciences, both from Purdue, with an emphasis on tissue repair and healing. Jay works full-time as the Clinical Affairs Manager for Cook Biotech Incorporated, a medical device company in Indiana. He has completed over 60 ultramarathons, including the Grand Slam of Ultramarathon and the 2006 Badwater Ultramarathon.

THE DANGERS OF HOT WEATHER RUNNING

DEHYDRATION, HEAT CRAMPS, HEAT EXHAUSTION, HEATSTROKE & HYPONATREMIA

By Claudio Piepenburg
(Originally published by Road Runner Sports)



2007 men's champion and record-breaker Valmir Nunes gets help with staying cool.

Running in hot weather can pose dangers to runners. Particularly dangerous is racing in hot, humid summer conditions. Here's how to protect yourself from these five serious (and potentially fatal) conditions.

Dehydration

Dehydration is not limited only to the summer months, although it's probably more likely to occur during that time. Many physicians believe that most people are in a constant state of dehydration. Since coffee, tea, soda and alcohol act as a diuretic, anyone who drinks these fluids on a daily basis, and doesn't drink at least an equal amount of water, will probably be dehydrated. If the person is physically active, the potential for dehydration is even greater.

Working out in hot, humid conditions promotes sweating, which in turn can cause dehydration. Sweating is good for you because it cools your body, but when you lose too much water you become dehydrated. If you're already slightly dehydrated, sweating will only

make it worse. It's important to maintain an adequate fluid intake all the time. Don't expect that you can make up for several days of not drinking enough by downing two cups of sports drink before your next long run or race. It's important to keep hydrated all the time. Once you start to feel thirsty, it's too late.

The average (sedentary) person needs a minimum of eight 8-ounce glasses of fluid a day. Runners need more: anywhere from four to eight quarts of fluid. That translates to at least sixteen 8-ounce glasses daily. Remember that diuretics don't count! Drink water and sports drinks, and if you don't have to worry about calories, fruit drinks or juice.

Two hours before your daily summer workout or a race, you should drink 16 ounces of fluid. Then ten minutes or so before you start to run, drink another one or two cups of water or sports drink. Drinking early and drinking often is the key. During a race you should drink six to twelve ounces of fluid every 15-20 minutes. If the weather is very hot, you may

need to drink even more. Training in warm weather, you should drink at least every 35 to 40 minutes. (Remember you will have already had two 8-ounce glasses before you started.) If you're running a race shorter than 30 minutes, you probably won't need any water other than what you drank before the start. The same goes for the last few miles of a longer race. If you're racing or training for longer than an hour, drink sports drinks as opposed to strictly water.

Start drinking immediately after finishing a run, no matter if it was a race or a workout. Minimum is 16 ounces for every 30 minutes you ran. If you tend to sweat a lot, you'll need more. Weigh yourself after you've run. Drink at least 16 ounces of fluid for every pound you lose through sweating.

By monitoring the color of your urine you can tell if you're hydrated. It should be pale yellow or even clear. If it isn't, you need to drink more fluids. It's important that you retain the fluid, so be careful if you're urinating every fifteen or twenty minutes. To restore your fluid balance, eat something salty (a bag of pretzels, salted nuts, crackers or potato chips), then drink a sports drink. The salt will make you thirstier, so you'll take in even more fluid and urine production will decrease.

Heat Cramps

Have you ever seen a runner bent over at the side of the road massaging their calves during a race? Chances are that he or she had heat cramps. Heat cramps are very painful (envision someone stabbing a knife deep into your muscles!) and rarely "work themselves out". The cramps occur because you've lost minerals through sweating and dehydration. Once you've reached the point of heat cramps, it's too late to try to replace fluids on the run. To make the cramps go away you should:

- Stop running
- Drink fluids immediately. The fluids should include sports drinks as well as water
- Massage the muscles once the pain begins to subside
- Cool your body with wet towels
- Get out of the sun

Heat Exhaustion

Heat exhaustion is a very serious condition that can lead to heatstroke. The symptoms of heat exhaustion are:

- Dizziness
- "Goose bumps" (particularly on the torso and arms)
- Nausea (sometimes accompanied by vomiting)
- Moderate to severe headache
- Weak legs
- Lack of coordination
- Rapid pulse
- Heavy sweating often accompanied by moist and cold skin
- Muscle cramping

If you experience any of these symptoms you must:

- Stop running immediately
- Get medical attention
- Drink large amounts of fluids, including sports drinks
- Get out of the sun
- Lie down and elevate your feet above your heart
- Loosen your clothing

Heatstroke

Heatstroke can be fatal. Unfortunately runners will sometimes ignore the symptoms of heat exhaustion (particularly in races longer than 10K) and will continue to push themselves until they're nearing a total thermoregulatory breakdown. The symptoms of heatstroke are very similar to those of heat exhaustion, but rapidly progress to:

- Disorientation
- Weakness in the legs to the point that the runner may fall
- Strange behavior (including flailing with the arms and shoving)
- "Fuzzy" thinking
- Rapid pulse
- Cessation of sweating and hot/dry skin
- Body temperature that may reach 104 degrees or higher
- Lack of consciousness
- Convulsions or seizures
- Coma



Noora Alidina receives fluids for inside and out during the 2007 race from her husband and daughter.

Someone suffering from heatstroke needs immediate medical attention. They should be moved out of the sun, cooled by either rubbing their body with ice or immersing them in cold water and given fluids intravenously.

Hyponatremia

Within the last few years the condition known as hyponatremia has begun to attract the attention of sports medicine physicians, exercise physiologists, and the medical directors at some of the larger marathons around the country. Hyponatremia has been called water intoxication because of the symptoms it produces. According to Dr. Tim Noakes, Professor of Exercise & Sports Science Director at the University of Cape Town, "...a person with hyponatremia looks like he or she is mildly drunk. They can't concentrate normally...they forget what you were talking about and start to concentrate elsewhere."

Hyponatremia occurs when the body becomes dangerously low in sodium. It's caused when you literally take in too much water. Although scientists have known about it for a long time, it has only been in the last few years as more runners have been competing in marathons that it has become a concern. According to Dr. Noakes, fluid has to be ingested at high levels for several hours for hyponatremia to occur. He suggests that a runner would have to be drinking water regularly for at least four to six hours to develop the condition. So runners taking four to six hours or more to run a marathon are at particular risk.

Unfortunately, symptoms of hyponatremia tend to mimic those of severe dehydration and/or heat exhaustion. By giving the athlete more water to drink the hyponatremia becomes worse, as more and more sodium is flushed out of the system. If a runner with hyponatremia is given fluids intravenously, they can suffer a

fatal reaction. Dr. Noakes and other sports medicine professionals recommend that physicians and other medical personnel at road races be alert for the signs of hyponatremia. One of the earliest symptoms is a craving for salty food.

Although hyponatremia is rare, it's wise to be aware that it can occur, particularly if you're running a marathon in unusually hot weather. Hyponatremia serves as a reminder that water is good, but don't forget sports drinks, which replenish your body with the sodium, potassium and other trace minerals you lose through sweat. It's worth repeating: if you're going to be running (or racing) for longer than an hour, you should be drinking a sports drink as well as water.



About the author:

Claudia Piepenburg has been running for 21 years and is the current editor for Peak Run Performance. She holds or has held state age-group records in Michigan, North Carolina, Florida, Tennessee and Virginia. In 1990, she was ranked 18th fastest masters woman in the world and 8th fastest masters woman in the U.S. in 1990 and 1991. She competed in the 1988 Olympic Marathon Trials, was 20th woman overall in the 1987 Boston Marathon and women's winner of the 1986 Virginia Beach Marathon. If you have questions or comments for Claudia, she can be reached at cpiepe@roadrunnersports.com.

MEDICAL RISKS IN THE BADWATER ULTRAMARATHON

This 135 mile race is probably the most physically taxing competitive event in the world. It also has considerable medical risks. All runners and crews must appreciate these two facts both before and during the race.

Heat illness and heat stroke are serious risks. These can cause death, renal shutdown, and brain damage. It is important that runners and crews be aware of the symptoms of impending heat illness. These include: nausea, vomiting, headache, dizziness, faintness, irritability, lassitude, weakness, and rapid heart rate. Impending heat stroke may be signaled by a decrease in sweating and goose bumps, especially over the chest.

Heat stroke may progress from minimal symptoms to complete collapse in a very short period of time. Deaths and renal shutdown (kidney failure) have been reported in other ultra-marathons. Adequate conditioning is mandatory.

Adequate fluid and electrolyte intake is the most important preventative for heat illness. Runners may well require dozens of gallons of fluid during this race. Proper pace is crucial.

The high altitude plus exertion can also produce various degrees of altitude sickness. This can lead to severe lung and brain swelling, and even death. The main treatment is rest, and especially to get to a lower altitude.

Blisters are also a problem on this course, with pavement temperatures perhaps reaching 200 degrees. Proper foot care & preparation are essential for having a successful race.

Remember, you are responsible for your well-being while participating in this race. There are no aid stations. Know where your limits are and know your body. Your acceptance of invitation to this race declares that you are aware of the risks & potential health problems.



FINISHER DATA ANALYSIS: 1990-2011

FINISHER DATA ANALYSIS: BADWATER ULTRAMARATHON, 1990-2011

Year	Starters	Finishers	Buckle Cut-Off	Sub 60hr	Sub 48hr	Sub 40hr	Sub 34hr	New M Rec?	New F Rec?
2011	94	81	48 hours	NA	86%	76%	20%		
2010	80	73	48 hours	91%	83%	51%	19%		26:16:12
2009	86	75	48 hours	87%	77%	47%	24%		
3yr avg	87	76		89%	80%	49%	22%		
2008	82	75	48 hours	91%	83%	37%	10%		26:51:33
2007	84	78	48 hours	93%	77%	47%	18%	22:51:29	
2006	85	67	48 hours	79%	62%	24%	13%		
2005	81	67	48 hours	83%	56%	22%	7%	24:36:08	
2004	72	57	48 hours	79%	58%	28%	8%		
5yr avg	80.8	68.8		83%	67%	32%	11%		
2003	73	46	48 hours	63%	42%	14%	5%		
2002	78	58	48 hours	74%	47%	12%	4%		27:56:47
2001	71	55	48 hours	77%	46%	14%	7%		
2000	69	49	48 hours	71%	41%	16%	12%	25:09:05	29:48:27
1999	42	33	48 hours	78%	60%	26%	12%	27:49:00	36:58:00
5yr avg	66.6	48.2		73%	47%	16%	8%		
1998	29	20	48 hours	69%	41%	17%	10%	28:09:00	
1997	27	20	48 hours	74%	44%	26%	3%	29:10:00	37:01:00
1996	23	14	45 hours	61%	35%	1%	4%	33:01:00	41:13:00
1995	24	16	45 hours	67%	38%	13%	0%		
1994	25	16	45 hours	64%	32%	1%	4%		
5yr avg	25.6	17.2		67%	38%	12%	4%		
1993	12	10	60 hours	83%	50%	25%	17%		
1992	14	13	60 hours	92%	29%	14%	14%		
1991	14	14	60 hours	100%	71%	36%	14%		
1990	21	17	70 hours	81%	29%	29%	14%		
4yr avg	15.25	13.5		89%	45%	26%	15%		



Helping hands for Jamie Donaldson.

Notes in Chronological Order

1987 through 1989: Data was not included because it is incomplete and because the route was 11 miles longer than the route used from 1990 through the present.

1990 through 1995: The race began in the evening (a “PM Start”), which is, by all accounts, faster. Thus course records are not noted above.

1999: The feature length documentary film “Running on the Sun” was filmed, creating a larger field than ever before and, we would argue, a higher than average “drive to succeed” due to the plethora of cameras on the course.

2000 to the present: The field became much more international and thus significantly faster and more competitive than previous years. In 2000, the highest placed American was in sixth place, five hours behind the winner. Since then only in 2007 has a non-American won.

2002 and 2003: Pam Reed, a female, won the race overall.

2003: This year, even by Badwater standards, was “extra hot.” Thus the finishing and bucking cut-off averages dipped, rather than rose, that year. Interestingly, the sub-40 and the sub-34 hour averages rose, so apparently the very top competitors were not negatively affected by the heat.

2011: In light of the increasingly faster finishing times, the overall cutoff was dropped from 60 hours to 48 hours.



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Shannon Farar-Griener

Moeben CEO and
5x Badwater finisher

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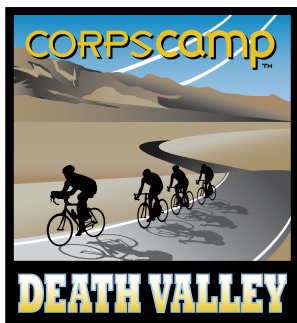
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adventureCORPS Cycling



October 27, 2012

Our Fall Death Valley ride offers one-of-a-kind, 108-, 144- and 197-mile cycling routes to Scotty's Castle, Ubehebe Crater, and Hell's Gate in Mother Nature's greatest sports arena, Death Valley National Park! With full rider support, roving SAG vehicles, and impossible-to-get-lost routes with very little traffic, there's no better place to ride a century, ultra century, or double century cycling event!



February 25-28, 2013

The original CORPScamp features four days of SAG-supported, one-of-a-kind cycling in and around Death Valley National Park, as well as daily yoga classes, two group dinners, and more. We've been producing events here since 1990 and we never tire of sharing one of the world's most dramatic, inspiring, and unusual landscapes. From desert flowers to snow-capped mountains, we'll see it all by bicycle. Bring a camera or nobody will believe your stories!



March 2, 2013

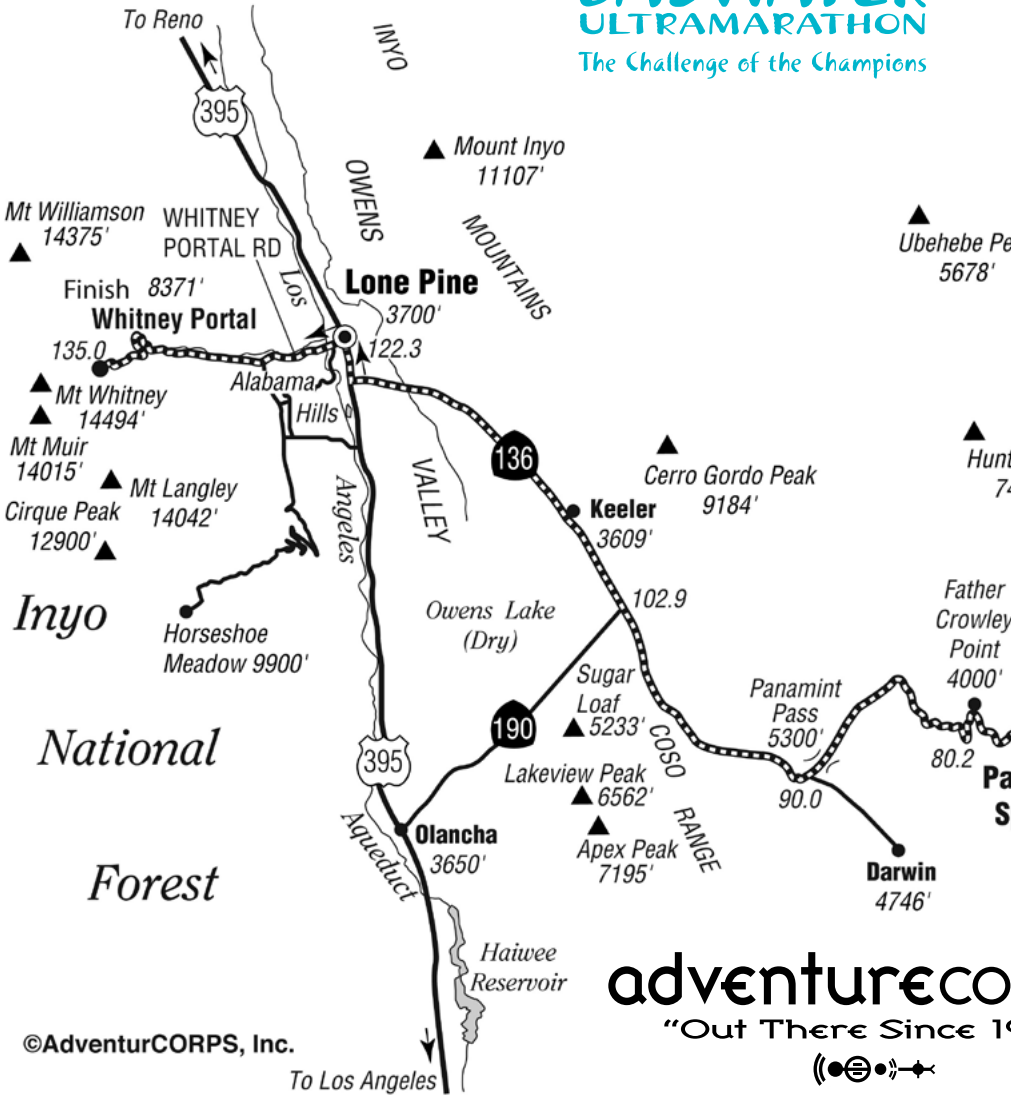
Our classic Spring Death Valley ride, held annually since 1990, offers one-of-a-kind, 105-, 150-, and 196-mile cycling routes past Badwater, Ashford Mill, and over the passes to Shoshone and back in Mother Nature's greatest sports arena, Death Valley National Park!

Want to kick off the New Year with a solid week of warm weather riding in paradise? Come ride CORPScamp, and the Spring ride!

Information and Registration: www.adventurecorps.com

BADWATER ULTRAMARATHON

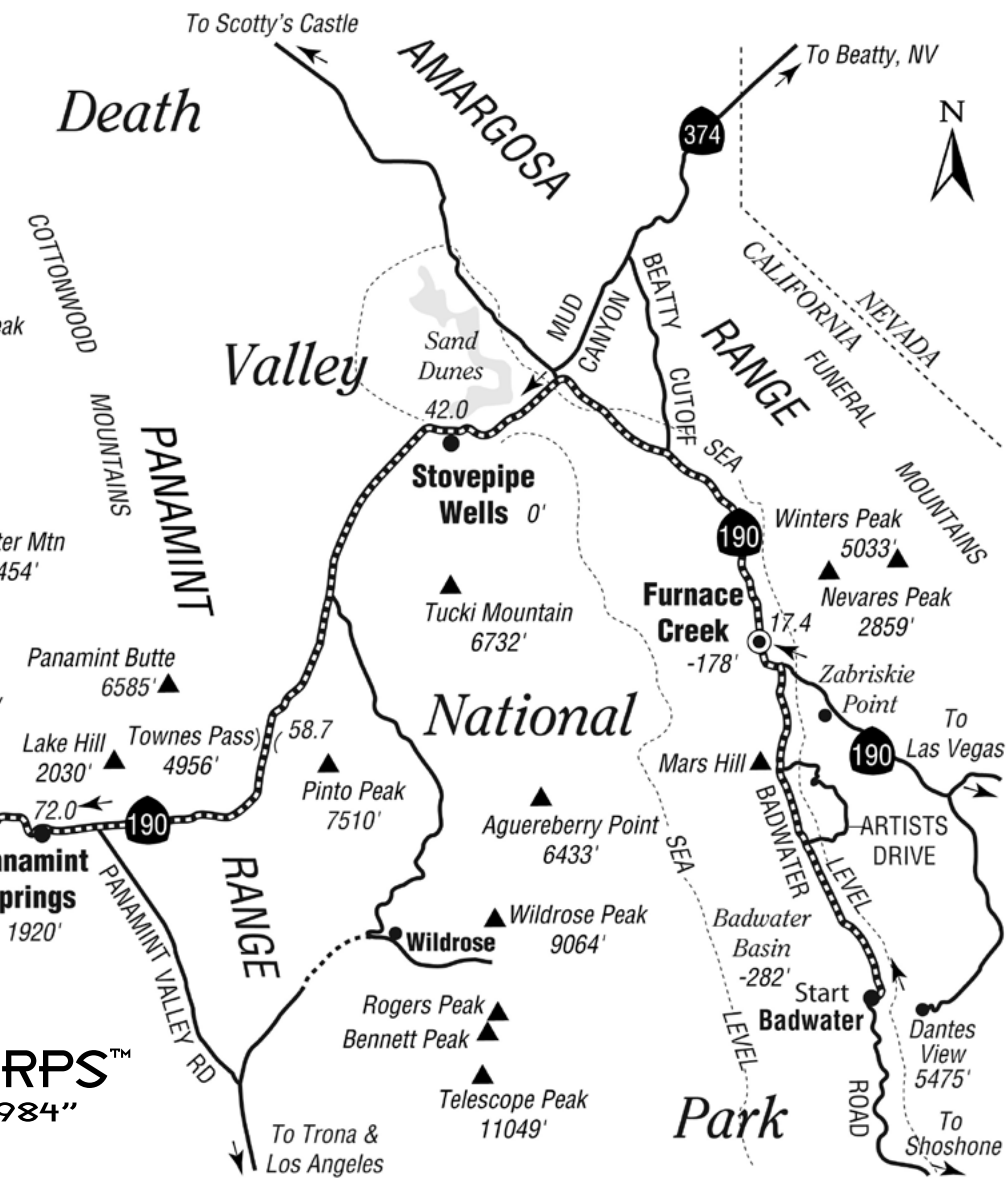
The Challenge of the Champions



©AdventurCORPS, Inc.

adventureCORPS
"Out There Since 1972"
((⊕)⊖)↔

Please, no groveling or whining. Treat your crew (and race staff) with respect. A tired and pissed off crew/pacer will never enhance your effort. Their responsibility is to stand tall and silently deal with the pain, misery and suffering of the race application."



h due respect. They deserve tons of thanks for their volunteered time. A responsibility is to pamper and prod you through the event. Your responsibility is to finish the race. Don't forget you were the one who filled out

— Arthur Webb, 13-time official finisher

OFFICIAL RACE ROUTE

OFFICIAL RACE ROUTE

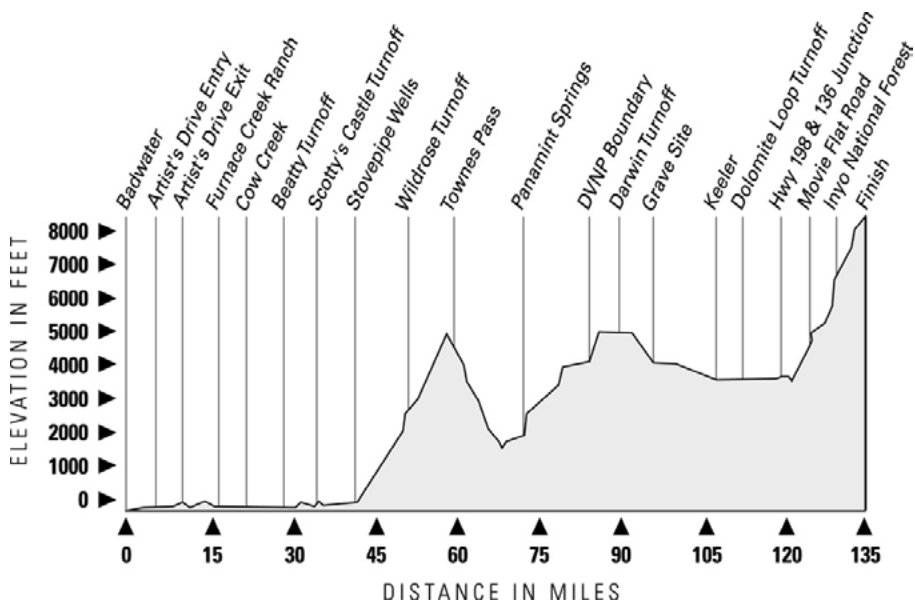
<i>Landmark</i>	<i>Distance (mi.)</i>	<i>Elevation (ft.)</i>	
Badwater	0	-282	
Telescope Peak Sign on L.	1.8	-200	
Wide Shoulder on R.	3.1	-200	
Natural Bridge on R.	3.5	-170	
Devil's Golf Course on L.	5.5	-165	
Artist's Drive entry on R.	7.9	-165	
West Side Road on L.	10.5		
Artist's Drive exit on R.	11.6	-70	
Mushroom Rock on R.	12.9	-170	
Golden Canyon on R.	14.4	-165	
Hwy 190 & 178 – Go Left	16.4	0	
Furnace Creek Ranch on L.	17.4	-165	First Time Station on Left after entrance
Chevron Gas and ice on L.	17.6	-165	
Visitor's Center on L.	17.7	-170	
Harmony Borax Works on L.	19.0	-170	
Cow Creek on R.	20.7	-170	
1st Marathon	26.2	-170	
Beatty, NV turnoff on R.	28.3	-165	
Salt Creek turnoff on L.	30.7	-165	
Sea Level Sign on L.	31.9	0	
Scotty's Castle turnoff on R.	34.7	-130	
Sea Level Sign on L.	35.2	0	
Sand Dunes turnoff on R.	35.8	0	
Devil's Cornfield sign on R.	36.1	-80	
Sand Dunes on R.	39.9	0	
Stovepipe Wells Village	41.9	0	Second Time Station / Medical on Left by Hotel Courtyard
Mosaic Canyon turnoff on L.	42.1	5	
1000' elevation sign	46.6	1000	
2000' elevation sign	50.5	2000	
Wild Rose turnoff on L.	51.0	2500	
2nd Marathon	52.4	2800	
3000' elevation sign on L	53.3	3000	
4000' elevation sign on L.	55.7	4000	
2nd Radiator Water Tank on R.	58.5	4900	
Towne Pass summit	58.7	4965	
4000' elevation sign on R.	61.5	4000	
Vista Point (view of Whitney)	62.2	3500	
3000' elevation sign on L.	63.8	3000	
2000' elevation sign on L.	66.1	2000	

<i>Landmark</i>	<i>Distance (mi.)</i>	<i>Elevation (ft.)</i>	
Adopt-a-Highway sign on R	67.7	1800	
Panamint lake bed, east edge	68.1	1640	
Panamint lake bed, west edge	69.1	1640	
Trona turnoff on L.	69.8	1750	
Panamint Springs Resort	72.3	1970	Third Time Station on Left at Resort
2000' elevation sign on L.	72.9	2000	
Darwin Falls turnoff miles 74 to 81*	73.3	2500	Dangerous, narrow area! -
3000' elevation sign on L.	75.8	3000	
3rd Marathon	78.6	3400	
4000' elevation sign on L.	80.2	4000	
Father Crowley's Point on R.	80.2	4000	
DVNP Park Boundary	84.9	4200	
Saline Valley turnoff on R.	86.0	4800	
5000' elevation sign	87.0	5000	
Darwin turnoff on L	90.1	5050	Fourth Time Station on Left at turnoff
5000' elevation sign on L.	92.4	5000	
Grave Site on R.	96.3	4100	
27.5 mile post marker	100.0	4050	
4000' elevation sign on L.	101.6	4000	
Hwy 136 & 190 – go straight	102.9	3935	
4th Marathon	104.8	3800	
Keeler	107.8	3610	
Adopt-a-Highway sign on R.	108.5	3605	
Dolomite loop turnoff on R.	112.6	3600	
Dolomite loop turnoff on R.	116.9	3610	
Owen's River	117.7	3610	
Junction Hwy 136 & Hwy 395 - Go Right	120.3	3695	
Dow Villa Hotel on Right	122.3	3610	Fifth Time Station / Medical on Right at Dow Villa
Portal Road light – go Left	122.4	3610	
Tuttle Creek turnoff on L.	122.9	3770	
LA Aqueduct	123.0	3855	
Lone Pine Creek	124.1	4200	
Movie Flat Road on R.	125.1	4590	
Lone Pine Creek	125.3	4800	
Horseshoe Meadow on L.	125.5	5000	
Cuffe Ranch turnoff on R.	126.7	5100	

OFFICIAL RACE ROUTE

<i>Landmark</i>	<i>Distance (mi.)</i>	<i>Elevation (ft.)</i>	
Olivas Ranch turnoff on L.	128.0	5300	
Lone Pine Campground on L.	129.0	5700	Dangerous, narrow area! - miles 129 -135*
Lone Pine Creek	129.2	6000	
Inyo Nat. Forest sign on R.	129.5	6400	
Large pullout on R.	130.8	6890	
5th Marathon	131.0	7000	
Switchback to left	131.7	7215	
Vista Point	132.4	7400	
"Campsites 39-44" sign on R	133.3	7700	
Meysan Lakes trailhead on L.	133.5	8035	
Family Campsites	133.7	8100	
Overflow Parking	134.3	8200	
Finish	134.4	8360	

Official distance is 135.0 miles. Remember all car odometers have error. Distances above are accurate in a relative sense, but you may find variation in the overall distance, as we did when creating the above routesheet.



COURSE DESCRIPTION

Badwater, Death Valley

The race begins here adjacent to a pool of salt-water located at the lowest place in the Western Hemisphere.

Furnace Creek Ranch, Mile 17.4 (Time Station One)

The first oasis in our journey. A gas station, small general store, hotel, restaurant, camping, and ice are available.

Stovepipe Wells, Mile 41.9 (Time Station Two)

A small market, gas station, restaurant and motel. The gas station and restaurant are not open 24 hours. Location of the race's Medical HQ for most of first day and night of the race.

Towne Pass (4956'), Mile 58.7

17-mile long ascent, then 10-mile long descent, followed by approx. 14 long straight miles. It's a steep and narrow road with limited opportunities to park. Support vehicles, crews, and runners must be cautious and extra aware of the traffic.

Panamint Springs Resort, Mile 72.3 (Time Station Three)

Restaurant, gas station, and motel with limited hours. Our friends at Panamint Springs Resort are kindly donating the use of "The Cottage" as a way station for any and all race entrants and crews: There are several beds and a shower available throughout the first day and night of the race. Bring your own towel, soap, and shampoo. After passing Panamint Springs, a long, steep climb follows on a steep and narrow road with limited opportunities to park. Support vehicles, crews, and runners must be cautious and extra aware of the traffic.

Father Crowley's Turnout, Mile 80.2

This isn't the top. The road continues to rise to 5000' over rolling hills, then eventually descends into the Owen's Valley. As of 2011, there are bathrooms and paved parking here, rather than just a large gravel pullout.

Darwin Turn-Off, Mile 90.1 (Time Station Four)

Just a few miles to the south of our route is the small inhabited ghost town of Darwin, the website for which touts "NO broadcast TV; NO AM/FM radio, NO cell signal; NO stores; NO restaurants." This is where the race usually starts to get serious for all entrants.

Keeler, Mile 107.8

A small mining town with no facilities to the left of the highway. Amazing views of Mt. Whitney and the Sierra Nevada abound.

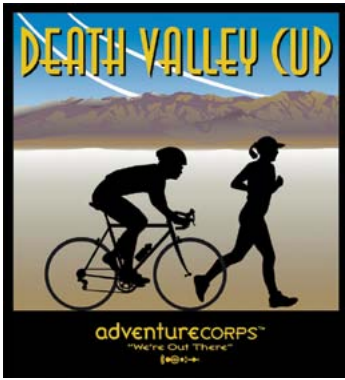
Lone Pine, Whitney Portal Road, Mile 122.2 (Time Station Five)

Lone Pine offers the weary runner and crew all the amenities of a real town: fast food, pizza, restaurants, motels, gas stations, grocery stores, and more, not to mention our Race Headquarters at the Dow Villa. Restock here for the climb to Whitney Portal. Turn left onto the Whitney Portal Road to begin the final leg, the longest and steepest climb of the race (13 miles with 5000 feet of elevation gain). After the turn from Hwy 395, it's 8.4 miles to Time Station Six, located at the start of the switchbacks. Temperatures will steadily decrease during the ascent. Be prepared with extra layers of clothing and rain gear the final few miles; at night it can approach freezing temperature. Be sure your support vehicle is completely off of the road and that you do not block traffic, even for a moment.

Mt. Whitney Trailhead, (8360'), Mile 135

Congratulations! You have finished the most extreme running race in the world! A small diner/shop are open during daylight hours. There is also a stocked fishing pond and a campground (because, of course, after running 135 miles, you really want to go fishing and camping!).





The Death Valley Cup recognizes those athletes who complete both the Badwater Ultramarathon 135 Mile Running Race and the Furnace Creek 508 Mile Bicycle Race in the same calendar year. To earn this recognition is a very significant achievement in endurance sports and especially for those athletes who have come to know and love Death Valley and its environs.

For more information about Furnace Creek 508, visit: www.the508.com

Current Death Valley Cup Record Holders

Charlie Engle, “Water Dragon” Greensboro, NC, 47, 2009 (2nd DV Cup)



Badwater

25:45:11, 4th place

Furnace Creek

33:19:25, 4th place

=59:04:36 total time*

Shanna Armstrong “Dik Dik” Lubbock, TX, 34, 2008

Badwater

31:16:10, 3rd female,
7th overall

Furnace Creek

34:30:58, 5th female,
24th overall

=65:47:08 total time*



*(*To receive the Death Valley Cup plaque, these combined record times must be broken.)*

Death Valley Cup Finishers

Athletes	Yr	Badwater	FC508	Time
Kaname Sakurai, "Sea Lion" Nagoya, Japan, 36	2000	27:52:14, 3rd place	32:31:56, 2nd place	60:24:10
Charlie Engle, "Water Dragon" Greensboro, NC, 44	2007	27:42:32, 5th place	34:31:12, 13th place	62:13:44
Danny Westergaard, "Wiener Dog" Rolling Hills, CA, 48	2007	32:22:58, 12th place	35:51:38, 19th place	68:14:36
Monica Fernandez, "Quetzal" Casablanca, Morocco, 40 (Guatemala)	2008	35:17:59, 7th female, 12th overall	32:58:12, 2nd female, 12th overall	68:16:11
Patrick Candé, "Golden Eagle" Tahiti, French Polynesia, 48	2005	34:13:21, 7th place	36:52:12, 37th place	71:05:33
Danny Westergaard, "Wiener Dog" Rolling Hills, CA, 49 (2nd DV Cup)	2008	36:31:46, 17th place	34:38:34, 23rd place place	71:10:20
Marshall Ulrich, "Unicorn" Ft. Morgan, CO, 43	1996	33:01, 1st place	38:32:45, 16th place	71:33:45
Nickademus Hollon, "Horned Lizard" San Diego, CA, 20 (2nd DV Cup)	2010	31:53:00, 13th place	39:53:28, 21st place	71:46:28
Monica Scholz, "Scarlett Fairy Cup" Jerseyville, Ontario, Canada, 39(2nd DV Cup)	2006	32:07:01, 1st female, 8th overall	40:00:02, 2nd female, 27th overall	72:07:01
Jean Michel Monot, "Manta Ray" Tahiti, French Polynesia, 45	2005	36:51:12, 11th place	35:53:48, 31st place	72:45:00
Monica Scholz, "Scarlett Fairy Cup" Jerseyville, ON, Canada, 37	2004	29:22:29, 1st female, 3rd overall	44:29:15, 1st female, 25th overall	73:51:44
Danny Westergaard, "Wiener Dog" Rolling Hills, CA, 50 (3rd DV Cup)	2009	35:51:24, 28th place	39:54:25, 14th place	75:45:49
Danny Westergaard, "Wiener Dog" Rolling Hills, CA, 52 (2nd DV Cup)	2011	38:29:58, 42nd place	37:40:22, 23rd place place	76:10:20
Nickademus Hollon, "Horned Lizard" San Diego, CA, 19	2009	33:21:29, 18th place	44:06:44, 24th place	77:28:13
Michele Santilhana, "Shongololo" Menlo Park, CA, 38 (South Africa)	2008	39:42:23, 11th female, 29th overall	38:01:42, 7th female, 42nd overall	77:44:05
Danny Westergaard, "Wiener Dog" Rolling Hills, CA, 51 (4th DV Cup)	2010	37:13:19, 30th place	40:32:17, 23rd place	77:45:36
Steve Teal, "Desert Duck" Phelan, CA, 42 (3rd DV Cup)	2007	44:16:27, 50th place	34:16:04, 11th place	78:32:31
Tim Hewitt, "Muskox" Greensburg, PA, 56	2010	36:30:52, 26th place	42:11:07, 32nd place	78:41:59
Steve Teal, "Desert Duck" Phelan, CA, 45 (5th DV Cup)	2010	42:15:49, 47th place	37:15:00, 16th place	79:30:49
Steve Teal, "Desert Duck" Phelan, CA, 40	2005	43:56:20, 34th place	35:39:52, 29th place	79:46:12
Steve Teal, "Desert Duck" Phelan, CA, 43 (4th DV Cup)	2008	45:24:20, 56th place	35:12:55, 26th place	80:37:15
Angelika Castaneda, "Cat" San Diego, CA, 56	1999	36:58, 1st female, 8th overall	43:46:40, 3rd female, 18th overall	80:44:40
Steve Teal, "Desert Duck" Phelan, CA, 41 (2nd DV Cup)	2006	42:29:16, 32nd place	41:24:06, 29th place	83:53:22
Greg Pressler, "Pheasant" Portland, OR, 43	2011	38:36:46, 43rd place	42:18:56, 39th place	80:55:42
David Jackson, "Jackass" Lexington, KY, 43	2002	47:12:30, 25th place	38:56:12, 15th place	86:08:42
Del Scharffenberg, "Spider" Portland, OR, 52	1997	48:16, 13th place	42:15:26, 10th place	90:31:26
Charlie Liskey, "Lizard" Somis, CA, 40	1996	58:26, 14th place	39:32:08, 17th place	97:58:08

OFFICIAL RULES

General Race Rules

1. There are three starting times for the 2012 Badwater Ultramarathon (6am, 8am, and 10am on July 16, 2012), but all racers in all groups are competing in the same race. Runners may attend only their assigned start time. Runners must check in at the start line, ready to race, 30 minutes prior to their start time. Starting Groups are assigned by the race director and are non-transferable. Split times will be collated throughout the race to maintain overall standings. There are only two divisions: men's and women's. The racer to arrive at the finish line in each division with the lowest overall time, based on their starting time, will be considered the winner.

2. The race number must be worn on the front of the body, unmodified, unfolded, and visible at all times during the race. It may not be worn on the head or hat.

3. The clock does not stop for any reason until the race course officially closes 48 hours after each designated official start time. All racers must leave the course by the 48th hour beyond their start time: Finishing, or remaining on the race course with the intent to continue, is not allowed after 48 hours.

4. All runners must have passed, and be proceeding forward, beyond the following locations within the specified time cut-offs:

- Stovepipe Wells: within 12 hours of their respective start time (STRONGLY ENCOURAGED).
- Panamint Springs Resort: within 28 hours of their respective start time (MANDATORY).

Note: Failure to pass Panamint Springs Resort within the specified 28 hour time cut-off will result in disqualification. Runners MAY NOT continue under human power, officially or unofficially, unless they have continued beyond the Panamint Springs time station within 28 hours of their starting time.

Additionally, beyond Panamint Springs Resort, if it becomes clear that a runner will not be able to finish the race officially within the 48-hour time limit, that runner may be forced to withdraw from the course and the race prior to the actual conclusion of the 48 hours.

5. Running must always be single file, on the far left side of the road or off the left side of the road, facing traffic (pacers, too).

6. Racers must make their presence known at all Time Stations located along the route. Runner arrival times at Time Station will be recorded and made public.

7. The race ends at Mt. Whitney Portal. If any entrant or crew member chooses to hike to the summit, official race logos must not be worn and the appropriate permits must be obtained from the Forest Service.

8. Racers, crew, and staff must not litter, mar, or pollute the landscape or environment.

9. All racers, crew and staff must display courtesy, good taste, decorum, and sportsmanship at all times. Nudity is specifically not allowed.

Legal and Bureaucratic Issues

1. All racers must follow and complete the entire application and entry process, filling out all forms and paying all necessary fees.

2. All racers must sign the Entrant Contract.

3. All racers and all crew members must sign the Accident Waiver and Release of Liability / Release of Name and Likeness. Each entrant must also bring the properly completed Check-In Form and Medical History Form to Runner Check-In.

4. All race vehicles must meet the minimum requirements of property damage and personal injury liability automobile insurance for the State of California. All vehicle drivers must be fully licensed.

5. All racers and the designated Crew Chief for each entrant must attend Racer Check-In. Additionally, all racers, their designated Crew Chiefs and exactly two or three crew members per racer must attend their assigned Pre-Race Meeting (Meeting 1, 2, or 3, based upon assigned Starting Wave times of 600, 800, or 1000am, respectively). Those racers who do not complete the scheduled check-in and attend their assigned meeting will not be allowed to participate. No exceptions.

6. All racers must be willing to submit to a drug urine test before, during, or after the race. If any WADA banned substances are detected, the racer will be disqualified from competition and listed as **DISQUALIFIED FOR DOPING** in the final standings of the race.

7. All racers and crew must pay the Death Valley National Park Entrance Fee for each of their support vehicle(s). Proof must be brought to Runner Check-In. Runners will not be allowed to check-in for the race without proof of paying the Park Entrance Fee.

8. All entrants must bring one U.S. dollar (or more) in a sealed envelope to Racer Check-In. Please write the runner number on the envelope. This envelope will not be returned and the money will be donated to charity.

9. During Racer Check-In, all entrants must display a minimum of four satisfactory reflective vests and eight blinking red lights - which will be worn and utilized by the runner and crew during nighttime periods of the race. Runners without satisfactory quality, or quantity, nighttime safety equipment will be required to purchase additional gear at that time, IF any such gear is available.

10. During Racer Check-In, all entrants must display four race-legal vehicle identification signs (details below) for each support vehicle which will support them during the race.

11. All applicants must be a minimum of 19 years in age when submitting an application to race.

12. No TV, film, or video crew, person, producer, director or other broadcast media representative may accompany or cover any racer or the race itself without the specific written permission of AdventureCORPS, Inc. All film crews must sign a Non-Exclusive Licensing Agreement and, potentially, pay a Rights Fee. Additionally, Death Valley National Park and/or the U.S. Forest Service may also require payment of a filming fee and signature of a filming agreement.

Support Crew and Assistance

1. Each racer must be accompanied by a support crew comprised of at least one four-wheeled motor vehicle and two crew members - both of whom are legally licensed to drive and at least one of whom can speak English - at all times. Each racer must have his or her own personal support crew and vehicle; crew and support vehicles may not be shared, except informally in the spirit of the event, i.e., crews may lend assistance to other racers or crews. Race entrants may have no more than two support vehicles and no more than six crew members in total (including “unofficial” and “family cheering squads”) at the race. This includes at the finish line: no more than six crew and two vehicles may be present.

2. Runners must progress under their own power without drafting, helping, pushing, supporting, or any other type of physical assistance. Runners may not use walking sticks, ski poles, or the like. So-called “cooling vests” or other types of artificial / technological cooling systems may not be worn or utilized by race entrants while making forward progress on the race course. Crewmembers may not carry an umbrella or shade cover for a runner.

3. Runners may not be accompanied by more than one pacer at any given time while making forward progress on the race course. Additional crew members that are handing off supplies, or otherwise providing aid, to the runner and/or pacer must be off the roadway at all times (i.e. left of the white line on the shoulder) and may not run along with the runner. To be clear: if a

OFFICIAL RULES

runner is moving forward on the race course, NO MORE THAN ONE crew member may also be moving with, or near, the runner at the same time.

4. Runners must not run abreast with other runners or with pacers. All running must be single-file. Pacers may not run in front of race entrants at any time.

5. Crew members may not use illegal drugs, stimulants, or dope, as well as alcohol of any kind, during the race or at any official race events or activities.

6. Runners under the age of 60 may not be accompanied by pacers or moving crew members between Badwater and the Furnace Creek time station.

7. Wheeled conveyances (other than a motorized support vehicle), including in-line skates, strollers, and bicycles, are prohibited on the course at all times. Likewise for hovercrafts and helicopters. Runners accompanied by any such conveyance will be disqualified.

Support Vehicles

1. The California Motor Vehicle Code, and all local, county, and/or National Park Service laws, rules, and regulations, must be respected at all times. In particular, support vehicle drivers and crews are reminded that phones must only be operated by the driver with a hands-free device; seat belts must be worn by all vehicle occupants at all times while moving, and it is illegal to drive on a highway while displaying emergency flashers. For further information, consult the DMV Code.

2. Support vehicles may not be wider than 78" in width, not counting mirrors, fenders, or bumper which extend beyond the widest part of the actual vehicle body. Small Cars, Minivans, and SUVs are recommended. Oversize SUVs, vans, and trucks, or other types of oversize vehicles are strongly discouraged, even as a secondary support vehicle. Motorhomes, RVs, "SportsMobiles," Sprinter Vans, and all types of Hummers are specifically not allowed.

3. Race entrants may have no more than two support vehicles and no more than six crew members in total (including "unofficial" and "family cheering squads") at the race. This includes at the finish line: no more than six crew and two vehicles may be present. Secondary support vehicles, if any, may not "caravan" with the primary support vehicle; secondary support vehicles are to be used for running errands, crew shift changes, and such. For safety reasons, and to make the limited shoulder parking available to all support crews, secondary vehicles may not generally be in the vicinity of the runner and primary support vehicle, except when passing off supplies and/or crew members. Specifically, secondary support vehicles must leapfrog a minimum of five miles when on the race course in the vicinity of their athletes.

4. All support vehicles must have their headlights on while driving, 24 hours a day, except as noted in Rule 11 in this section of the rules.

5. All race vehicles must have highly visible signage on the back of the vehicle stating "CAUTION RUNNERS ON ROAD," as provided by the race organizers at Runner Check-In. Magnetic, reflective, professionally made signs for this purpose can be made to order by your local sign shop instead.

6. All support vehicles, including secondary support vehicles, must have their racer's name and race number easily and clearly visible on all four sides. The race number must be at least 11" (28cm) tall and the racer's name must be at least 6" (15cm) tall. Our suggestion is to order standardized, professionally made signs for this purpose from a specific Los Angeles-based sign shop. It is each race entrant's responsibility to create or pay for their vehicle identification signs. For those who order the signs from the specified LA sign shop, the race organizers will pick up all ordered signs, bring them to Furnace Creek, and deliver them at Racer Check-In.

7. Vehicle windows may not be blocked or obstructed with any signage, paint, or the like. All

vehicles will be inspected at the start line at Badwater, and no runner will be allowed to start the race who has any vehicle windows blocked. If a runner support vehicle is found with blocked windows during the race, that runner will be forced to stop and wait while the vehicle's windows are unblocked and signage properly mounted.

8. Only one support vehicle is allowed for each racer at the Start Line before the race and then between the Start Line and the Furnace Creek time station during the race.

9. Only one support vehicle is allowed to support each runner on the Whitney Portal Road. Any second support vehicle must drive directly from Lone Pine to the finish line, stopping NO MORE THAN ONCE anywhere on the Portal Road, if necessary, to swap crew members or transfer supplies with the active support vehicle.

10. Vehicles must "leapfrog" the runner at all times. Attempt to make each "leapfrog" at least one mile or more in length. Racers may not be "shadowed" (driving a vehicle at the runner's speed) and vehicles must not "caravan" (drive together, like a train, at any speed). Driving may never be at the speed of any racer. Driving must be done at the speed of traffic, never slowing down to encourage, talk to, or lend assistance to any racer while moving. All assistance must be provided by pedestrian crew members; handing off of supplies from the vehicle is never allowed.

11. Vehicles must be parked completely off the road surface whenever they are stopped (with all four tires right of the white line). Many areas of the route have very little shoulder for parking so care must be taken in choosing stopping places. When stopping/parking, vehicles may not stop on the left side of the road. All stopping/parking must be on the right side of the road, off the roadway. From 700pm to 600am each day (night) of the event, at all times while stopped or parked off the road, support vehicles must have their headlights turned off and emergency flashers turned on.

Safety and Medical Issues

1. Remember, at all times and in all situations, safety is the most important issue. This means safety for racers, crew, staff, and the general public. The roads are not closed for this event and are, in fact, quite busy with tourist and local traffic.

2. I.V.s (intravenous fluids) are not permitted during the race. If a racer receives an I.V. during the race, for any reason, then that racer is disqualified and must withdraw from the race and the race course.

3. From 700pm to 600am each day (night) of the event, while outside on the race course, all racers and all crewmembers/pacers must wear reflective material facing in all four directions, as well as blinking red lights facing front and rear. Racers and crewmembers are encouraged to wear reflective material during the day as well. We highly recommend the products from ZombieRunner.com (click "Nighttime Running" in their store.)

4. Racers are responsible for both their own and their crew's actions; crews are responsible for both their own and their racer's actions.

5. Always look and listen both ways before crossing the highways. Remember that drivers will not expect to encounter a racer or parked vehicle out on the course. Remember we are on public roads. Racers should not cross over the highway more than necessary; crew should cross the highway carefully to bring assistance to their racer.

6. All entrants and crew must study "Medical Risks in the Badwater Ultramarathon," "Dangers of Running in the Heat," and "The Dangers of Hot Weather Running".

Leaving the Course or Withdrawing

1. Every inch of the course must be traveled by each racer. In the event of a routing error, e.g., wrong turn, the racer may be driven back to the exact original spot where he/she left the course

OFFICIAL RULES

and continue running from that location. There will be no allowance made for lost time or miles run in the wrong direction.

2. If a racer needs to leave the course, his/her crew must note the exact location with a numbered stake in the ground. This numbered stake must be visible from the road in both directions. The racer must then resume the race from the same place that he/she left it. The numbered stakes will be provided to all runners at Runner Check-In. Racers may only leave the course for appropriate reasons such as rest or medical attention. Focus must be kept on the speedy completion of the course.

3. If a racer withdraws, he/she or his/her crew must contact Race Headquarters or a Time Station immediately. Name, reason for withdrawal, time of withdrawal, and miles completed must be stated. All racers and crew who drop are encouraged - and expected - to come to the finish line and both post-race events to greet and celebrate with their fellow racers and crews.

4. All Emergency Evacuation costs for participants or crews will be borne by that person or their heirs. The race organizers are in no way liable or responsible for emergency evacuation.

Awards

1. All racers who begin the event will receive a Badwater Ultramarathon race t-shirt, hat, Race Magazine, and a goodie bag with other one-of-a-kind Badwater items and products from the race sponsors, as well as entry into the post-race pizza party (for the racer and up to six crew members). All racers who officially complete the event within 48 hours will receive a finisher's t-shirt and commemorative Badwater Ultramarathon buckle.

Rule Enforcement and Penalties

1. Race rules are designed to provide a safe and fair experience for everyone involved and to help ensure our ability to produce the race again next year.

2. Major rule infractions by racers or their crew, especially those regarding "cheating," will result in immediate disqualification of the racer.

3. Other, lesser offenses will result in the following cumulative time penalties:

- First Penalty: One Hour
- Second Penalty: Disqualification

4. Time penalties are imposed by stopping at the final Time Station in Lone Pine to serve his/her time. The race and clock will continue while the penalized racer waits out his/her penalty time. A Race Official will be present to oversee this process.

5. The Race Director has the authority, at any time, to overrule any rule or invent a new rule based on extenuating, unforeseen, and/or unusual circumstances and/or to maintain the integrity and fair play necessary for the successful completion, and continuation, of the race. The Race Director has ultimate authority in regards to all rules, their interpretation, and their enforcement. There is no "appeals committee" nor an "appeals process." All entrants in the race, and their support crews, willingly acknowledge this fact, as well as all other race rules, by attending the race in any capacity.

6. In all cases and circumstances, it is the intent, and spirit, of the rules which will govern their implementation and enforcement.

Finally

1. Have fun and keep smiling!



2012 OFFICIAL RACE ROSTER

6:00AM START

#	Entrant	City	State	Country	Nationality	R/V	M/F	Age
32	Blanchard, Eric	Beaurepaire	Alpes	France	France	R	M	44
73	Bucci, Paolo	San Polo Torriile	Parma	Italy	Italy	V	M	59
51	Budzirik, Kimberlie	Friendswood	TX	USA	USA	V	F	52
57	Coats, David	Houston	TX	USA	USA	R	M	51
61	Cook, Ethel	Phoenixville	PA	USA	USA	R	F	47
64	Dangelo, Scott	Delray Beach	FL	USA	USA	R	M	45
66	Frixe, Eberhard	Meine	Lower Saxony	Germany	Germany	V	M	62
55	Frost, Chris	Malibu	CA	USA	USA	V	M	61
67	Gelber, Eric	Briarcliff Manor	NY	USA	USA	R	M	45
76	Green, David	Jacksonville Beach	FL	USA	USA	R	M	48
58	Grimm, Paul	Littleton	CO	USA	USA	V	M	43
53	Gungle, Bruce	Tucson	AZ	USA	USA	V	M	53
72	Jacaway, Scott	Downers Grove	IL	USA	USA	V	M	54
92	Mak, Chris	HKSAR	HKSAR	China	China	R	M	51
74	Marinistik, Dan	San Jose	CA	USA	USA	V	M	53
48	McKinney, Frank	Delray Beach	FL	USA	USA	V	M	49
11	Moon, Chris	Strathaven	Lanarkshire	UK	UK	V	M	50
65	Murphy, Meredith	Chester Springs	PA	USA	USA	V	F	33
38	Palmiero-Winters, Amy	Hicksville	NY	USA	USA	V	F	39
88	Parker, Ian	Irvine	CA	USA	UK	V	M	61
89	Portera, Anthony	White Plains	NY	USA	USA	V	M	41
77	Radtich, John	Monrovia	CA	USA	USA	V	M	58
68	Ratliff, Doug	San Antonio	TX	USA	USA	V	M	43
52	Re, Gerardo Hector	Rafael Calzada	Buenos Aires	Argentina	Argentina	R	M	52
17	Rita, Jason	Elkton	MD	USA	Australia	R	M	46
28	Rizk, Levi	St Petersburg	FL	USA	USA	R	M	28
18	Ryan, Lucy	Coquitlam	BC	Canada	Canada	R	F	44
37	Strychalski, Dariusz	Lapy	Podlasie	Poland	Poland	R	M	37
47	Stypula, Elaine	Farmington Hills	MI	USA	USA	R	F	47
24	Ulrich, Marshall	Idaho Springs	CO	USA	USA	V	M	61
14	Webb, Arthur	Santa Rosa	CA	USA	USA	V	M	70
81	Wiaderek, Markus	Ile Bizard	QE	Canada	Germany	V	M	44
50	Zwarkowski, Cheryl	Spring Valley Lake	CA	USA	USA	V	F	54

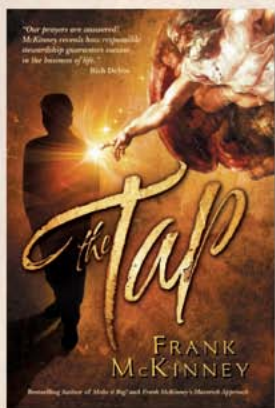
8:00AM START

#	Entrant	City	State	Country	Nationality	R/V	M/F	Age
19	Alexander, Lorie	Vernon	BC	Canada	Canada	V	F	53
21	Angel Andrade, Julio Cesar	Mexico	Distrito Federal	Mexico	Mexico	R	M	46
26	Basich, Crystal	Madison	OH	USA	USA	R	F	29
29	Beach, Maggie	La Crescenta	CA	USA	USA	R	F	41
36	Brehe, Michael	Osnabrueck	Niedersachsen	Germany	Germany	R	M	51
13	Dickerson, Alexa	Irvine	CA	USA	USA	R	F	24
80	Ehasz, James	Parker	AZ	USA	USA	V	M	59
75	Fegyveresi, John	State College	PA	USA	USA	R	M	35
59	Gleason, Jeff	Wexford	PA	USA	USA	V	M	54
39	Hafner, Joerg	Hamburg	Hamburg	Germany	Germany	R	M	39
82	Hardy, Timothy	Marietta	NY	USA	USA	R	M	51
85	Heid, Claire	Tacoma	WA	USA	USA	R	F	23
90	Hicks Jr., Claude	Fort Worth	TX	USA	USA	R	M	52
49	Kent, Karla	Las Vegas	NV	USA	Czech Republic	R	F	49
54	Kilpatrick, Samuel	London	Greater London	UK	UK	R	M	54
91	Lombardi, Bradford	Stuart	FL	USA	USA	R	M	43
93	Mazzi, Marco	Valeggio sul Mincio	Verona	Italy	Italy	R	M	45
94	Miller, Michael	Scottsdale	AZ	USA	USA	R	M	50
63	Olson, Mark K.	Covina	CA	USA	USA	V	M	65
97	Perry, Heidi	Lacey	WA	USA	USA	R	F	41
86	Posner, Kenneth	New York	NY	USA	USA	V	M	49
15	Radovic, Sergio	Delray Beach	FL	USA	Serbia	R	M	38
70	Recore, Brian	Valley Center	CA	USA	USA	V	M	36
25	Roberts, Hannah	Honolulu	HI	USA	USA	R	F	25
95	Rzeszotko, Leszek	Bielsko-Biala	Katowice	Poland	Poland	R	M	49
41	Sanchez, Ray	Sacramento	CA	USA	USA	V	M	45
98	Smith, Mosi	Annapolis	MD	USA	USA	R	M	30
60	Straw, Keith	Malvern	PA	USA	UK	V	M	57
10	Vila Casanovas, Joan	Mexico	DF	México	Spain	R	M	41
84	Westergaard, Danny	Rolling Hills	CA	USA	USA	V	M	53
27	Zdon, William	New York	NY	USA	USA	R	M	27

10:00AM START**Entrant**

#	Entrant	City	State	Country	Nationality	R/V	M/F	Age
20	Andersson, Mikael	Skultuna	Vastmanland	Sweden	Sweden	R	M	39
99	Arnstein, Michael	New York	NY	USA	USA	R	M	35
23	Ashizawa, Jeff	Waterloo	ON	Canada	Canada	R	M	46
100	Baluchi, Reza	Death Valley	CA	USA	Iran	V	M	40
42	Carver, Dave	London	ON	Canada	Canada	R	M	50
33	Clark, Tony	Wichita	KS	USA	USA	V	M	34
79	Corbarieu, Thierry	Lagrace Dieu	Haute-Garonne	France	France	R	M	43
62	Cowan, Robert	Coto de Caza	CA	USA	USA	R	M	51
71	Eadie, David	Frankston	Victoria	Australia	Australia	R	M	41
16	Eittinghausen, Ed	Murrieta	CA	USA	USA	V	M	49
3	Farinazzo, Marco	Resende	Rio de janeiro	Brazil	Brazil	V	M	44
4	Gingerich, Zach	Tigard	OR	USA	USA	V	M	32
30	Gunderson, Jonathan	San Francisco	CA	USA	USA	V	M	34
78	Hardel, Fabrice	San Diego	CA	USA	France	R	M	38
46	Helminger, Gabriel	Cambridge	MA	USA	France	R	M	46
45	Holdaway, Dale	Northville	MI	USA	USA	R	M	45
7	Inagaki, Sumie	Kasugai	Aichi	Japan	Japan	V	F	46
44	Iwamoto, Nobumi	Chiyoda	Tokyo	Japan	Japan	V	M	46
5	Jones, David	Eagleville	TN	USA	USA	V	M	60
2	Kamazases, Dean	Ross	CA	USA	USA	V	M	49
35	Lewis III, Harvey	Cincinnati	OH	USA	USA	V	M	36
31	Lindermuller, Kurt	San Rafael	Heredia	Costa Rica	Germany	V	M	52
1	Lopez, Oswaldo	Madera	CA	USA	Mexico	V	M	40
56	Matyazic, Mark	Irvine	CA	USA	USA	V	M	47
8	McCarthy, Philip	New York	NY	USA	USA	V	M	44
40	Morton, Mike	Lithia	FL	USA	USA	R	M	40
96	Nishimura, Hiroyuki	Kamagaya	Chiba	Japan	Japan	R	M	42
12	Philip, Ted	Wayland	MA	USA	USA	R	M	47
34	Ploskonka, David	Baltimore	MD	USA	USA	V	M	30
6	Reed, Pamela	Jackson	WY	USA	USA	V	F	51
22	Roman, Chris	Jacksonville	FL	USA	USA	V	M	42

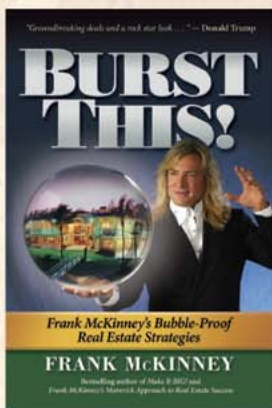
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Frank McKinney (frankmckinney.com) is a five-time international bestselling author, philanthropist, and extreme risk-taker, best known for his unprecedented success as a real-estate artist and visionary. He sees opportunities and makes markets where none existed before, designing, creating, and ultimately selling some of the most magnificent oceanfront estate homes in the world.

Whether applying his deep, fantastical creativity to these masterpieces or to his first young reader fantasy novel, McKinney consistently defies conventional wisdom to achieve success on his own terms. He is the founder and director of the nonprofit Caring House Project Foundation, which provides homes, schools, orphanages, medical clinics, churches, clean water, and renewable food sources to families in the most underdeveloped nations.

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- 1) Juan Sanchez and crew
- 2) Cheryl Zwarkowski
- 3) Ed Ettinghausen
- 4) Ray Sanchez and crew
- 5) Eberhard Frixe's crew logo

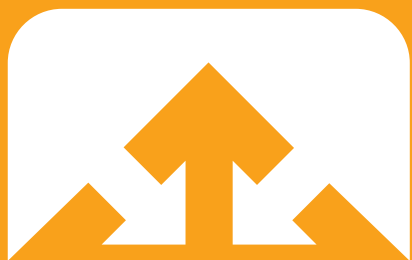
PHOTOS FROM 2011





- 6) Marco Farinazzo and crew
- 7) Webcaster Anna Leeg with Manfred Steiner
- 8) Lorie Alexander
- 9) Keith “Tutu Man” Straw
- 10) Top Three Women, L-R: Jen Vogel, Sumie Inagaki, Iris Cooper Imhof
- 11) Amy Palmiero-Winters
- 12) Terry Sentinella’s crew
- 13) Carmelo Nucifora and crew
- 14) Staffers CHP Scott and John Wiley





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