# BADWATER



# Death Valley National Park

The nation's **Lowest, Driest, & Hottest** Welcomes the world's **Toughest** 



Photo: Enrico Meier





Congratulations, you made it to the 2017 STYR Labs Badwater 135!

You will push yourself harder than you ever thought possible, testing every preconceived notion of what our bodies are capable of.

We have built our company around the idea that nourishing your body with customized vitamins, proteins and electrolytes, designed by your own unique body data, environmental and lifestyle inputs is key to achieving and maintaining optimum performance.

Your Body, Your Lab™





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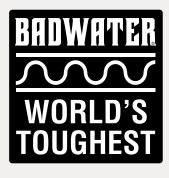
Out There Since 1984" ()•⊜•)→+

BADWATER<sup>®</sup> Magazine is published semiannually by AdventureCORPS, Inc. 638 Lindero Canyon Rd., #311, Oak Park, CA 91377 U.S.A. www.badwater.com www.adventurecorps.com

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Cover: Badwater Basin, Death Valley, as captured by eight-time Badwater 135 official finisher Ian Parker.

Design and Layout by Kevin Fung, kevin@kfungdesign.com



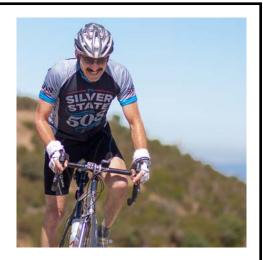
"Your commitment to taking ownership of what you touch and making it fun makes you the best."

> Jerry H, genl mgr for largest client



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Chris with Alex Ramsey



Chris with Ashley Lindsey



Chris with Pablo Segura Romero



Chris with Kayla and Kevin Delk

Welcome to the July 2017 edition of BADWATER<sup>®</sup> Magazine! We are AdventureCORPS<sup>®</sup>, an athlete-run firm producing and promoting ultra-endurance sports events and the BADWATER<sup>®</sup> brand. Adventure is our way of life, so we are pleased to host the 40th anniversary STYR Labs Badwater<sup>®</sup> 135, known globally as "the world's toughest foot race," on July 10-12, 2017.

This year's race celebrates the 40th anniversary of Al Arnold's original trek from Badwater to Mt. Whitney in 1977. Arnold, an ultrarunning pioneer and human potential guru, competed in a solo effort: it was just Arnold and his support crew against the elements and the clock. It took four more years until Jay Birmingham also completed the course, in 1981. The official head-to-head race began ten years after Arnold's pioneer trek, in 1987, and has been held annually since then without serious incident, fatality, or any citations issued by any branch of law enforcement.

As always, we tip our hat to the National Park Service, which celebrated their 100th birthday last year. Death Valley is the largest U.S. National Park outside Alaska at 3.4 million acres. Nearly 1000 miles of paved and dirt roads provide access to locations both popular and remote. Even so, 91% of the park is protected as officially designated Wilderness. That wild country includes low valley floors crusted with barren salt flats, rugged mountains rising as much as 11,000 feet, deep and winding canyons, rolling sand dunes, and spring-fed oases. We call it "Mother Nature's greatest sports arena."

The STYR Labs Badwater 135 is the final event in the Badwater<sup>®</sup> Ultra Cup, a three race series which began with the 51-mile Badwater<sup>®</sup> Cape Fear in March, continued with the 81-mile Badwater<sup>®</sup> Salton Sea in April, and now concludes with the STYR Labs Badwater 135 in July. Those runners who complete all three events in the same calendar year are featured on the Badwater.com website and their virtues are extolled throughout the Internet and in BADWATER Magazine. This year, nineteen athletes have completed the first two Badwater races and will now toe the line at the third and final race.

A true "challenge of the champions," the legendary STYR Labs Badwater 135 pits up to 100 of the world's toughest athletes—representing 19 countries and 21 American states in 2017—against one another and the elements. Covering 135 miles (217km) non-stop from the bottom of Death Valley to high on Mt. Whitney, CA, in the hottest time of the year, the STYR Labs Badwater 135 is the most demanding and extreme running race offered anywhere on the planet.

The start line is at Badwater Basin, Death Valley, which marks the lowest elevation in North America at 280' (85m) below sea level. The first 86.4 miles of the race course fall within Death Valley National Park. The Badwater 135 course covers three mountain ranges for a total of 14,600' (4450m) of cumulative vertical ascent and 6,100' (1859m) of cumulative descent. Whitney Portal is the trailhead to the Mt. Whitney summit, the highest point in the contiguous United States, and serves as the finish line.

Now in its eighteenth year producing this race, AdventureCORPS is pleased to welcome our title sponsor, STYR Labs—an innovative nutrition customization and tracking platform delivering cutting-edge supplements to connected athletes and health and fitness consumers worldwide. The advanced ecosystem includes an activity tracker, wireless scale and free app that collects health and fitness data to create personalized multivitamins or protein blends specific to the user's health and fitness goals and needs. The STYR Labs founder, Sergio Radovcic, is a well-known Badwater 135 veteran with three consecutive Badwater 135 finishes.

We also greatly appreciate the support of Farm to Feet Socks, Caring House Project Foundation, ZZYXXZ, and ZombieRunner.com, plus the local support of Furnace Creek Ranch, Stovepipe Wells Resort, Panamint Springs Resort, Dow Villa, Pizza Factory, the community of Lone Pine, CA, the people of Inyo County, 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. Finally, this race could not be held without the nearly 50 amazing, tireless, wonderful volunteers who make it all happen! We thank them especially!

Yours in sport,

Chrís Kostman

Race Director and Chief Adventure Officer

# AL ARNOLD, THE JOGGERNAUT

#### Memories from the man who went first, proving it possible:

In early 1961 I was invited to a gathering of scuba divers in Oakland. The guest speaker was Jacques Cousteau. At the end of his speech, he mingled with the club members in their bright dive club jackets. I wasn't a member and so didn't have the jacket. When they introduced me to Mr. Cousteau, he asked if I was a diver. A member said, "no, Jacques, he's a jogger." He flapped his arms and pointed at the sky and said "astronaut," then he pointed at the floor with swimming motions and said "aquanaut." Then he raised my arm overhead and said "Al, the joggernaut!" and everyone cheered.

That's the inception of the word "joggernaut," which is how I was introduced to the Badwater 135 runners when I came to spectate the race in 2002.

Back in 1977 when I ran from Badwater to Mt. Whitney, there were humourous moments and there were serious moments:

I was running along my myself by Artist's Canyon and this limousine came driving along. It pulled over and all these gorgeous women from Belgium got out. They wanted to know what I was doing, and then posed for pictures with me. I spent some time with them, but not enough, ha ha! The temperature was, of course, very hot. As a result, there was a mirage across the road and after they pulled away and headed down the road, it looked like the limo just ascended into the sky.

Later I made it to Panamint Springs and the Department of Transportation was stopping traffic from traveling up Hwy 190. There was demolition going on and there would be an eight-hour delay on the Father Crowley climb. Not wanting to wait eight hours, I grabbed two gallons of water and headed north, then west into the Panamint Valley desert. Eventually I ascended a rocky canyon all the way up to Father Crowley checkpoint, with the Cal Trans crews honking their horns so I would know which way to climb.

When I got back to the road, my only remaining crew member was Eric. I essentially was abandoned by the rest of my crew. (Earlier they had gone into Artist's Canyon and I didn't see them again until Stovepipe Wells. Fortunately Cal Trans came along and gave me water.)

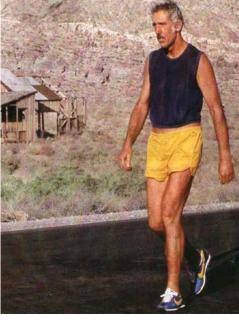
Simply put, without the crew, there can be no runner, so I'm thankful to Eric for sticking with me for the whole run. Crew members have to train for the heat, be alert, and take this very, very seriously. It could be a matter of life and death.

Two weeks after my 1977 run from Badwater to Mt. Whitney, I was in Hawaii, at the beach. I was hit by by a wave and totally paralyzed. At the hospital I was diagnosed with Brown-Siccard Syndrome. They gave me a walker and said maybe in a year I would be able to walk a few steps. I gave them the walker back and told them to give it somebody who could use it.

Three days short of one year later, I ran around Lake Tahoe, 72 miles. Without a walker.

The body follows the mind, and with hard work and dedication, anything is possible!





NOTE: Al Arnold is the Neil Armstrong and Edmund Hillary of ultramarathons, the first to run between Badwater and Mount Whitney, back in 1977, after two failed attempts in 1974 and 1975. He became the first inductee into the Badwater Hall of Fame in 2002, on the 25th anniversary of his historic run, and remains a staunch friend and fan of the race. He lives in Walnut Creek, CA and is 89 years old. His birthday is February 4, 1928. He can be reached by email at alarnold1977@ msn.com and loves hearing from fellow ultrarunners. His essays are archived on the Badwater.com website.



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One year before I set foot in Death Valley in 1981, I met Gary Morris at a running shop on the eve of my third attempt to run solo from Los Angeles to New York City. "What are you going to wear in the desert?" he asked.

In an hour, I'd been given a gauzy hooded shirt that would blunt the 100+ degree heat of the Mojave and dozens of heat-wave days in the Midwest.

Gary Morris was preparing to challenge Al Arnold's 84-hour mark for the 146 miles from Badwater to the summit of Mt. Whitney, a feat I'd read about in RUNNER magazine. Morris later wrote to me that he'd stopped at Townes Pass, unable to handle food.

In the year that followed, I pondered whether to give Arnold's record a shot. On paper, it seemed possible. My confidence to handle extreme heat was high. My summer vacation from teaching science gave me time to prepare. My wife and three kids would be my support crew.

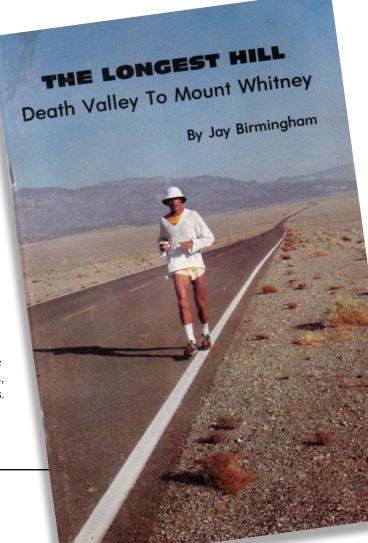
As I lived in north Florida, I trained on stairs, bridges, and sand dunes to strengthen my legs. One hundred mile weeks in heavy clothing enhanced my acclimation to heat.

The details of my 1981 success are in The Longest Hill, my book which Chris Kostman has posted on the Badwater website. In short, I covered Arnold's route in 75 hrs, 34 minutes. Max Telford (NZ) shattered my mark in 1982; Morris became the fourth to cover the route in 1983. The actual race began four years later, but I had no involvement with that until Chris reached out to me in 2000, eager to learn about the history.

Invited to join the Badwater Hall of Fame in 2003, I decided to enter the race, but quit with a sick crew after 75 miles. In 2004, at age 58, I returned to carve nine hours and 44 minutes from my 1981 time to Whitney Portal. After 23 years, the allure of Death Valley and Whitney drew out my best.

I am honored to have served on the Badwater 135 Application Committee for the past several years, evaluating the thousands of runners who, like me, are drawn to the challenge of the hottest place on Earth, to confront its hazards, and to ascend the side of the tallest mountain in the contiguous United States.

—Jay Birmingham



AdventureCORPS is pleased to welcome the support of STYR Labs, ZombieRunner.com, Farm to Feet, ZZYXXZ, and Caring House Project Foundation, as well as Furnace Creek Ranch, Stovepipe Wells, Panamint Springs Resort, and Dow Villa of Lone Pine, the community of Lone Pine, CA, the County of Inyo, and other generous companies and individuals.



#### SCHEDULE OF EVENTS

#### Sunday, July 9

**100-400pm:** Runner Check-In and Registration / Retail of BADWATER Gear: Held in the Stovepipe Wells Auditorium. Please do not all show up at 100pm! It takes quite a while to go through the Check-In process! We suggest that 1st wave runners arrive at 100pm, 2nd wave runners arrive at 200pm, and 3rd wave runners arrive at 300pm. (Each Racer and their designated Crew Chief must attend; all crew are welcome and encouraged to attend). NOTE: All retail is first come, first served. If there is something you NEED or MUST BUY, be there at 100pm to purchase.

**500-630pm: Pre-Race Meeting for ALL Racers + ALL Crew Chiefs.** ALL racers and ALL crew chiefs must attend the Pre-Race Meeting (but no other crew members). Held in the Auditorium at the National Park Service Visitors Center in Furnace Creek.

630pm(app.): Group Photo of All Racers at the Thermometer in front of the Visitors Center.

#### Monday, July 10

1230-130pm: Optional Races Rules Review / Questions & Answers / Discussion of Best Crewing Practices / Retail of Badwater Gear: Since only racers + crew chiefs may attend the Pre-Race Meeting on Monday, we are offering a follow-up meeting to review race rules and best crewing practices, as well as a Q&A session, along with retail of Badwater gear. This is open to everyone. If you want or need to know more before you start the race this evening, please attend! Held in the Stovepipe Wells Auditorium.

**130-200pm: Media Check-In and Briefing**: All journalists / media / photographers must attend. Held in the Stovepipe Wells Auditorium.

**200-300pm: Private Staff Meeting**: Held in the Stovepipe Wells Auditorium.

**800pm: 1st Wave Starts at Badwater Basin**: ALL Wave 1 runners must check in, weigh in, and receive their GPS tracker no later than 730pm.

**930pm: 2nd Wave Starts at Badwater Basin**: ALL Wave 2 runners must check in, weigh in, and receive their GPS tracker no later than 900pm.

**1100pm: 3rd Wave Starts at Badwater Basin**: ALL Wave 3 runners must check in, weigh in, and receive their GPS tracker no later than1030pm.

#### Tuesday, July 11

**300am: Furnace Creek General Store Closes.** By special arrangement, the General Store at Furnace Creek will remain open on the first night of the race until 300am. They have food, snacks, drinks, ice, and much more. Please support them, and stock up heavily!

Additionally, an ice trailer will be set up in the parking lot just east of the General Store. The crews will purchase the quantity they need at the registers in the store, then take the receipt to the trailer where the employees working the trailer will hand out the bags.

**400am: Stovepipe Wells General Store and Gas Station Opens**. By special arrangement, the General Store and Gas Station in Stovepipe Wells (at mile 42 of the race route) will open at 400am during the first night of the race. They have food, snacks, drinks, ice, and much more. Please support them, and stock up heavily!

**1000am: First Time Cut-Off**. Deadline for ALL RUNNERS, regardless of starting wave, to pass Mile 50.5 (2000' Elevation Sign, located 8.6 miles beyond Stovepipe Wells.)

**800pm: Second Time Cut-Off**. Deadline for ALL RUNNERS, regardless of starting wave, to pass Mile 72 (Panamint Springs Resort.)

#### Wednesday, July 12

**500am: Third Time Cut-Off**. Deadline for ALL RUNNERS, regardless of starting wave, to pass Mile 90 (Darwin Time Station.)

**700-900pm: Post-Race Get-together:** Lo-Inyo Elementary School at, 223 East Locust Street (1.5 blocks east of Hwy 395 in the north-east end of town). Pizza and drinks will be served. No charge (up to four crew per runner may attend).

NOTE: Although the 48-hour overall time limit remains in place in 2017, ALL runners are encouraged to complete the race by 600pm on Wednesday in order to attend the post-race get-together in Lone Pine. That "soft" deadline equals a 46 hour completion for the 800pm wave runners, 44.5 hours for 930pm wave starters, and a 43 hour completion for 1000pm wave starters.

**800pm: Course Closes for 1st Wave Runners** (48 hour time limit, based on start; all runners recommended to finish by 600pm.)

**930pm: Course Closes for 2nd Wave Runners** (48 hour time limit based on start; all runners recommended to finish by 600pm.)

**1100pm: Course Closes for 3rd Wave Runners** (48 hour time limit based on start; all runners recommended to finish by 600pm.)

SUNRISE / SUNSET (July 10): Civil Twilight (AM): 5:14am | Sunrise: 5:44am | Sunset: 8:08pm | Moonrise: 9:06pm | Civil Twilight (PM): 8:38pm | Moonset: 7:08am.

**PERMITS:** This event is held under special use permits from the California Department of Transportation, Inyo National Forest, Death Valley National Park, and Inyo County, and is additionally overseen by the California Highway Patrol. (If one of these agencies won't issue us a permit, this race could be cancelled. Please keep that in mind!)

#### DRIVING DISTANCES:

Las Vegas Airport to Furnace Creek: 120 miles Los Angeles Airport to Furnace Creek: 270 miles Lone Pine to Las Vegas Airport: 225 miles Lone Pine to Los Angeles Airport: 220 miles

#### **BADWATER CAPE FEAR**

The fourth annual **Badwater Cape Fear** 50km/51mi ultramarathon took place March 18 this year on Bald Head Island, North Carolina. A field of 183 runners from seven countries and twenty-six American states competed, with 76 of 79 runners completing the 50km race and 101 of 104 runners completing the 51-mile race.

With 50km and 51-mile race options, Badwater<sup>®</sup> Cape Fear features a twelve-mile warm-up on the car-free, one-lane-wide roads of Bald Head Island, followed by either 19 or 39 miles of running on the wild and secluded sandy beach between Cape Fear and Fort Fisher. The race is held along the Atlantic Seaboard with spectacular views of the Frying Pan Shoals to the east and wild and undeveloped marshlands to the west. Running this remote coast is a dramatic, invigorating, and inspiring manner in which to experience the Cape Fear region in all its grandeur!

This exquisite natural setting is the perfect antidote to the "real world" and a wonderful counterpart to the desert sands and



mountains of Death Valley and Anza-Borrego Desert featured in the two West Coast BADWATER<sup>®</sup> races.

Registration is already open for the March 17, 2018 edition, and there is a 200-runner limit which will sell out. Whether you are a grizzled Badwater veteran, or looking to take on your first Badwater race, we hope you will join us!

Visit www.badwater.com for all the information and the registration link.



# About Cape Fear

Cape Fear is a prominent headland jutting into the Atlantic Ocean from Bald Head Island on the coast of North Carolina in the southeastern United States. It is largely formed of barrier beaches and the silty outwash of the Cape Fear River as it drains the southeast coast of North Carolina through an estuary south of Wilmington.

Cape Fear is formed by the intersection of two sweeping arcs of shifting, low-lying beach, the result of longshore currents which also form the treacherous, shifting Frying Pan Shoals, part of the Graveyard of the Atlantic.

Dunes dominated by sea oats occur from the upper beach driftline back to the stable secondary dunes, where they mix with other grasses such as Saltmeadow Cordgrass and panic grass, as well as seaside goldenrod, spurge and other herbs to form a stable salttolerant grassland.

The Cape Fear estuary drains the largest watershed in North Carolina, containing 27% of the state's population.

Giovanni da Verrazzano, the Italian explorer sailing for France, made landfall after crossing the Atlantic at or near Cape Fear on March 1, 1524.

The name comes from the 1585 expedition of Sir Richard Grenville. Sailing to Roanoke Island, his ship became embayed behind the cape. Some of the crew were afraid they would wreck, giving rise to the name Cape Fear.[1] It is the fifth-oldest surviving English place name in the U.S.[2]

Cape Fear was the landing place of General Sir Henry Clinton during the American Revolutionary War on May 3, 1775. The 1962 movie Cape Fear and its 1991 remake were set at Cape Fear.

The legend of Cape Fear lives on with BADWATER® CAPE FEAR!

Source: Wikipedia

The fifth annual **Badwater Salton Sea** 81-mile ultramarathon took place April 30 - May 1 of this year. This remarkable event challenges teams of two or three ultrarunners – running together as duos or trios for the duration, NOT in a relay – to tackle an unimaginable traverse of Southern California deserts and mountains. This year, seventy-one runners from five countries and seventeen American states competed as 13 two-person teams and 15 three-person teams. Of the 28 teams entered, just 21 completed the race intact, with 63 of 71 runners finishing officially. Teams that do not finish as a complete unit are unranked, though all finishers receive the coveted Badwater Salton Sea buckle featuring the fish skeleton motif reminiscent of the start line.

The route covers 81 miles (130km) from Salton City (elevation 234 feet / 71m below sea level) to Palomar Mountain, the almost tallest mountain in San Diego County (elevation 5500 feet / 1676m.) Eight of the 81 race miles pass through Anza-Borrego State Park on a single track trail from near Borrego Springs to near Ranchita, creating a race route which is a mix of road and trail. There is a total elevation gain of over 9000 feet (2740m).

Registration is already open for the April 29-30, 2018 editions, and there is a 105-runner limit!

Visit www.badwater.com for all the information and the registration link.







## September 15-17, 2017 www.the508.com

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\* Carningon de la company

08

Danny "Wiener Dog" Westergaard is a ten-time consecutive finisher of Furnace Creek 508 / Silver State 508 and of the Badwater 135 Ultramarathon (2007-2016)!

MUTECORS

# A SALUTE TO *DANNY WESTERGAARD*, TEN-TIME FINISHER

#### By Chris Kostman

In 2017, we salute Danny Westergaard of Palos Verdes Estates, CA, who has successfully completed the Badwater 135 Ultramarathon ten times in a row, from 2007 through 2016 (age 48-58.) Concurrently, Danny has also completed the Badwater 135's sister race, an ultraycling race called Furnace Creek 508 / Silver State 508, all of those same ten years. Additionally, Danny is a two-time finisher of Badwater Salton Sea in 2013 and 2017.

Looking at all his strong finishes, to say he is "Mr. Consistent" would be an understatement. It would also be fair to call him "Mr. Nice Guy," as evidenced by his always-friendly smile and demeanor, and by the fact that he has had the same two-person crew for the majority of his Badwater 135 races! (Hats off to Jennifer Drain for crewing Danny at nine consecutive races and Patrick Sweeney for six!)

Year	Badwater	The 508	11 14
2007	32:22:58	35:51:38	Sunday .
2008	36:31:46	34:38:34	ALL ALL
2009	35:51:44	39:54:25	A CONTRACTOR
2010	37:13:19	40:32:17	Sec.
2011	38:29:58	37:40:22	
2012	33:22:00	39:52:42	and the second
2013	42:41:28	28:54:00	The state
2014	38:25:08	41:23:00	
2015	36:39:17	43:08:00	Sector 1
2016	36:14:40	43:30:00	Start Attack

Why does Danny come back to the Badwater 135 every year?

"Because I'm hooked! I love the feeling I get running through Death Valley, the other runners, the volunteers, the race staff, and the teamwork it takes to get through the race, and I really love the challenge and overwhelming feelings of accomplishment if you are lucky enough to cross the finish line at the top of the Whitney Portal road."



## The AdventureCORPS Cup (formerly the Death Valley Cup)

recognizes those athletes who complete both the Badwater 135 Ultramarathon and the Silver State 508 (formerly Furnace Creek 508) Bicycle Race in the same calendar year. To earn this recognition is a very significant achievement in endurance sports, and especially for those who love our AdventureCORPS events.

For more information about Silver State 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



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

Badwater 31:16:10, 3rd female, 7th overall Furnace Creek 34:30:58, 5th female, 24th overall

=65:47:08 total time\*

#### **DEATH VALLEY CUP FINISHERS**

\* Note: The 2013 edition of Furnace Creek 508, also known as "Trona 353," was held on an abbreviated 353-mile course due to the federal government shutdown. The race moved from the Furnace Creek Route in California to the Silver State route in Nevada in 2014.

Athletes	Yr	Badwater	FC508	Time
	2000	Badwater, 31:16:10, 3rd female,	Furnace Creek, 34:30:58, 5th female,	(5.45.00
Shanna Armstrong "Dik Dik" Lubbock, TX, 34	2008	7th overall	24th overall	=65:47:08
Patrick Candé, "Golden Eagle" Tahiti, French Polynesia, 48	2005	Badwater, 34:13:21, 7th place	Furnace Creek, 36:52:12, 37th place	=71:05:33
Joaquin Candel, "Toro" Henderson, NV, 45	2015	Badwater, 42:55:23, 67th place	Silver State 508, 49:57:50, 22nd place	=92:53:43
Angelika Castaneda, "Cat" San Diego, CA, 56 (1st Ever female DV Cup)	1999	Badwater, 36:58, 1st female, 8th overall	Furnace Creek, 43:46:40, 3rd female, 18th overall	=80:44:40
Meredith Dolhare, "RedAssd Monkey" Charlotte, NC, 40	2013	Badwater, 30:52:40 3rd female, 20th overall	"Trona 353*," 30:42:00 8th female, 54th overall	=60:34:40
Charlie Engle, "Water Dragon" Greensboro, NC, 45	2007	Badwater, 27:42:32, 5th place	Furnace Creek, 34:31:12, 13th place	=62:13:44
Charlie Engle, "Water Dragon" Greensboro, NC, 47 (2nd DV Cup)	2009	Badwater, 25:45:11, 4th place	Furnace Creek, 33:19:25, 4th place	=59:04:36
Charlie Engle, "Water Dragon" Greensboro, NC, 51 (3rd DV Cup)	2013	Badwater, 26:15:35, 5th place	"Trona 353*," 26:52:00, 12th place	=53:07:35
Monica Fernandez, "Quetzal" Casablanca, Morocco, 40, Guatemala	2008	Badwater, 35:17:59, 7th female, 12th overall	Furnace Creek, 32:58:12 2nd female, 12th overall	=68:16:11
Paul Grimm, "Wile E Coyote" Littleton, CO, 44	2012	Badwater, 46:13:12, 87th place	Furnace Creek, 45:10:28, 41st place	=91:23:40
Tim Hewitt, "Muskox" Greensburg, PA, 56	2010	Badwater, 36:30:52 26th place	Furnace Creek, 42:11:07 32nd place	=78:41:59
Nickademus Hollon, "Horned Lizard" San Diego, CA, 19	2009	Badwater, 33:21:29, 18th place	Furnace Creek, 44:06:44, 24th place	=77:28:13
Nickademus Hollon, "Horned Lizard" San Diego, CA, 20 (2nd DV Cup)	2010	Badwater, 31:53:00, 13th place	Furnace Creek, 39:53:28 21st place	=71:46:28
David Jackson, "Jackass" Lexington, KY, 43	2002	Badwater, 47:12:30, 25th place	Furnace Creek, 38:56:12 15th place	=86:08:42
James Kern, "Shrike" Sunnyvale, CA, 55	2013	Badwater, 33:57:30, 22nd place	"Trona 353*," 22:31:00, 11th place	=56:28:30
Charlie Liskey, "Lizard" Somis, CA, 40	1996	Badwater, 58:26, 14th place	Furnace Creek, 39:32:08 17th place	=97:58:08
Eric Meech, "Cattle Dog" San Diego, CA, 44	2013	Badwater, 41:17:32 47th place	"Trona 353*," 26:45:00 33rd place	=68:02:32
Jean Michel Monot, "Manta Ray" Tahiti, French Polynesia, 45	2005	Badwater, 36:51:12, 11th place	Furnace Creek, 35:53:48 31st place	=72:45:00
Ted Philip, "Mountain Gorilla" Wayland, ME, 47	2012	Badwater, 32:30:48, 24th place	Furnace Creek, 38:52:59, 17th place	=71:23:47
Greg Pressler, "Pheasant" Portland, OR, 43	2011	Badwater, 38:36:46 43rd place	Furnace Creek, 42:18:56 39th place	=80:55:42
Vito Rubino, "Crazy Ibex" Pasadena, CA, 36	2014	Badwater, 35:23:51 27th place	Silver State 508, 37:19:00 14th place	=72:42:51
Kaname Sakurai, "Sea Lion" Nagoya, Japan, 36	2000	Badwater, 27:52:14, 3rd place	Furnace Creek, 32:31:56, 2nd place	=60:24:10
Michele Santilhano, "Shongololo" Menlo Park, CA, 38, South Africa	2008	Badwater, 39:42:23, 11th female, 29th overall	Furnace Creek, 38:01:42, 7th female, 42nd overall	=77:44:05
Del Scharffenberg, "Spider" Portland, OR, 52	1997	Badwater, 48:16, 13th place	Furnace Creek, 42:15:26, 10th place	=90:31:26
Monica Scholz, "Scarlett Fairy Cup" Jerseyville, ON, Canada, 37	2004	Badwater, 29:22:29, 1st female, 3rd overall	Furnace Creek, 44:29:15, 1st female, 25th overall	=73:51:44
Monica Scholz, "Scarlett Fairy Cup" Jerseyville, ON, Canada, 39 (2nd DV Cup)	2006	Badwater, 32:07:01, 1st female, 8th overall	Furnace Creek, 40:00:02, 2nd female, 27th overall	=72:07:01
Joshua Talley, "Escape Goat" Santa Monica, CA, 43	2015	Badwater, 38:59:05, 44th place	Silver State 508, 39:07:08, 9th place	=78:06:13
Steve Teal, "Desert Duck" Phelan, CA, 40	2005	Badwater, 43:56:20, 34th place	Furnace Creek, 35:39:52 29th place	=79:46:12
Steve Teal, "Desert Duck" Phelan, CA, 41 (2nd DV Cup)	2006	Badwater, 42:29:16, 32nd place	Furnace Creek, 41:24:06 29th place	=83:53:22
Steve Teal, "Desert Duck" Phelan, CA, 42 (3rd DV Cup)	2007	Badwater, 44:16:27, 50th place	Furnace Creek, 34:16:04, 11th place	=78:32:31
Steve Teal, "Desert Duck" Phelan, CA, 43 (4th DV Cup)	2008	Badwater, 45:24:20, 56th place	Furnace Creek, 35:12:55, 26th place	=80:37:15
Steve Teal, "Desert Duck" Phelan, CA, 45 (5th DV Cup)	2010	Badwater, 42:15:49 47th place	Furnace Creek, 37:15:00, 16th place	=79:30:49
Marshall Ulrich, "Unicorn" Ft. Morgan, CO, 43 (1st Ever DV Cup)	1996	Badwater, 33:01, 1st place	Furnace Creek, 38:32:45 16th place	=71:33:45
Danny Westergaard, "Wiener Dog" Rolling Hills, CA, 48	2007	Badwater, 32:22:58, 12th place	Furnace Creek, 35:51:38, 19th place	=68:14:36
Danny Westergaard, "Wiener Dog" Rolling Hills, CA, 49 (2nd DV Cup)	2008	Badwater, 36:31:46, 17th place	Furnace Creek, 34:38:34, 23rd place	=71:10:20
Danny Westergaard, "Wiener Dog" Rolling Hills, CA, 50 (3rd DV Cup)	2009	Badwater, 35:51:24, 28th place	Furnace Creek, 39:54:25, 14th place	=75:45:49
Danny Westergaard, "Wiener Dog" Rolling Hills, CA, 51 (4th DV Cup)	2010	Badwater, 37:13:19 30th place	Furnace Creek, 40:32:17 23rd place	=77:45:36
Danny Westergaard, "Wiener Dog" Rolling Hills, CA, 52 (5th DV Cup)	2011	Badwater, 38:29:58 42nd place	Furnace Creek, 37:40:22 23rd place	=76:10:20
Danny Westergaard, "Wiener Dog" Rolling Hills, CA, 53 (6th DV Cup)	2012	Badwater, 39:52:42, 26th place	Furnace Creek, 33:22:00, 20th place	=73:14:42
Danny Westergaard, "Wiener Dog" Rolling Hills, CA, 54 (7th DV Cup)	2013	Badwater, 42:41:28, 59th place	"Trona 353", 28:54:00, 45th place	=71:35:28
Danny Westergaard, "Weiner Dog" Palos Verdes Estates, CA, 55 (8th DV Cup)	2014	Badwater, 38:25:08 46th place	Silver State 508, 41:23:00 17th place	=81:48:08
Danny Westergaard, "Weiner Dog" Palos Verdes Estates, CA, 56 (9th DV Cup)	2015	Badwater, 36:39:17, 31st place	Silver State 508, 43:08:00, 11th place	=79:42:17
Danny Westergaard, "Weiner Dog" Palos Verdes Estates, CA, 57 (10th DV Cup)	2016	Badwater, 36:14:40, 35th place	Silver State 508, 43:30:00, 10th place	=79:44:40
Thomas Zaide, "Speedy Turtle" Long Beach, CA, 37	2014	Badwater, 46:33:40 78th place	Silver State 508, 47:35:00, 25th place	=94:08:40

# -11/121/121/12

The ultimate physical and mental challenge. Heat. Suffering. Comradeship. Ecstasy. The opportunity to surpass myself. —**Ricarda Bethke** 

Badwater signifies gratefulness and thankfulness that I am healthy, fit and strong. Badwater denotes never giving up, digging deep, and persevering onward for these are my mantras throughout life. Badwater represents learning to be comfortable in the uncomfortable; being empowered. Badwater means lifelong friendships and offering words of inspiration in each other's personal journey. —**Kimberlie Budzik** 

Badwater = Bad Ass!!! —Chavet Breslin

> Badwater symbolizes the toughest footrace on earth; simply the premier running event that exists. —Pamela Chapman-Markle

Badwater is an epic brand meaning adventure, endurance, fun and achievement. —Adam Connor

It means tough, dig deep, push hard, and never give up. —Catra Corbett

Badwater is synonymous with the (perceived) impossible, human potential, and physical and mental devotion to achieving one's goals and dreams. Perhaps more important, Badwater is a supportive family of unbelievable people who share a common interest in pushing the limits of what is possible.

—Kevin Delk

*Family!* —Amy Costa

To me, the name/brand Badwater means to explore. A way of life that I chose to follow to improve how I react and interact with everyone and everything around me. —Luigi Dessy

Badwater is the epitome of what ultra is: the struggle, the risk, the triumph, and on occasion, the defeat. —Ed Ettinghausen

Courage, Spirit and perseverance! —John Radich

Badwater is just one word, but the connotations are nearly boundless. —Eric Spencer

Prefacing the following words with extreme illustrates BADWATER's meaning to me: beauty, difficulty, exposure, learning, willingness (to adapt), respect, challenge, preparation, attention (to detail), execution (of the plan), experience, and (hopefully) accomplishment. —Jason LeDoyen The ultimate physical and mental challenge. Heat. Suffering. Comradeship. Ecstasy. The opportunity to surpass myself. —Jens Vieler

Prestige and seriousness. —Roberto Mario Gili Farina

As a person, Badwater makes me think about the incredible beauty of Death Valley. As a runner, it is the same for me as Everest is for a mountain climber. As a brand, Badwater I see it as a very professional race with an organization that you can trust. —Patrick Hameau

It means tough. Badwater tough. You can not only withstand the elements, but you can withstand the ugliness that is inside all of us. You are able to work through and around all types of problems that may arise during a long hard race. It forces you to see things with more love and gratitude.

—Andrea Kooiman

It means letting your actions speak for you, both in what you aspire to be and how you help others realize their own dreams. —Pete Kostelnick

You are not a true Ultrarunner if one is not confronted with this "terrible" but great race, the hardest, the most coveted by all ultrarunners. —Marco Mazzi

# 

The meaning of life for me is exploring and realizing one's god-given potential, and in so doing, helping others realize theirs. We are not meant to sit on couches, watch television and count money. —Dan McHugh

To share love. —Michael Jimenez

Life for me means not only to exist, it means to live your dreams and not only to dream your life, to make happy those you love and to be happy every moment. —Francisco Manzanares

I believe that the meaning of life is in the pursuit of happiness, and nothing makes me happier than achieving something. What I am trying to achieve now is to fulfill my potential, which I believe is the source of true satisfaction. —Marcia Zhou

Life is a big, blank canvas we create by our actions and attitudes. —Noelani Taylor

I hope we are here to learn, grow, to become 'more": to self-actualise, to take personal responsibility for our choices and the consequences thereof - such choices and actions rippling out positively, by walking our talk we demonstrate and influence, inspire. —Michelle Payne Live life to the fullest and share peace, love and happiness with all those who enter your life to the greatest degree possible. —Tim Robert

Life is an adventure. Reflecting back on my challenges, successes, joy, pain, and where I am at in life today, I find myself appreciative of the opportunities life can bring. Life is good. —Ray Sanchez

The meaning of life in general is to selfactualize and in doing so, be of service to others along the way. —Cheryl Zwarkowsk When we allow ourselves to feel our feelings, to express ourselves, to love one another, to receive love, to challenge our mind and body then we are living, and so I think the meaning of life is to really live life - don't live it meekly, but rather boldly. —Rosie Prather

In general, people working together and progressing to build a better society. —Brian Tjersland

Life is about dreaming and achieving. To learn from mistakes and make it better your next attempt. To be strong and never quit. To help others by motivation, listening, and actions. To be brave and show others that anything is possible. To share your time and knowledge with others. To be able to always forgive others. —Luigi Dessy

> An endless journey of self-discovery; realizations, challenges externally and from within, and looking out for and helping others along the way with love and giving until we reach our end. —Joshua Holmes

In general, the meaning of life is to pursue authentic, challenging activities that stretch you to the edge of who you think are and what you can do. —Nathan DeWall

> To keep doing and growing. Gain people's empathy by showing what I am doing and make them grow as well. —Nobumi Iwamoto

**THE OFFICIAL CHARITIES OF ADVENTURECORPS** ARE THE CHALLENGED ATHLETES FOUNDATION, MAJOR TAYLOR ASSOCIATION, CARING HOUSE PROJECT FOUNDATION, AND BALD HEAD ISLAND CONSERVANCY. THE GOAL AND PURPOSE OF OUR EVENTS IS TO RAISE FUNDS FOR, AND AWARENESS OF, THESE WONDERFUL AND IMPORTANT ORGANIZATIONS.



**The Challenged Athletes Foundation** was created on the belief that people of all abilities should have the opportunity to pursue a life full of physical activity and of sports. Be they recreational or in pursuit of a gold medal at the Paralympic Games, people with a physical disability are limited only by their access to funding. Since 1994, CAF has raised over \$76 million—allowing the Foundation to satisfy thousands of funding requests from challenged athletes in all 50 states and across the globe.

Over eighty cents of every dollar raised by CAF provides funding and programs that get challenged athletes into the game. Whether it's a \$2,000 handcycle, helping underwrite a \$15,000 running prosthetic or arranging enthusiastic encouragement from a mentor who has triumphed over a similar injury, CAF's mission is clear: give those with the desire to live active, competitive lifestyles every opportunity to compete in the sports they love.

Since 2002, AdventureCORPS has raised over \$350,000 for CAF, and AdventureCORPS athletes have raised equally impressive sums!

Website: www.challengedathletes.org



**The Bald Head Island Conservancy** was founded on Bald Head Island, NC in 1983 with a focus on barrier island conservation, preservation, and eduction. The Conservancy sponsors and facilitates scientific research that benefits coastal communities and provides numerous recreational and educational activities to the public. In coordination with various organizations, partnerships, and collaborations, the Conservancy has led the nation in conservation and research efforts and is uniquely poised to become a leader in Barrier Island Conservation world-wide.

Badwater fans and race participants will appreciate that BHIC cares for the pristine setting for the Badwater Cape Fear race route and its role as a seat turtle nesting site and sanctuary. The Conservancy also serves as the host and finish line for our event. As such, our goal is to raise \$10,000 to purchase one of the special UTV vehicles which BHIC uses to patrol the beach and care for sea turtle nesting sites.

Website: www.bhic.org



Since 2014, AdventureCORPS is proud to recognize **Caring House Project Foundation** as an Official Charity and support their efforts. Founded by eleven-time Badwater 135 veteran Frank McKinney, and based on the principal that "stability begins at home," CHPF provides shelter to the world's most desperately poor and homeless by building entirely self-sufficient villages in the poorest county in the Western Hemisphere, Haiti.

As of today 10,616 children and their families have been provided with a new concrete home, and countless more are alive because of CHPF's efforts. In 2017 CHPF completed its 24th self-sufficient village in Guimbi, Haiti. That's right, 24th self-sufficient village in 21 Haitian cities in last 14 years! Visit www.chpf.org to support Frank's efforts. Thank you for all you do, Frank and Nilsa!

Website: www.chpf.org









#### Founded by 10x Badwater veteran

Frank McKinney, the Caring House Project Foundation builds selfsufficient villages for the world's most desperately poor and homeless by providing housing, education, food, water, medical support & capitalism in *Haiti, Honduras, Nicaragua, Indonesia, Africa & the United States.* 



#### What CHPF is doing?

This year Caring House Project will build its 24th self-sufficient village in the last 14 years in the small town of Guimbi, Haiti located about two hours north of the capital city of Port au Prince. By the end of 2017, a total of 10,616+ people will have been sheltered because of CHPF, and thousands more are alive because of our (and your) efforts.





## **How Can You Help?**

Please visit www.chpf.org to donate today.

There are many different donation options to choose from (Housing, Schooling, Orphanages, Church/Community Centers, Medical Clinics, Renewable Food, Clean Drinking Water, and a Miscellaneous category).

www.chpf.org 561.662.4503

#### **ENVIRONMENT**

AdventureCORPS events happen not in a man-made stadium, but in the real world "out there." We care deeply about the natural world for we are intrinsically linked with it and because we want to enjoy these events in their awesome natural settings for a long, long time.

As such, we joined One Percent For The Planet on July 1,



2008, a growing global movement of more than 1200 companies that donate at least 1% of their sales to a network of more than 3600 approved environmental organizations worldwide. Therefore we donate at least 1% of total revenues (in other words, "off the top," not just 1% of profit) to environmental causes. This is in addition to all the work we do on behalf of, and donations we make

to, Challenged Athletes Foundation, Major Taylor Association, and Caring House Project Foundation, which are wonderful causes but not environmental in their focus. In the past ten years, we and our fellow One Percent For The Planet members have invested over \$100 million in positive environmental change.

In association with our membership in One Percent for the Planet, we have supported The **Conservation** Alliance since September, 2008. The Conservation Alliance is an organization outdoor businesses of



whose collective contributions support grassroots environmental organizations and their efforts to protect wild places where outdoor enthusiasts recreate. Alliance funds have played a key role in protecting rivers, trails, wildlands and climbing areas throughout North America.

Membership in the Alliance is open to companies representing all aspects of the outdoor industry, including manufacturers, retailers, publishers, mills and sales representatives. The result is a diverse group of businesses whose livelihood depends on protecting our natural environment. Since its inception in 1989, the Alliance has contributed close to \$13 million to grassroots conservation groups throughout North America. The results of our funding have been remarkable. Alliance funding has helped to save more than 44 million acres, protect 2,945 miles of rivers, stop or remove 26 dams, and purchase 10 climbing areas. There are now more than 190 member companies, and plans to disburse \$1.65 million in 2015.

2014, In we began supporting the Bald Head Island Conservancy with the inaugural BADWATER Cape Fear race by focusing attention on the race route's



pristine setting as a sea turtle nesting area and BHIC's role as a leader in barrier island conservation, preservation and education.



Additionally, we have championed other environmental causes including the Los

Coalition, a nonprofit organization with over 1,000 members that engages cyclists through advocacy, education and outreach across the county. Founded in 1998, LACBC brings together the diverse bicycling community in a united mission to improve the bicycling environment and quality of life for the entire region. In 2011, we donated \$10,000 to LACBC to initiate and sponsor the Jim Swarzman Memorial Membership Drive, an effort that brought \$23,000 into LACBC.

AdventureCORPS joined the Death Valley Natural History Association as Life Members and recognized DVNHA as an Official

Charity of AdventureCORPS from 2009 through 2013. DVNHA is a non-profit organization supporting education, research, and preservation in Death Vallev National Park and Ash Meadows National Wildlife Refuge. Some of their efforts include DeathValley R.O.C.K.S. (bringing inner city kids to



experience one of the largest outdoor classrooms in the world). Devil's Hole Pupfish Recovery, Death Valley All Taxa Biological Inventory, plus they run the wonderful gift shops in the Park.

According to DVNHA, AdventureCORPS has paid for, at the minimum, "every need (sleeping bags, cooking fuel, transportation) for one Death Valley ROCKS school group (50-60 students, chaperones, and teachers) every year since 2009." AdventureCORPS athletes have also supported this and other DVNHA causes! Additionally, through DVNHA, AdventureCORPS and our athletes have donated \$5000 to support the recently renovated Death Valley National Park Visitors Center, as evidenced by five "donor tiles" are in the Visitors Center (one per \$1000 donation.)



# THS LOGO GIVES BACK

### #purchaseforourplanet

Our brands take responsibility for the health of our planet by giving to environmental nonprofits creating positive change. You can create impact too by purchasing products with the 1% for the Planet logo. Join members like Badwater® and AdventureCORPS® and become part of our global movement today!

onepercentfortheplanet.org

# INSPIRING A PASSION for Death Valley and Ash Meadows

Since 2009, AdventureCorps participants have contributed over \$20,000 to DVNHA in support of Death Valley National Park programs. To make a donation or shop with us online please visit dvnha.org.



Preserving and interpreting the natural and cultural resources of the Death Valley region in cooperation with our government partners: Death Valley National Park and Ash Meadows National Wildlife Refuge.



#### (800)478-8564 dvnha.org

#### **Bookstore Locations:**

Furnace Creek Visitors Center Stovepipe Wells Ranger Station Scotty's Castle Museum (temporarily closed) Ash Meadows NWR

All proceeds benefit education and research in Death Valley National Park and Ash Meadows National Wildlife Refuge. Please visit us next time you are in the park or shop with us online at **dvnha.org** 



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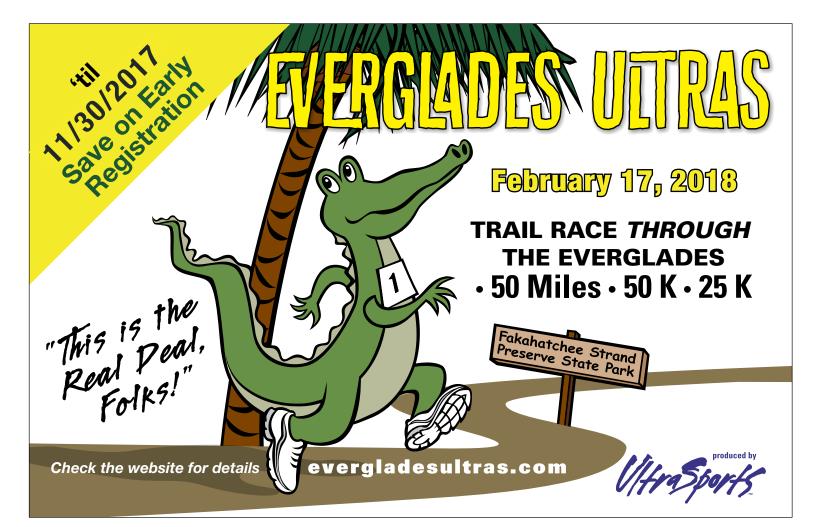
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# FIEDANCER OF SUNNCE DINNE FO

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.

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 humidity 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

		Air Temperature (Degrees F)									
	70	75	80	85	90	95	100	105	110	115	120
Relative Humidity		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				о	

BROOKS

Scott Jurek takes one of many ice baths in 2006.

#### **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

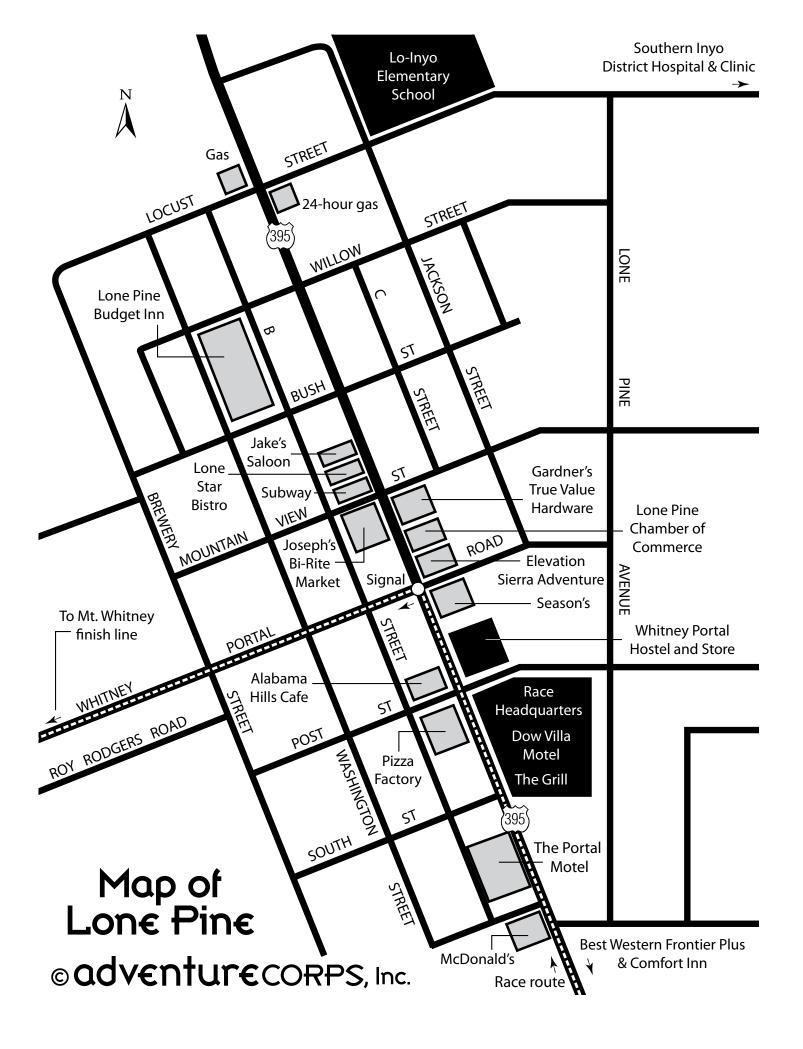
Valley, many runners complained of cramps in their legs; I suffered from cramps in my diaphragm and had difficulty breathing for more than an hour! Cramps become less frequent with heat training, but for those of us unaccustomed to such extreme conditions, maintaining adequate hydration and electrolyte 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 trainedwill 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.





#### LONE PINE: QUICK REFERENCE TO THE MOST POPULAR PLACES FOR BADWATER FOLKS

Lone Pine is located at Mile 122 of the Badwater 135 race route and is an important hub of activity before, during, and after the race. Located at 3727 feet (1136m) at the foot of Mt. Whitney and with a population of just over 2000 friendly people, it is a wonderful and appealing destination year-round and particularly important to the success of the Badwater 135.

Lone Pine meets every need, from great food to comfortable hotels, plus all enjoy the Post-Race Get-Together at the school, followed later by the traditional social hour(s) at Jake's Saloon. We hope you enjoy the town, spend lots of money there, and let everyone know how much you enjoy racing in their back yard!

Many Badwater 135 runners and crews buy race equipment and supplies at True-Value Hardware or Whitney Portal Hostel and Store, groceries at Joseph's Bi-Rite, purchase moderately priced gas in town, and/or excellent coffee, snacks, and sandwiches at Lone Star Bistro, get an excellent meal at The Grill or enjoy fine dining at Seasons Restaurant.

During the race, many support teams will go into town to pick up coffees and more at Lone Star Bistro, pizza from The Pizza Factory, to-go food from The Grill or Lee's Frontier Deli, or for ice, water, & groceries.

## <u>Motels / Hotels</u> (Not a complete list! See LonePineChamber.org for more listings!)

<b>Best Western Frontier Hotel</b> 1008 S Main Street	760-876-5571
<b>Comfort Inn</b> 1920 S Main Street	760-876-8700
Dow Villa Motel 310 S Main St <i>(Race HQ)</i>	760-876-5521
<b>Portal Motel</b> 425 S Main St	760-876-5930
<b>Whitney Portal Hostel (and Store)</b> 238 S Main St	760-876-0030

#### **Popular Eateries**

Lone Star Bistro at 107 N Main St (Coffee drinks, sandwiches, pastries, ice cream, smoothies, and such, plus WiFi. Very popular with PCT hikers.) 760-876-1111 Open 6am-10pm daily

The Grill at 446 S Main St. (Located on the southern end of the<br/>Dow Villa parking lot. Great food and great location!)760-876-4240Open 6am-10pm daily

Alabama Hills Cafe at 111 W Post S 760-876-4675

Open 6am-2pm daily

**Pizza Factory** at 301 S Main St 760-876-4707

Open 11am-10pm daily

Open 5pm-10pm daily

Season's Restaurant at 206 S Main St 760-876-8927

**Jake's Saloon** at 119 N Main St (Many runners and crews socialize here after attending the official post-race pizza party at the Lo-Inyo Elementary School at the conclusion of the race!)

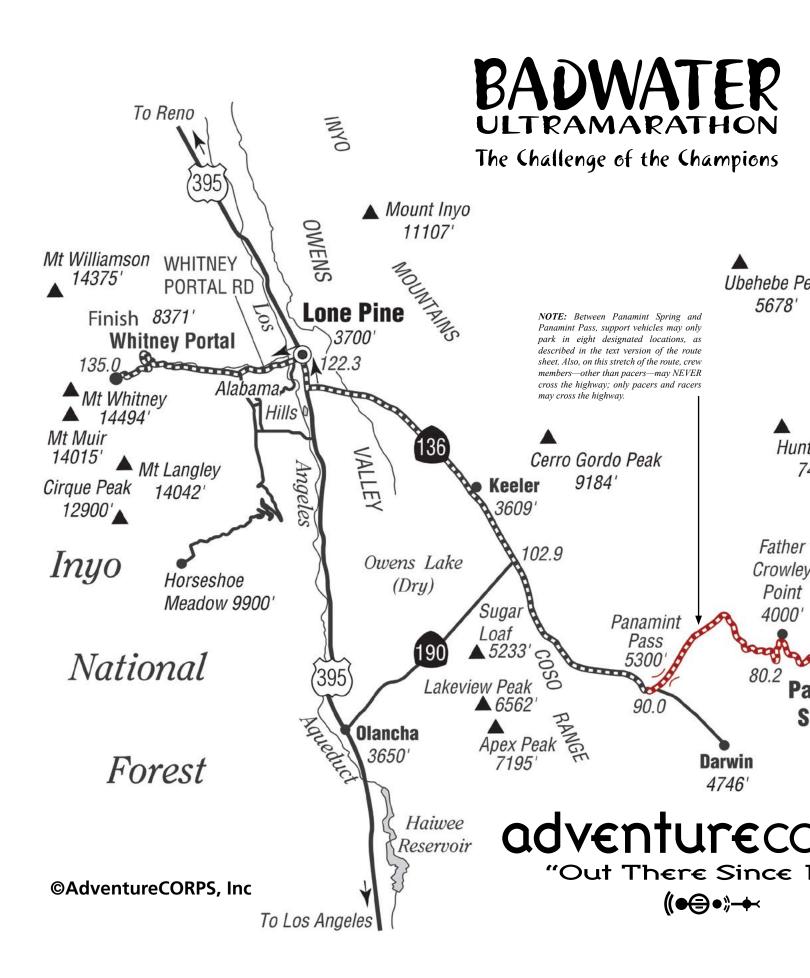
#### Groceries, Gas & Mini-Mart, Outdoor Outfitters, Hardware

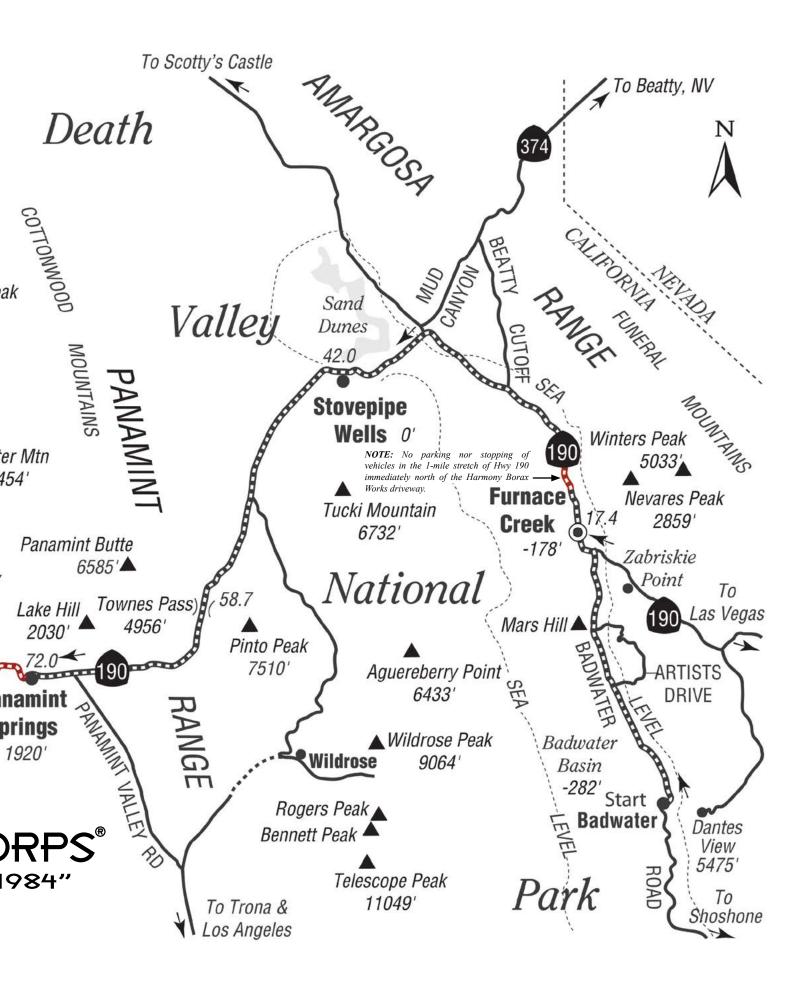
Whitney Portal Store and Hostel at 238 S Main St760-876-0030Open 7am-9pm daily in July					
<b>Elevation Sierra Adventure</b> a 760-876-4560	at 150 S Main St Open 9am-630 or 7pm daily				
<b>Joseph's Bi-Rite Market</b> at 1	19 S Main St				
760-876-4378	Open 8am-9pm daily				
<b>Gardner's True Value Hardv</b>	vare at 104 S Main St				
760-876-4208	Open 8am-6pm, Mon-Sat				
L.P. Chamber of Commerce	at 120 S Main St				
760-876-4444	Open 830am-430pm daily				

**Chevron & Lee's Frontier Deli** at 1900 South Main St (This is the last business on the west side of the road on the far southern end of town. Many crews call ahead to order sandwiches as they approach town, or if making a quick run into town from the race route.) 760-876-5844 Gas 24/7; Deli closed 2-4am only

Exxon-Mobil & AM-PM at 380 North Main St 760-876-4073 Open 24 Hours a Day







#### THE OFFICIAL RACE ROUTE

LANDMARK	DIST. (MI)	ELE. (FT)	MARKEF
NOTE: TL = TRAFFIC LIGHT; SS = STOP SIGN; T-INT = T-INTERSECTION; JCT. = JU	NCTION		
Badwater Basin: Head north	0	-282	
Crews will be held for 10 minutes after each wave begins, then released in small batches.			
Former location of Telescope Peak Sign on L.	1.8	-200	
Wide Shoulder on Right	3.1		
Natural Bridge turnoff on R (PACERS MAY JOIN AGE 65+ RUNNERS HERE)	3.5	-170	MM 13
Wide Shoulder on R.	3.9		
Devil's Golf Course on L.	5.6	-165	
Artist's Drive entry on R.	8	-165	
West Side Road on L.	10.6		MM 6
Artist's Drive exit on R.	11.7	-70	
Mushroom Rock on R.	12.1	-170	MM 5
Golden Canyon on R. (Toilet / Parking) (45 MPH)	14.5	-165	
Jct. Hwy 190 & Badwater Rd.: Go Left onto 190 north (Cell Service Begins)	16.5	0	
Watch Speed Limit! (Don't be like that Aussie team in 2015!)			
Timbisha Shoshone Reservation on L.	17.2	-140	
Furnace Creek Ranch on L.: Ice & Store close at 300am (Time Station #1)	17.5	-165	
Park in lots, not along roadway, near Time Station.			
Dumpsters available to dump garbage and recycling at Time Station.			
Furnace Creek Fuel on L. (Please do NOT dump garbage here.)			
Park Service Visitor's Center on L. (Run on bike path left of roadway)	17.7	-165	
Furnace Creek Campground on L.	17.8	-170	
Harmony Borax Works on L.: Park here and let runner go ahead (45 MPH)	18.2	-170	
NO STOPPING, SLOWING, or PARKING NEXT 1 MILE! Drive beyond curves!	19.1	-100	
Parking allowed beyond curvey section, where safe.	20.1		
Cow Creek on R.	20.8		
1st Marathon	26.2		
Daylight Pass Rd. on R. (Cell Service Ends)	28.4		MM 99.5
Salt Creek turnoff on L.	30.8		MM 97.5
Sea Level sign on R.	31.5	0	
Sea Level sign on L.	32.1	0	
"Summit" / end of rolling hills section	33.7	140'	MM 94.5
North Hwy / Scotty's Castle turnoff on R.	34.9	110	MM 93.5
Sea Level sign on L.	35.4	0	101101 / 5.5
MINIMAL PARKING NEXT 6 MILES! SOFT SHOULDERS. Do not get stuck in sand.	55.1	0	
Devil's Cornfield sign on R.	36.3	-80	MM 91.5
Parking on R. (Space for 2-3 cars)	37.1	00	101101 / 1.0
Camera Sign pullout on R. (Space for 4-5 cars only)	37.5		
Sand Dunes Parking Lot on R. (Toilet / Parking) (35 MPH)	40.2	0	
Approaching Stovepipe Wells (Cell Service Begins)	41	0	
Stovepipe Wells Village Welcome sign: Gas / Food / Store opens at 300am!	42	0	
Time Station #2 & Medical HQ on L. by hotel courtyard & flag	42.2	0	
(PACERS MAY JOIN RUNNERS OF ANY AGE HERE.)	72.2		
It's a long climb, and a long way, to Panamint Springs, 30 miles away!			
It is CRITICAL to stock up on water, ice, and snacks, plus real food for the crew!			
Also, take advantage of the low gas prices while you are here!			
Mosaic Canyon turnoff on L.	42.4	5	
1000' Elevation sign on R. (65 MPH)	46.8	1000	
Short downhill (Cell Service ends on this ascent.)	47.2		
DIP Sign on R. (Do NOT park in dips as you will be invisible!)	48.5		
2000' Elevation sign: All racers must pass this location before 1000am	50.7	2000	MM 77.5
Wildrose Station (Bathroom; paved parking lot on R.)	51.2	2450	

LANDMARK	Dist. (MI)	Ele. (FT)	MARKER
Wildrose Turnoff on L.	51.4	2500	MM 76.5
2nd Marathon	52.4	2800	MM 75.5
3000' Elevation sign on L.	53.6	3000	
4000' Elevation sign on L.	56	4000	
DIP sign on R. (Do NOT park in dips as you will be invisible!)	56.4		
Approaching the summit of Towne Pass (30 MPH)	57.25		MM 70.5
Brake Check area on R.	58.9	4965	
Towne Pass Summit sign on R.	59	4965	
"Downhill Next 9 Miles - 9% Grade" - Begin descent into Panamint Valley	59.6		
4000' Elevation sign on R. (55 MPH)	61.8	4000	
Vista Point (amazing view of Mt. Whitney!) / big gravel pullout on R.	62	3500	
Paved pullout on L.	62.5		
Gravel pullout on L.	63.7		MM 64.5
3000' Elevation sign on L.	64.1	3000	1011011.5
Large Paved pullout on L.	65.3	5000	
2000' Elevation sign on L. (65 MPH)	66.4	2000	
Panamint Dry Lake Bed, east edge; "Soft Shoulder" sign	68.4	1640	
Panamint Valley Road to Trona / Ridgecrest on L.	70.2	1750	
Panamint Variey Road to Trona / Ridgecrest on L. Panamint Springs Resort: Gas / Mini Mart / Food / Hotel (35 MPH)			
	72.7	1970	
Time Station #3 on L. at resort hotel, not at the gas station			
All racers must pass TS3 before 800pm, Tuesday night			
Free Showers and Flush Toilets across street at campground!			
Get water, ice, snacks, and more at Gas Station / Mini Mart!			
Get REAL FOOD quuickly with "streamined Badwater Race Menu" at the Resort			
WARNING: Parking only allowed in designated locations for next 12.2 miles: follow odometer and	l route book closely.		
Also watch for our "Badwater Parking Zone" signs.			
2000' Elevation sign on L. (55 MPH)	73.3	2000	
Darwin Falls turnoff on L. / "Rock Slide Area" sign on R.	73.7	2500	
Parking Allowed on R. in gravel pullout with yellow left arrow (1.8 from PSR)	74.5		MM 53.5
Parking Allowed on R. in small gravel pullout on right(3.4 from PSR)	76.1		
3000' Elevation sign on L. (end parking allowed zone)	76.2	3000	
Parking Allowed on R. in large gravel shoulder on right(4.7 from PSR)	77.4		
Parking Allowed in large gravel pullout on L. before left curve (5.3 from PSR)	78		
3rd Marathon at 25 MPH sign with sharp left curve arrow	78.6	3400	MM 48.5
4000' Elevation sign on L.	80.55	4000	
Father Crowley's Point on R. (Toilet) Parking Allowed in lot(7.9 from PSR)	80.6	4000	
Please no sleeping on the ground in parking spaces!			
Parking Allowed in elevated gravel pullout via small drive on R. (8.7 from PSR)	81.4		
Parking Allowed in wide gravel pullout on R. (35 MPH) (10.5 from PSR)	83.2		MM 44.8
Summit (no sign) Parking Allowed in large gravel pullout on R. (12.2 from PSR)	84.9		
65 MPH sign on right, just beyond parking zone	85		
Support vehicles may resume parking wherever it is safe to do so from here onwards.			
Death Valley National Park sign on L. (65 MPH)	85.4	4200	
Saline Valley Rd. on R. (actual DVNP boundary)	86.4	4800	
"Adopt a Highway" sign on R.	88.6		MM 39.5
Darwin turnoff on L.: Time Station #4 on Left before turnoff	90.6	5050	MM 37.5
All racers must pass TS4 before 500am, Wednesday morning			
Gravesite on right (white cross)	96.8	4100	
"Rock Slide Area"	99.8	4100	
One hundred miles! (3' wide gray stripe across road with culvert under road)	100	4050	MM 28*
* MM 28 is exactly at the 100-mile mark, but is on the LEFT side of the road, facing the opposite dir		4030	101101 20
		4000	
4000' Elevation sign on R. before "Gunsite Notch" (Cell Service Begins)	102.2	4000	
Jct. Hwy 136 & Hwy 190: Go straight / north onto Hwy 136 "Lone Pine 19mi"	103.4	3935	

LANDMARK	Dist. (MI)	Ele. (FT)	MARKER
h Marathon	104.8	3800	MM 16.5
00 Sulfate Road" sign	106.5		
eeler City sign at Cerro Gordo Rd. on R.	108.1	3610	
dopt-a-Highway sign on R. after solar panel array	109.1	3605	
OFT SHOULDERS NEXT FOUR MILES: BE CAREFUL! DO NOT GET STUCK!			
olomite Loop Road on R.	113.2	3600	
plomite Loop Road on R.	117.5	3510	
oss Owens River: View of Whitney Portal Rd. is straight ahead!	118.3	3500	
t. Hwy 136 & Hwy 395: Go Right / North	121	3696	
unners may run on right side of road into and through Lone Pine: stay well away from traffic lane.			
ARNING: SPEED LIMITS DROP TO 25mph as you pass through town!			
omfort Inn on R. (45 MPH)	121.1		
nevron / Lee's Frontier Deli / Mini Mart (Great sandwiches!) on L.	121.3		
est Western on R. (35 MPH)	122		
one Pine City Limits sign on R. (25 MPH)	122.3		
cDonald's on L.	122.6	3610	
ow Villa on R.: Time Station #5 & Medical HQ	122.7	3610	
Il racers must pass within 42 hours of their individual wave start!			
I racers with time penalties must "check in" and serve penalty time here before continuing.			
ortal Road (the only traffic light in Lone Pine): Go left	122.8	3610	
tttle Creek turnoff on L.	123.3	3770	
ARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!	120.0	3110	
os Angeles Aqueduct	123.4	3855	
one Pine Creek	124.5	4200	
ovie Flat Road on R.	125.5	4590	
ARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!			
one Pine Creek	125.7	4800	
presence Meadow turnoff on L.	125.9	5000	
affe Ranch turnoff on R.	127.1	5100	
ARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!			
hitney Vista Drive on L	127.4		
livas Ranch Road on L.	128.4	5300	
Entering Active Bear Area"	129.2		
ARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!			
one Pine Campground on L.	129.3	5700	
one Pine Creek	129.6	6000	
nyo National Forest" sign on R. (Sign was missing in May, 2015)	129.8	6400	
h Marathon at Indian Creek Rd. on R.	131	7000	
me Station #6 in Large gravel pullout on R.	131.1	6890	
bad makes a 180-degree switchback to L.	132	7215	
sta Point on Left at large gravel pullout	132.8	7400	
Campsites 39-44" and "Whitney Portal Recreation Area" signs	133.7	7700	
ARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!			
eysan Lakes trailhead on L.	133.9	8035	
mily Campground on L.: Support vehicles should drive ahead to park!	134	8100	
verflow Parking Lot on L.	134.6	8200	
nish Line of the World's Toughest Foot Race: Congratulations!	134.7	8360	

Mile Markers (MM) noted are on R. side of road and within 2/10 of a mile of their stated location. For reference only. Official distance is 135.0 miles. Remember all car odometers have error. Distances above were GPS-measured and are accurate in a relative sense. © AdventureCORPS, Inc. for the exclusive use of registered Badwater 135 entrants and race staff.

#### Badwater Basin, Death Valley (- 85m / 280ft)

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

#### Furnace Creek Ranch (-170'), Mile 17.5 (Time Station #1)

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

#### Stovepipe Wells (Sea Level), Mile 42.2 (Time Station #2)

A small general store, gas station, restaurant and motel. Location of the race's Medical HQ for most of first 15 hours of the race. Stock up here!

#### Towne Pass (4956'), Mile 58.7

17-mile long ascent with 5000' of elevation gain, then a 10-mile long descent with 3000' feet of elevation loss into the Panamint Valley. 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 (2000'), Mile 72.7 (Time Station #3)

Gas station / mini-mart, plus restaurant and motel. We rent out "The Cottage" as a way station for any and all race entrants and crews to use during the race: Bring your own towel, soap, and shampoo and make a big effort to keep the room and bathroom tidy. 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, and ONLY park in the eight designated parking zones between Panamint Springs Resort and unmarked "Panamint Pass" at mile 84.9.

#### Father Crowley's Turnout (4000'), Mile 80.65

The bathrooms and parking lot that designate this view point are not the top of this ascent, though you may hope so. The road continues to rise to 5000' over rolling hills, then eventually descends into the Owen's Valley.

#### Darwin Turn-Off (5050'), Mile 90.6 (Time Station #4)

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. Look for Mile Marker 28 about nine miles ahead to indicate your 100-mile mark!

#### Keeler (3610'), Mile 108.1

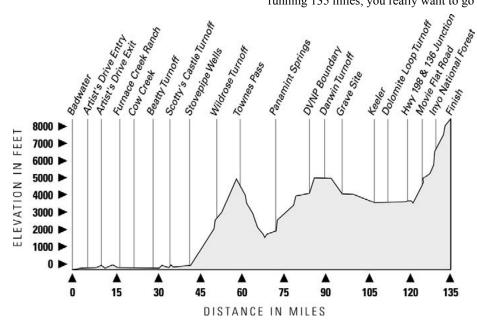
This is a small mining town with no facilities which abuts the Owens Dry Lake Bed the left of the highway. Amazing views of Mt. Whitney and the Sierra Nevada abound. A dirt road to the right ascends to Cerro Gordo, an authentic ghost town which was featured in the 2014 Badwater 135 and will be featured again in the upcoming "Badwater® Cerro Gordo" 102-mile Ultramarathon.

#### Lone Pine (3610'), Mile 122.7 (Time Station #5)

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 #6, located at the start of the switchbacks. Temperatures will steadily decrease during the ascent (though depending on time of day). 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 always parked 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 world's toughest foot race! 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!).





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

# THE DANGERS OF HOT WEATHER RUNNING

# DEHYDRATION, HEAT CRAMPS, HEAT EXHAUSTION, HEATSTROKE & HYPONATREMIA

By Claudio Piepenburg (Originally published by Road Runner Sports)

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 it 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

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."



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

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



2011 champ Oswaldo Lopez stays cool during the 2013 race.

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.

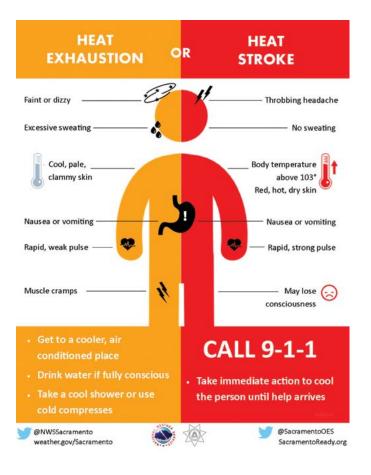
Heat illness and heat stroke are serious risks. These can cause death, renal shutdown, and brain damage. It is important that runners and crews be aware of the symptoms of impending heat illness. These include: nausea, vomiting, headache, dizziness, faintness, irritability, lassitude, weakness, and rapid 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.



#### **GENERAL RACE RULES**

1. There are three starting times for the 2017 Badwater Ultramarathon (800pm, 930pm, and 1100pm on July 10, 2017), but all racers in all groups are competing in the same race. Runners must check in at the start line, ready to race, 30 minutes prior to their start time.

2. 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.

3. The race number must be worn by the racer 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. Bib numbers must also be worn by any pacer / crew member who is running along with his or her racer.

4. The GPS tracker provided by the race organizers must be worn by the runner, as directed (not worn on the shorts, nor carried In a pocket or in a hand-held bottle pocket.). When the runner has a pacer with him or her, that pacer may wear the tracker instead of the runner. However, the tracker must stay on or immediately near the racer at all times during the race; it must NOT travel along the race course within the support vehicle. The tracker must be returned to the race staff upon finishing the race, or when the racer withdraws; a \$500 fee will be charged if the tracker is lost. A minimum one-hour time penalty will be assessed for any runner who doesn't properly use the assigned GPS tracker.

5. All runners MUST have passed, and be proceeding beyond, the following locations along the race route within the specified time cut-offs.

• Mile 50.5 (2000' Elevation Sign, located 8.6 miles beyond Stovepipe Wells): All runners must pass by 1000am, Tuesday morning (regardless of starting wave).

• Mile 72 (Panamint Springs Resort): All runners must pass by 800pm, Tuesday night (regardless of starting wave).

• Mile 90 (Darwin Turn-Off): All runners must pass by 500am, Wednesday morning (regardless of starting wave).

• Lone Pine at Mile 122: Within 42 hours. Additionally, beyond the Darwin Checkpoint, 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.

6. Runners who fail to meet the specified time cut-offs along the course must withdraw from the race course; similarly, runners who are disqualified from the race must also withdraw from the race course. Such runners may not continue on the race course "unoffi-

cially" or after simply removing their bib number. Crew members from withdrawn runners must also depart the race course, unless they formally join another runner's crew.

7. 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.

8. 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).

9. Racers must make their presence known at all Time Stations located along the route.

10. As it has since 1989, 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.

11. Racers, crew, and staff must not litter, mar, or pollute the land-scape or environment.

12. 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. "Badwater®" is a federally registered trademark and may not used in any commercial or promotional manner except under license from AdventureCOPRS, Inc. In particular, t-shirts (such as for crew members) may not state "Badwater" or feature any version of the race logo.

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

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

4. Each Runner's Support Crew shall have a designated Crew Chief and his or her name and email address must be provided to the race organizers at least six weeks before the race. All crew chiefs must study all race rules and information about supporting a runner and organizing and overseeing a support team, as well as study all email correspondence sent by the race organizers. Each Crew Chief is to be primarily responsible for managing the support crew, maintaining adherence to all race rules, state and local laws, and common sense, as well as overseeing the Health and Safety of all crew members and the runner at all times.

5. The names and email addresses of all support crew members must be provided at least four weeks before the race. All crew members must study all race rules and information about supporting a runner and organizing a support team, as well as study all email correspondence sent by the race organizers.

6. Each runner is strongly encouraged to bring a nurse, EMT, MD or other first responder or medical professional on his or her support team.

7. Each runner is strongly encouraged to bring at least one crew member or Crew Chief who is a veteran runner, crew member, or Crew Chief with Badwater 135 experience.

8. Each racer is strongly encouraged to carry a walkie-talkie for communicating with his or her support crew. This is particularly encouraged for the Father Crowley / Panamint Springs ascent, between Panamint Springs at Mile 72.7 and Panamint Pass at Mile 84.9.

9. 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.

10. 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.

11. All racers and all designated Crew Chiefs must attend Racer Check-In, while all crew members are encouraged to attend. Additionally, all racers and their designated Crew Chiefs ONLY must attend the Pre-Race Meeting. Those racers and/or their Crew Chiefs who do not complete the scheduled check-in and attend the Pre-Race Meeting will not be allowed to participate. Attendance is mandatory: no exceptions will be made.

12. All racers must be willing to submit to a drug urine test before (at any point prior to the race, after being officially confirmed for entry), during (at any time), or after the race (up to 90 days after the conclusion of the race). If any WADA banned substances are detected, the racer will be disqualified from competition, listed as DISQUALIFIED FOR DOPING in the final standings of the race, and banned for life from any AdventureCORPS event. Refusal to submit a urine specimen upon demand will also result in the racer being disqualified from competition, being listed as DISQUALI-FIED FOR DOPING in the final standings of the race, and being banned for life from any AdventureCORPS event. Additionally, any Badwater 135 finisher who fails a drug test within 36 months after competing in any edition of the Badwater 135 will be retroactively disqualified from any and all previous Badwater 135 races, removed from all Badwater 135 race results, as well as banned for life from any AdventureCORPS events.

13. 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.

14. During Racer Check-In, all entrants must display a minimum

of four satisfactory reflective vests - or 360 degree reflective belts - 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.

15. During Racer Check-In, all racers must display one OSHA Class 2 reflectivity garment for each crew member to wear during the day, and one OSHA Class 3 reflectivity garment for each crew member to wear during the night (or one OSHA Class 3 reflectivity garment for each crew member to wear 24 hours a day). See point 3 under "Support Crew & Assistance" below.

16. During Racer Check-In, all racers must show that they have at least eight personal portable toilet products such as the Biffy Bag for use on the race course wherever toilets are not available. (Ziplock bags or dog poop bags are NOT acceptable.) Such products must be used discreetly and must be disposed of properly after use. Public and/or unsanitary defecation by racers or crew members will result in disqualification of the racer.

17. 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 checkin for the race without proof of paying the Park Entrance Fee.

18. No commercial photography or videography may be conducted at the race without the specific written permission of AdventureCORPS, Inc. Additionally, the National Park Service, California Department of Transportation and/or the U.S. Forest Service may also require payment of a filming fee and signature of a filming agreement. Also, bona fide media must contact AdventureCORPS, Inc. to request a media credential.

### 19. PHOTO / VIDEO REGULATIONS WITHIN DEATH VALLEY NATIONAL PARK

The National Park Service regulates photography and videography that is considered commercial in nature. (The NPS had jurisdiction over the first 85 miles of the race route; the final 50 miles of the race route are outside DVNP jurisdiction. Therefore photos and videos shot over the last 50 miles of the race route – Darwn, Keeler, Lone Pine, Portal Road, and finish line – are not governed by NPS regulations.) In simple terms, this means the following:

- Photo / video for personal use, including posting to runners' and crew members' social media accounts, websites, and similar is not regulated, so long as it is conducted in a safe manner and according to the rules of the race, the motor vehicle code, and the NPS special event permitting guidelines. No permit is required for personal use.
- Photos / video which is being shot to provide to sponsors of runners to be used by the sponsors in a promotional purpose IS regulated and may require a Commercial Filming Permit. Said

permits have an up-front \$210 fee and may likely also require Ranger Monitoring. Any monitoring costs would likely be fractionally shared by all those who are required to have a Commercial Filming Permit, and will be billed after the event.

-If you or your crew members will be shooting photos and/or video to provide to your sponsor(s), you likely require a Commercial Filming Permit and thus should contact the Special Park Uses office at Death Valley National Park at least 30 days before the event to inquire.

- All those who are required to obtain a Commercial Filming Permit, as well as all bona fide media, must also attend the Media Check-In and Briefing prior to the race.

#### Support Crew and Assistance

1. Each racer must be accompanied by a support crew comprised of no more than one four-wheeled motor vehicle and at least two and no more than four crew members - at least two of whom are legally licensed to drive and at least one of whom can speak English - at all times. Race entrants may have no more than one support vehicle and no more than four crew members in total on the race course.

2. "Unofficial" or extra crew members and "family cheering squads" may only be present in Lone Pine and at the finish line; they may not drive on the race course except between Lone Pine and the finish line and such drive must be made without stopping en route. A secondary vehicle may not be used to shuttle crew members or supplies to and from the runner and support vehicle, except within Lone Pine.

3. 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. Exceptions may be made under some circumstances for married couples or others who have a history of racing together and would like to race this event in this manner. Please inquire.)

4. Regulations for sporting events held within Death Valley National Park require that ALL support crew members (except those actively pacing their racer) wear a minimum of OSHA Class 2 (or higher) high-visibility clothing during daylight hours, and OSHA Class 3 high-visibility clothing during nighttime hours (or OSHA Class 3 high-visibility clothing 24 hours a day). These regulations may ONLY be met by wearing the special garments developed by ZZYXXZ in collaboration with BADWATER and which can be pre-ordered for pick-up in Death Valley prior to the race, OR by wearing certified OSHA Class 2 (in daytime) and Class 3 (at nighttime) vests / jackets, such as those worn by highway workers. Running-type reflective vests, such as those by Nathan Sports, do NOT meet OSHA Class 2 or Class 3 requirements.

5. Racers and Pacers may dress as they choose during daylight, and must wear 360 degree reflectivity (such as runner-type reflective vests by Nathan Sports) and front and rear blinky lights at night.

Racers and Pacers are not required to wear the specific OSHA Class 2 or OSHA Class 3 garments that are required for all crew members, but that level of high-contrast reflectivity and visibility is highly recommended for racers and pacers, too.

6. In addition to the requisite reflective garments, all crew members, pacers, and racers must wear front and rear blinky lights whenever they are outside of a motor vehicle during nighttime.

7. Beginning immediately at the start line, racers must not run abreast with other racers or with pacers, except when passing a slower racer, which must be done quickly. All running must be single-file. Additionally, pacers may not run in front of, even slightly, racers at any time.

8. 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 while he or she is moving forward on the race course.

9. Any crew member running along with their racer is considered a pacer and must wear the pacer's designated bib number (provided at Racer Check-In). 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 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. Time penalties will be assessed for all infractions.

10. No more than two crew members, including a pacer if one is present, may be on the other side (racers' side) of the highway at any given time.

11. Crew members, other than pacers, may never cross the roadway during the entire Father Crowley / Panamint Pass climb (a 12.2-mile stretch from Time Station 3 at Panamint Springs Resort at Mile 72.7 to "Panamint Pass" at Mile 84.9), as described above. Also, each racer, or racer's pacer, is strongly encouraged to carry a walk-ie-talkie for communicating with his or her support crew during this 12.2-mile stretch of the race route. In addition to Badwater race staff, this will also be monitored by National Park Service staff who have the authority to disqualify racers.

12. Racers may not be accompanied by pacers or moving crew members until Mile 42 at the Stovepipe Wells time station. Exception: racers over the age of 65 may utilize a pacer from Mile 3.5 (Natural Bridge turn-off.)

13. 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. (Drones are illegal within Death Valley National Park boundaries.)

14. 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.

#### **Support Vehicles**

1. The California Motor Vehicle Code, and all local, county, and/or federal 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. Motorhomes, RVs, "Sports-Mobiles," Sprinter Vans, and all types of Hummers are specifically not allowed. Suport vehicles may not pull trailers of any kind.

3. All support vehicles must have their headlights on while driving, 24 hours a day, except as noted in Rule 10 in this section of the rules.

4. All race vehicles must have highly visible signage on the back of the vehicle stating "CAUTION RUNNERS ON ROAD." Magnetic reusable signs may be ordered from our sign vendor, or one-time use signs will be provided by the race organizers at Racer Check-In.

5. All support vehicles must have their racer's bib number easily and clearly visible on both sides, the front, and the left rear in digits that are at least 8" (20cm) tall. The background for the racer number signs must be white and the lettering must be black, red, or blue. (STICKY racer bib numbers will be provided to ALL racers at no charge during Racer Check-In. These racer numbers must be displayed on the support vehicle.)

6. Display of the racer's name is optional, but must be at least 6" (15cm) tall if displayed, with a white background and black, blue, or red letters.

7. Sponsor / Charity names and graphics may be placed on support vehicles on the left and right sides only, not on the front or rear.

8. Vehicle windows may not be blocked or obstructed with any signage, paint, or the like. All vehicles will be inspected in Furnace Creek or Badwater, and no racer will be allowed to start the race who has any vehicle windows blocked. If a racer support vehicle is found with blocked windows during the race, that racer will be forced to stop and wait while the vehicle's windows are unblocked and signage properly mounted.

9. Vehicles must "leapfrog" the runner at all times. Each "leapfrog" must be at least two miles 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, nor is slowing down to speak with or to a racer or other person while moving.

10. Vehicles must be parked completely off the road surface whenever they are stopped (with all four tires right of the white line). The doors on the left side of the vehicle must never be opened into the roadway, even momentarily. All exiting of the vehicle by active crew members must be from the right side of the vehicle; drivers may exit from left but only if space allows for them to do so without their door opening into the roadway. Crew members must not stand on the left side of a parked vehicle (between the road and the vehicle.) 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.

11. Support vehicles must not park across from parked vehicles on the other side of the road (50 meters in either direction), in order to avoid bottlenecking the roadway.

12. Support vehicles may not stop during the one-mile stretch which begins at Harmony Borax Works at Mile 19.1, while runners pass through the curvy "Harmony Curves" section of Hwy 190. Each support vehicle should wait at Harmony Borax Works long enough to allow the runner to cover the next, mostly uphill mile, then drive ahead (no stopping nor slowing until Mile 20.1).

13. On the Father Crowley / Panamint Pass climb (a 12.2-mile stretch from Time Station 3 at Panamint Springs Resort at Mile 72.7 to "Panamint Pass" at Mile 84.9), support vehicles may only stop at EIGHT designated locations along the route. These are identified in the route book and with signage along the roadway. They are located 1.8, 3.4, 4.7, 5.3, 5.9, 7.95, 10.5, and 12.2 miles beyond Panamint Springs Resort. Except in a legitimate emergency situation, stopping at any other location along this stretch of roadway, even momentarily, will result in the immediate disqualification of the racer associated with the stopped crew. In addition to Badwater race staff, this will also be monitored by National Park Service staff who have the authority to disqualify racers.

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

4. 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 the event is held 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 (except on the Father Crowley climb as noted elsewhere). Time Penalties or Disqualification will be enforced with a Zero Tolerance Policy towards dangerous crossing of, or behavior on, the roadway.

5. Per National Park Service regulations, racers and crew members may not wear any headset covering the ears, or any earplugs in both ears, unless it is a necessary prosthetic device that aids the hearing-impaired.

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 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 via motor vehicle, 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 racers at Racer Check-In. Racers may only leave or otherwise drive up or down the course via motor vehicle for medical attention, NOT simply to rest. This must be reported as soon as possible to Race Headquarters or the nearest time station. Racers found in a moving motor vehicle will be disqualified unless they are en route to or from medical care. 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, bib#, 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 the post-race party 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 135 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 four crew members). All racers who officially complete the event within 48 hours will receive a finisher's t-shirt and commemorative Badwater 135 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:

- A WARNING may be issued, depending on the nature of the infraction, at the discretion of the race official (A "slash" will be marked on the racer's bib number.)
- First Penalty: One Hour ("X" will be marked on the racer's bib number.
- Second Penalty: Disqualification

4. Time penalties are imposed by the penalized runner stopping at the final Time Station in Lone Pine to serve his/her time penalty. 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. Any racer who is required to serve a time penalty, but does not stop to do so, will be disqualified.

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

Have fun and keep smiling! Remember, you chose to be here!

#### FINISHER DATA ANALYSIS: BADWATER 135 ULTRAMARATHON, 1990-PRESENT

Year	Starters	Finishers	Buckle Cut-Off	Sub 60hr	Sub 48hr	Sub 40hr	Sub 34hr	New Men Record	New Women Record
2016 (PM)	97	84	48 Hours	N/A	87%	55%	25%	21:56:32	25:53:07
2015 (PM)	97	79	48 Hours	N/A	81%	57%	20%		
2 Year Avg	97	82			84%	56%	23%		
2014 (AM)	97	83	48 Hours	N/A	86%	52%	23%		
2013 (AM)	96	81	48 Hours	N/A	84%	39%	23%		
2012 (AM)	96	89	48 Hours	N/A	93%	71%	34%		
2011 (AM)	94	81	48 Hours	N/A	86%	76%	20%		
2010 (AM)	80	73	48 Hours	91%	83%	51%	19%		26:16:12
5 Year Avg	92.6	81.4			86%	58%	24%		
2009 (AM)	86	75	48 Hours	87%	77%	47%	24%		
2008 (AM)	82	75	48 Hours	91%	83%	37%	10%		26:51:33
2007 (AM)	84	78	48 Hours	93%	77%	47%	18%	22:51:29	
2006 (AM)	85	67	48 Hours	79%	62%	24%	13%		
2005 (AM)	81	67	48 Hours	83%	56%	22%	7%	24:36:08	
5 Year Avg	83.6	72.4		87%	71%	35%	14%		
2004 (AM)	72	57	48 Hours	79%	58%	28%	8%		
2003 (AM)	73	46	48 Hours	63%	42%	14%	5%		
2002 (AM)	78	58	48 Hours	74%	47%	12%	4%		27:56:47
2001 (AM)	71	55	48 Hours	77%	46%	14%	7%		
2000 (AM)	69	49	48 Hours	71%	41%	16%	12%	25:09:05	29:48:27
5 Year Avg	72.6	53		73%	47%	17%	7%		
1999 (AM)	42	33	48 Hours	78%	60%	26%	12%	27:49:00	36:58:00
1998 (AM)	29	20	48 Hours	69%	41%	17%	10%	28:09:00	
1997 (AM)	27	20	48 Hours	74%	44%	26%	3%	29:10:00	37:01:00
1996 (AM)	23	14	45 Hours	61%	35%	1%	4%	33:01:00	41:13:00
1995 (PM)	24	16	45 Hours	67%	38%	13%	0%		
5 Year Avg	29	20.6		70%	44%	17%	6%		
1994 (PM)	25	16	45 Hours	64%	32%	1%	4%		
1993 (PM)	12	10	60 Hours	83%	50%	25%	17%		
1992 (PM)	14	13	60 Hours	92%	29%	14%	14%		
1991 (PM)	14	14	60 Hours	100%	71%	36%	14%		
1990 (PM)	21	17	70 Hours	81%	29%	29%	14%		
5 Year Avg	17.2	14		84%	42%	21%	13%		

#### AGE GROUP AND \*\*OVERALL COURSE RECORDS

Age Group	Men	Time	Women	Time
10-19	Nickademus Hollon, 19, USA, 2009	33:21:29	N/A	N/A
20-29	Pete Kostelnick, 28, USA, 2016**	21:56:32	Jen Lee Segger, 28, Canada, 2008	32:31:57
30-39	Oswaldo Lopez, 39, Mexico, 2011	23:41:40	Alyson Venti (Allen), 34, USA, 2016**	25:53:07
40-49	Valmir Nunes, 43, Brazil, 2007	22:51:29	Nikki Wynd, 43, Australia, 2015	27:23:27
50-59	Charlie Engle, 50, USA, 2013	26:15:35	Irina Reutovich, 50, Russia, 2000	29:48:27
60-69	David Jones, 60, USA, 2012	30:33:19	Pamela Chapman-Markle, 60, USA, 2016	41:02:04
70-79	Arthur Webb, 70, USA, 2012	33:45:40	N/A	N/A
Youngest Ever	Nickademus Hollon, 19, USA, 2009	33:21:29	Breanna Cornell, 22, USA, 2014	44:58:21
Oldest Ever	Jack Denness, 75, UK, 2010	59:13:02	Sigrid Eichner, 64, Germany, 2005	52:45:46
Oldest Ever (Sub-48 Hrs.)	Arthur Webb, 70, USA, 2012	33:45:40	Dixie A. Madsen, 63, USA, 2000	47:04:00

#### HISTORICAL DATA ABOUT THE BADWATER 135, 1987 - 2017

Total Number of Entrants, including 2017: 1787

\* 1430 and 357 Females (80% / 20%)

- **Total Number of Unique Entrants, including 2017:** 917 \* 725 Males and 192 Females (79% / 21%)
- **Total Unique Finishers, through 2016 (any time limit):** 782 \* 609 Males and 173 Females (78% / 22%)
  - \* Time limits have been 70 hours, 60 hours, then 48 hours
- **Total Unique Finishers, through 2016 (48 hours or less):** 660 \* 513 Males and 147 Females (78% / 22%)
- **Total Unique Finishers, through 2016 (36 hours or less):** 214 \* 176 Males and 38 Females (82% / 18%)
- **Comparison: Total Number of Mt. Everest Summits, as of 2016:** 7,646 summits by 4,469 people

#### NUMBERS OF OFFICIAL FINISHES, THROUGH 2016

1-Time Finishers: 523 (407 Males and 116 Females; 78% / 22%) 2-Time Finishers: 141 (109 Males and 32 Females; 77% / 23%) 3-Time Finishers: 51 (44 Males and 7 Females; 86% / 14%) 4-Time Finishers: 25 (16 Males and 9 Females; 64% / 26%) 5-Time Finishers: 12 (9 Males and 3 Females; 75% / 25%) 6-Time Finishers: 9 (7 Males and 2 Females; 78% / 22%) 7-Time Finishers: 5 (Monica Scholz, Cheryl Zwarkowski, Oswaldo Lopez, Frank McKinney, Anthony Portera) 8-Time Finishers: 4 (Eberhard Frixe, David Jones, Ian Parker, Keith Straw) 9-Time Finishers: 3 (Lisa Smith-Batchen, Ray Sanchez, Chris Frost) 10-Time Finishers: 2 (Dean Karnazes and Danny Westergaard) 11-Time Finishers: 1 (Pam Reed) 12-Time Finishers: 2 (Jack Denness and Dan Marinsik) 13-Time Finishers: 1 (Scott Weber) 14-Time Finishers: 2 (Arthur Webb and John Radich) 20-Time Finishers: 1 (Marshall Ulrich)

#### UNIQUE FINISHERS' NATIONALITY

India 4	Portugal2
Iran 3	<b>Romania</b> 1
Ireland 4	Russia3
Israel1	Serbia2
Italy13	Singapore3
Japan 8	Slovenia1
Jordan 1	South Africa3
Kazakhstan 1	South Korea1
Latvia 1	<b>Spain</b> 5
Luxembourg 2	Sweden
Malaysia 1	Switzerland6
<b>Mexico</b> 8	United Kingdom 43
Netherlands1	United States 465
New Zealand 5	
Philippines 3	Total Non-USA 317
Poland	<b>Total</b>
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> 1987, the first race: Tom Crawford and Jeanie Ennis stayed in synch for the duration.

Last Name	First Name	Nationality	Finishes
Adams	Eleanor	United Kingdom	1987
Adams	James	United Kingdom	2010
Adamson	Ian	Australia	2010
Afanador	Rudy	USA	2004, 2001
Albert	Norm	USA	2005
Aldovini	Roberto	Italy	2009
Alexander	Lorie	Canada	2016, 2015, 2014, 2011, 2010
Alidina	Noora	Jordan	2015, 2007, 2006, 2005
Amaral	Marcio Villar	Brazil	2008
Andersen	Jill	USA	2015
Anderson	Jay	USA	2003, 2002
Anderson	Marina (Mimi)	United Kingdom	2011, 2005
Andersson	Mikael	Sweden	2013, 2012
Andre	Carla	Portugal	2016
Andrews	Bill	USA	2009, 2008
Andrulis	Robert	USA	2006
Angel Andrade	Julio Cesar	Mexico	2014, 2012
Ankenbrand	Juergen	USA	1992, 1990
Ankeney	Bob	USA	1999, 1998
Ansick	William	USA	2010
Armstrong	Shanna Christine	USA	2008
Arnstein	Michael	USA	2012
Aro	Matthew	USA	2010
Ashizawa	Jeff	Canada	2013, 2012
Askew	Stuart	United Kingdom	2001
Ayres	Ed	USA	1990
Bahr	Tracy	USA	2003

Last Name	First Name	Nationality	Finishes
Baier	Dr. Burkhard	Germany	2004
Ballantyne	Jane	Canada	2003
Baluchi	Reza	Iran	2012, 2010
Banderas	Carlos	USA	1998
Barnes	Rita	USA	2008
Bartoletti	Marie	USA	2008
Barton	Michelle	USA	2010
Bartoo	Duke	USA	1998
Basich	Crystal	USA	2012
Bastidas	Norma	Canada	2015
Batchen	Gerald Jay	USA	2000
Baughman	Wayne	USA	1991
Baum	Todd	USA	2009, 2008, 2007
Beach	Maggie	USA	2014, 2012
Becker	Bob	USA	2015, 2014, 2008
Begay	Arnold	USA	2009
Belitu	Adrian	Romania	2010, 2009
Bell	Raymond	USA	1990
Bellante	Rich	USA	2000
Bello	Emily	USA	2013
Bello	Todd	USA	2013
Benike	Jim	USA	2001
Benjamin	Christopher	USA	2014
Benjamin	Elad	Israel	2010
Benke	Blake	USA	2009, 2007
Berggren	Marcus	Sweden	2016, 2015
Bergland	Christopher	USA	2005, 2003
Bethke	Ricarda	Germany	2015
Betts	Mary	Canada	2011

Last Name	First Name	Nationality	Finishes
Betz	Thomas	Germany	2005, 2004
Bhardwaj	Arun	India	2011
Bhatt	Divesh	India	2011
Bialla	Vito	USA	2008, 2002
Biondic	George	Canada	2004, 2002
Birmingham	Jay	USA	2004
Bishop	Rusty	USA	2001
Blackford	Darris	USA	2013
Blackford	Starshine	USA	2015
Blake	Jonathan	Australia	2013
Blanchard	Eric	France	2011
	Marianne	France	
Blangy	waranne	Flance	2014, 2009, 2008, 2007
Blessing	Ben	USA	2011
Bliss	Lisa	USA	2007, 2004
Blumberg	Andre	Germany	2014
Bodoh	Jim	USA	2006, 2004, 2003
Boehnke	Guenter	Germany	2006, 2004
Bolling	David	USA	1987
Bomhoff	Greg	USA	2011
Bonatto	Raphael	Brazil	2009
Bookspan	Adam	USA	2006, 2003, 2000, 1999, 1998
Bostic	Bobby	USA	2006
Boyer	Bonnie	USA	1991
Boyle-Vulgarian	John	USA	2001
Braden	Paul	Canada	1997
Bradley	Bill	USA	2009, 2008
Branco	Ariovaldo	Brazil	2010, 2009
Brehe	Michael	Germany	2012
Brenden	Dan	USA	2012
Brimsted	Antony	United Kingdom	2004
Brooks	Mike	USA	2004
Brunson	Angela	USA	2004
Bucci	Paolo	Italy	2013, 2012, 2011
Buck	Kip	USA	2013, 2012, 2011
Budzik	Kimberlie	USA	2016, 2015, 2014,
Duuzik	Killocille	USA	2013, 2012, 2011
Burnett	Adam	Canada	2016
Bursler	David	USA	2006
Busch	Bonnie	USA	2015, 2011, 2007, 2003
Butcher	Bill	USA	2011
Butterick	John	USA	2008, 2005, 2004
Cain	Gerard	France	2005
Calisto	Eduardo	Brazil	2013
Campbell	Amy	New Zealand	2013
Campilongo	Mary	USA	2000
Cande	Patrick	France	2005, 2003
Candel	Joaquin	Spain	2015
Cantu	Ruben R.	USA	2009, 2004, 2003, 2002, 2001, 2000
			,,0

Last Name	First Name	Nationality	Finishes
Carter	Carol	USA	1990
Carver	Dave	Canada	2012
Castaneda	Angelika	Austria	1999, 1991, 1990,
	0.0		1989
Castello	Patrick	USA	2016
Chapman-Markle	Pamela	USA	2016
Chasilew	Mauro	Brazil	2009
Cheang	Reuben	Singapore	2014
Choi	Don	USA	1991
Chorgnon	Ludovic	France	2007
Christensen	Odin	USA	1991
Christian	Jack	USA	1991, 1990
Christiansen	Odin	USA	1990
Ciabattini	Alberto	Italy	2001
Clark	Benjamin	USA	2011
Clark	David	USA	2015, 2013
Clark	Tony	USA	2015, 2012, 2011
Cleveland	Carl	USA	2014
Clifton	Eric	USA	1999
Coats	David	USA	2016, 2012
Cockbain	Mark	United Kingdom	2009, 2007, 2005,
			2003
Cockman	Dave	USA	2016
Coffey	Marty	USA	1995
Colque	Christian	Argentina	2014
Conill	Carles	Spain	2009
Conte	Francesca	Italy	2004
Cook	Ethel	USA	2012
Cook	Patricia	USA	2003
Cook	William	USA	2008
Cooper	Louise	USA	2003, 1999
Cooper-Imhof	Iris	Switzerland	2013, 2011, 2010, 2009
Corbarieu	Thierry	France	2012
Corbin	Leigh	USA	2009
Cordeiro	Sergio	Brazil	2003
Corey	John	USA	2016, 2014
Corfman	David	USA	2010
Corino	Marylou	Canada	2013
Corley	William	USA	2016
Cornell	Breanna	USA	2015
Costa	Amy	USA	2016, 2014, 2013
Cougot	Dale	USA	2016, 2015
Cowan	Robert	USA	2012
Craveri	Juan	Argentina	2014
Crawford	Sada	USA	2016
Crawford	Tom	USA	1987
Croxall	Doug	USA	2001
Crutchlow	Kenneth	United Kingdom	1987
Cuff	Kermit	USA	2011, 2009, 2008
Cunningham	Ron	USA	2006
D'Angelo	Scott	USA	2000

Last Name	First Name	Nationality	Finishes
D'Andria	Henri Alain	France	2007
Daguia	Sebastiao	Brazil	2009
Dailey	Bruce	USA	2013
Dami	Joao	Brazil	2016
Daniel	Conrad	USA	2003
de Souza	Rodrigo Pereira Reinaldo	Brazil	2015
De Witte	Philippe	Belgium	2004
Decker	Joe	USA	2000, 1999
DeJesus	Maria	United Kingdom	1999
Delk	Kayla	USA	2016
Delk	Kevin	USA	2016
Denness MBE	Jack	United Kingdom	2010, 2005, 2002, 2001, 2000, 1999, 1998, 1996, 1994, 1993, 1992, 1991
DeNoma	Mike	USA	2013
Desena	Joseph	USA	2003
Deshaies	Eric	Canada	2010
Dessy	Luigi	USA	2016, 2015, 2014
Deupree	Chisholm	USA	2008
Deupree	Harry	USA	1996, 1995, 1994, 1992, 1991
Dhaliwal	Charanjit	USA	2015
Di Palma	Ciro	Italy	2013
Dickerson	Alexa	USA	2013, 2012
Dill	Jim	USA	1995
Dobberteen	Dean	USA	2016
Dockendorf	Connie	USA	2011, 2010
Dodds	John	USA	2005
Doggett	Jesse	USA	2010
Dolhare	Meredith	USA	2013
Doman	Wendell	USA	2002
Donaldson	Jamie	USA	2010, 2009, 2008 2007
Doppelmayr	Hildegard	Austria	2006
Doppelmayr	Michael	Austria	2004, 2003, 2002
Dorgan	Jason	USA	2005
Dorion	Lisanne	Bermuda	2000
Dorsey	Rico	USA	2013
Douglas	Steven	USA	2008
Dowell	Derek	USA	2016
Draxler	Leon J.	USA	2002, 2001, 2000
Drelick	Julius	USA	2016
Duobinis	Stanley	USA	2001
Dutz	Sigurd	Germany	2001
Eadie	David	Australia	2001
Eason	Greg	USA	2012
Edinger	Perry	USA	2009
Edwards	Daniel	United Kingdom	2003
Eggenreich	Gerhard	Austria	2009, 2006
Ehasz	James	USA	2009, 2008 2015, 2014, 2012, 2011

Last Name	First Name	Nationality	Finishes
Eichner	Sigrid	Germany	2005
Eielson	Ken	USA	2003
Elam	Linda	USA	1988
Elder	Andrew	United Kingdom	2005
Elia	Barbara A.	USA	2003, 2002, 2001,
			2000
Elias	Barbara	USA	2008, 2007
Eliot	Eileen	USA	1994
Elmgart	Otto	Sweden	2013
Elson	James	United Kingdom	2010
Engle	Charlie	USA	2013, 2009, 2007, 2006, 2005, 2003
Ennis	Jean	USA	1987
Escobar	Luis	USA	2011, 2006, 2003
Ettinghausen	Ed	USA	2016, 2015, 2014, 2013, 2012, 2011
Evans	Colin Meredydd	United Kingdom	2000
Fahrenkamp	Kyle	USA	2016
Farar-Griefer	Shannon	USA	2015, 2010, 2009, 2006, 2005, 2001
Farinazzo	Marco	Brazil	2012, 2010, 2009
Fatton	Christian	Switzerland	2007
Faure	Francis	France	2004
Fegyveresi	John	USA	2012
Fernandez	Monica	Guatemala	2008
Ferraro	Nathan	USA	2015
Ferreira	Joilson	Brazil	2013
Fetterolf	Jared	USA	2016, 2015, 2014
Finkernagel	Holger	Germany	2005, 2002, 2001
Finnell	Scott	USA	2011, 2010
Fioroni	Gina	USA	2016
Fischer	Markus	Germany	2006
Flores	Gabriel	USA	1999, 1998
Florine	Jacqueline Adams	USA	2008
Foote	Geoffrey	USA	2014, 2013
Fortney	Darren	USA	2014, 2013, 2011, 2009
Franiak	Joe	USA	1993, 1992
Franklin	Martin	USA	2007
Frazeur	Rochelle	USA	2011
Freeman	Jimmy Dean	USA	2016, 2010
Friedel	Winfried	Germany	2002
Frixe	Eberhard	Germany	2012, 2011, 2009, 2008, 2007, 2004, 2002, 2001
Fromm	Anita Marie	USA	2010, 2008, 2007, 2003, 2002
Frost	Chris	USA	2012, 2011, 2010, 2008, 2007, 2006, 2004, 2003, 2002
Fumich	Frank	USA	2004
Gaetos	Ben	Philippines	2013
Gane	William	United Kingdom	2016
Gardner	Connie	USA	2010

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Gaudet	Peggy	USA	2009
Gay	Florence	France	2011
Gayter	Sharon	United Kingdom	2009
Geerdes	Gregg	USA	2010
Gelber	Eric	USA	2015, 2012
Gelder	Emily	United Kingdom	2011
Geoffroy	Rudolph	France	2015
Geraldi	Alan	USA	2008
Gerauer	Alfred	Germany	2004
Gingerich	Zach	USA	2012, 2011, 2010, 2009, 2008
Girard	Serge	France	2008
Givens	Bob	USA	1993, 1992
Gleason	Jeff	USA	2014, 2012, 2010, 2009
Gleman	Michael	USA	1995
Glover	Will	USA	2013
Godale	Mark	USA	1999
Goggins	David	USA	2013, 2007, 2006
Gorski	Mary Campbell	USA	2008
Graglia	Michele	Italy	2016
Graham	Dave	Australia	2016
Graves Jr.	Terry	USA	2002
Green	David	USA	2012
Griffith	Grif	USA	2013
Grimm	Paul	USA	2012, 2010
Grizard	Philippe	France	2014, 2007
Grobeson	Jay	USA	2000
Grossheim	Dagmar	Germany	2007
Grossman	Dominic	USA	2010
Gryfe	Robert	Canada	2010
Guajardo	Brenda	USA	2016, 2011
Gunderson	Jonathan	USA	2012, 2009, 2008 2007, 2006
Gungle	Bruce	USA	2012, 2008, 2006, 2004
Gusmão	Carlos Henrique	Brazil	2013
Hafner	Joerg	Germany	2012
Hamilton	James	USA	1999, 1998
Hanes	Steve	USA	2009
Hanna	Noel	Ireland	1999
Hannaford	Dave	USA	2002
Hansen	Leon Skriver	Denmark	2016
Hardel	Fabrice	France	2012
Hardy	Timothy	USA	2012
Harper	David	USA	2007, 2006, 2005
Harsh	Rob	USA	2005
Harvey-Jamieson	Susannah	Australia	2010
Hasse	Paul	USA	2006
Haugh	Bob	USA	2008, 2006
Hausmann	Herbert	Germany	2004
Haviland	Michael	USA	2002

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Hawke	Ferg	Canada	2006, 2005, 2004
Heid	Claire	USA	2012
Helmlinger	Gabriel	France	2012
Henderson	Mark	USA	2001
Hendley	Christopher	USA	2001
Henebry	Mike	USA	2002
Henson	Lisa	USA	2003
Hernandez San Juan	Nahila	Mexico	2013
Herrmann	Jan	Australia	2008, 2007
Heukemes	Achim	Germany	2007
Hewitt	Tim	USA	2010, 2000
Hicks Jr.	Claude	USA	2012
Hilliard	Gary	USA	2007
Hilton-Barber	Geoffrey	South Africa	2005
Hineline	Carl	USA	2016
Hodde	Jason	USA	2006
Hofmann	Jürgen	Germany	2008, 2006, 2005 2004, 2002
Holdaway	Dale	USA	2012
Hollon	Nickademus	USA	2010, 2009
Holmes	Joshua	USA	2016, 2015, 2014
Horn	Debra	USA	2002
Horner	David	USA	2010, 2008, 2006
Horsley	David	United Kingdom	2004
Hudgens	Stephen	USA	2008, 2007
Hughes	Iain	United Kingdom	2013
Humphrey	Jack	USA	2009, 2008, 2007 2005
Humphries	Andy	United Kingdom	2001
Huneycutt	Jamie	USA	2007
Hunt	Carl	USA	2005
Hutchison	Lorie	USA	2009, 2008
Inagaki	Sumie	Japan	2012, 2011
Ingalls	Frank (Jim)	USA	2007, 2005
Iwamoto	Nobumi	Japan	2016, 2013, 2011 2010
Jacaway	Scott	USA	2009, 2007
Jackson	David	USA	2005, 2002
Jensen	Daniel	USA	2011, 2010, 2008 2005
Jergens	Flip	South Africa	2005
Jimenez	Michael	USA	2015
Jo	Yoshiko	Japan	2016, 2015
Johnson	Kirk	USA	1999
Johnson	Mark	USA	2002
Johnson	Robert	USA	2001
Johnston	Christy	USA	2016
Jones	Ben	USA	1993, 1992, 1991
Jones	Chuck	USA	1989, 1988
Jones	David	USA	2016, 2013, 2012 2009, 2008, 2007 1997, 1995

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Jones	Denise	USA	1999, 1996, 1994
Jones	Errol	USA	2001, 2000, 1996
Judd	Joe	USA	2010
Jurek	Scott	USA	2006, 2005
Justin	Mick	USA	2000, 1999, 1997, 1996, 1994
Jylanbaev	Marat	Kazakhstan	1994
Kahla	Said	Germany	2005, 2004
Kahler	Mark	USA	2005
Kamei	Tomotaka	Japan	2011
Kamrani	Behnam	Iran	2013
Kanuga	Kerri	Cayman Islands	2016
Kapiloff	Betsy	USA	2001
Kapoor	Neil	United Kingdom	2006
Karch	Mike	USA	2004, 2003
Karl	Hubert	Germany	2004, 2003
Karnazes	Dean	USA	2013, 2012, 2009,
Kamazes	Dean	USA	2013, 2012, 2009, 2008, 2007, 2006, 2004, 2003, 2000, 1996
Kashurba	Mary	USA	2006, 2003
Kelly	Edward	USA	2011
Kelly	Joey	Ireland	2011, 2000
Keltner	Karl W.	USA	2004, 2001
Kent	Karla	Czech Republic	2016, 2015, 2014, 2013, 2012
Kern	James	USA	2013
Kerr	Steve	United Kingdom	1997, 1994, 1992
Kilpatrick	Samuel	United Kingdom	2012
Kim	David	USA	2001
King	Steve	Canada	2001
Kjenstad	Tim	USA	2007, 2006
Kladensky	Josef	Austria	2006
Klassen	Randy	USA	2002
Klein	Roger	Luxembourg	2003
Klimowicz	Brittany	USA	2011
Kobus	Karlheinz	Germany	2005
Konya	Akos	Hungary	2008, 2007, 2006
Kooiman	Andrea	USA	2015, 2014
Коор	Jason	USA	2011
Koors	Dennis	Denmark	2009
Koppenheffer	Bill	USA	2000
Kostelnick	Pete	USA	2016, 2015, 2014
Kozinc	Gabor	Hungary	2010, 2013, 2014
Krogmann	Brian	USA	2010
Kruger	Tom	USA	1994
Kruglikov	Anatoli	Russia	2000
Krupski	Dave	USA	2000
Kiupski	Brian	USA	2013, 2013
Kullii		Germany	
Vumzo			
Kunze	Guido	-	2005
Kunze Labudzki Labutin	Guido Dariusz Jacek Ivan	Poland Russia	2003 2014 2000

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LaDieu	Bill	USA	2006, 2003
Lalonde	Alexander	Canada	2013
Lam	Otto	USA	2015
Lambert	Robert "Primus"	United Kingdom	1997, 1994, 1993
Langstaff	Anne	USA	2007, 2001
Lapanja	Bob	USA	2001, 1999, 1998
Law	Chor Kin	China	2013
Lawson	Dan	United Kingdom	2016
Lazenby	David	United Kingdom	2002
Lebrun	Robert	Canada	2009
LeMieux	William	USA	2016
Lemus	Maria	El Salvador	2011, 2009, 2006
Leono	Tess	Philippines	2016
Levet	Janice I.	USA	2003
Lewis III	Harvey	USA	2016, 2015, 2014,
		0011	2013, 2012, 2011
Lim	Kelly	Singapore	2014
Lim	Nghee Huat	Singapore	2013
Lindermuller	Kurt	Germany	2012
Lindsey	Ashley	USA	2016
Lint	Adam	USA	2007
Linzbichler	Helmut	Austria	1998
Liskey	Charlie	USA	2004, 1996
Lockton	Bill	USA	2003
Lockwood	Glenn	Australia	2011
Lombardi	Bradford	USA	2016, 2015, 2014
Long	Douglas	USA	2013
Long	Kimani	USA	2015, 2014
Longcrier	Nathan	USA	2014
Lopez	Oswaldo	Mexico	2016, 2015, 2013,
			2012, 2011, 2010,
			2009
Losch	Rainer	Germany	2005
Lowell	Sarah	USA	2008
Ludwig	Scott	USA	2003
Lundell	Don	USA	2003, 2002
Lusskandl	Gerhard	Austria	2009, 2007
Lynch	Mike	USA	2005
Machado	Solane	Brazil	2014
Macmillan	Frank W.	USA	2000
Macy	Mark	USA	1993
Madl	Terence	USA	2009
Madsen	Dixie A.	USA	2000
Magill	Jim	United Kingdom	2006, 1997
Mak	Chris	China	2012
Malinowski	Zbigniew	Poland	2014
Maliszewski	Steve	USA	2015, 2014
Manley	Brian	USA	1999
Mann	Larry	USA	2001
Manzanares Ramirez	Francisco Simon	Mexico	2014
Maples	Major William C.	USA	2002, 2000, 1997

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Marcelino	Cristiano	Brazil	2014
Marchand	Joseph	Canada	1990
Marchant	Kari	USA	2002
Marek	Desiree	USA	2016
Marinsik	Dan	USA	2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2003
Marshall	Kelvin	Australia	2010, 2009, 2008
Martens	Albert	Canada	2004
Martin	Pascale	France	2001
Martin	Ron	United Kingdom	1990
Martinez	Camilo	Colombia	2015
Mason	Brendan	Australia	2010
Massie	Tammy	USA	2013
Matera-Welch	Nicole	USA	2014
Matsuda	Stephan	USA	2002
Matt	Palocsay	USA	2001
Matte	Camila Maria	Brazil	2015
Matukaitis	Kira	USA	2007
Matyazic	Mark	USA	2016, 2015, 2014, 2013, 2012, 2011
Maughan	Grant	Australia	2016, 2015, 2014, 2013
Mauro	Anthony	USA	2011
Mazaud	Jean-Paul	France	2000
Mazzi	Marco	Italy	2012
McBroom	Jack	USA	2000
McCarthy	Philip	USA	2012, 2010, 2009
McConnell	Kym	New Zealand	2004
McFadden	Linda	USA	2007, 2006, 2005, 2002
McKinney	Frank	USA	2016, 2011, 2010, 2009, 2007, 2006, 2005
McQueeney	Scott	USA	2000
Meech	Eric	USA	2013, 2011
Menard	Bill	USA	2005, 1997, 1995, 1994
Menard	Jack	USA	2006, 2002
Mendes	Manoel de Jesus	Brazil	2007
Mendoza	Adalberto	Mexico	2007, 2004
Merienne	Jean-Jacques	France	2002, 1999
Meyer	Don	USA	2001
Meyer	Peter	Germany	2007
Micka	Klaus	Germany	2005
Milanovich	Milan	Switzerland	1996
Millar	Anton	South Africa	2007
Miller	Bill	USA	1990
Miller	Michael	USA	2012
Miller	Rick	USA	2001
Miller	Toni C.	USA	2002
Minter	Greg	USA	2005, 2002, 2001

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Mitchell	Doug	USA	1988
Mitchell	Mike	USA	1996
Moayedi	Parvaneh	Iran	2014, 2013
Moeller	Kent	Denmark	2007
Molteni	Stefano	Italy	2011
Monot	Annie	France	2007
Monot	Jean Michel	France	2005
Moon	Chris	United Kingdom	2013, 2012, 2001, 2000, 1999
Moreau	Philippe	France	2008
Morelli Neto	Joao José	Brazil	2016
Morris	Mark	USA	2004, 2003
Morton	Mike	USA	2012
Mravlje	Dusan	Slovenia	2006, 2000
Mueller	Peter	Switzerland	2004, 2002
Muhlen	Monique	Luxembourg	2006
Mullen	Jess	USA	2011
Mullins	Padraig	Ireland	2015
Murphy	Alan	USA	2014
Murphy	Meredith	USA	2012, 2011
Murray	Jack	USA	2005
Murri	Morgan	USA	2009
Muston	Pam	Australia	2011
Myers	George	USA	2016
Natraj	Nattu	India	2009, 2007, 2006
Nawrocki	Rick	USA	2002, 2001, 2000
Neckar	Tim	USA	2007, 1995
Nelson	James	USA	2004
Nemet	Alex	USA	2008
Neumann	Klaus	Germany	2007
Newton	Scott	USA	2015
Ng	Hung-Kwong	USA	2010, 2009
Ng	Seow Kong	Malaysia	2013
Ngamkam	Angela	Germany	2006
Nimmo	Phil	USA	2016, 2015, 2014
Nishimura	HIroyuki	Japan	2016, 2015, 2013, 2012
Nitzky	Alene	USA	2011, 2008
Nucifora	Carmelo	Italy	2011
Nugent	Doina	Germany	2000
Nunes	Valmir	Brazil	2007
O'Donnell	Aoife	Ireland	2014
O'Grady	Kevin	USA	1990
Ochsner	Nathan	USA	2005, 2001
Olmo	Marco	Italy	2001
Olson	Mark K.	USA	2016, 2014, 2013, 2012, 2011, 2009
Oralek	Daniel	Czech Republic	2010
Ostor	Pierre	France	2009, 2007, 2004
Otero	Monica	Brazil	2010, 2007
Overholtzer	Judy	USA	1996, 1995, 1994
Owen	Barb	Canada	2011

Last Name	First Name	Nationality	Finishes
Pacheco	Jorge	Mexico	2010, 2009, 2008, 2007
Palazzo	Nick	USA	1999
Pallardy	Yves	France	2000
Pallos	Judit	Hungary	2006, 2005
Palm	Најо	Germany	2013
Palmiero-Winters	Amy	USA	2012, 2011
Papathan- asopoulos	Argyrios	Greece	2016
Park	Sukhee	South Korea	2013
Parker	Ian	United Kingdom	2010, 2008, 2007, 2006, 2005, 2004, 2003, 2002
Parker	Ross	Australia	1993
Pawzik	Heike	Germany	2006
Pearlman	Oz	USA	2013
Peischl	Otto	Austria	2006
Pelissier	Stephane	France	2006, 2005
Pence	Eric	USA	2006, 2004
Perez	Angel	USA	2004
Perier	Marc	France	2000
Perry	Heidi	USA	2013, 2012
Petersen	Keith	USA	2001
Peterson	Keith Alan	USA	2002
Pfeil	Terri	USA	2011
Philip	Ted	USA	2012
Pippin	Keith	USA	1995, 1994, 1993, 1992
Plichta	Katherine	USA	2014
Ploskonka	David	USA	2013, 2012, 2011, 2010
Podell	Thomas	USA	2015
Pollard	Fred	USA	2007
Portera	Anthony	USA	2015, 2014, 2013, 2012, 2011, 2010, 2009
Posner	Kenneth	USA	2012, 2010
Possert	Tom	USA	1990, 1989
Poupard	Thierry	France	2000
Prather	Antonette	USA	2015
Pratscher	Johann	Austria	2006, 2000
Pressler	Greg	USA	2015, 2011, 2007
Prestes	Joao Sacks	Brazil	2008
Prost-Dumont	Alain	France	2009
Prusaitis	Joe	USA	2003
Puntelli	Amerigo	Italy	2000
Purdeu	Brandon	USA	2014
Quirk	Linda	USA	2013
Radich	John	USA	2015, 2014, 2013, 2012, 2011, 2009, 2008, 2007, 2006, 2005, 2004, 2003, 2002, 1997
Radovcic	Sergio	Serbia	2014, 2013, 2012

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Rambach	Whit	USA	1995
Rambo	Ernie	USA	2002
Rampacek	Christopher	USA	2002 2003, 2002, 2001
Ramsey	Alex	USA	2016
Rasmussen	Kim	Denmark	2010
Ratliff	Doug	USA	2012, 2010
Re	Gerardo Hector	Argentina	2012, 2010
Recore	Brian	USA	2012 2012
Redpath	Glen	Canada	2012, 2011, 2010
Reed	Pam	USA	2015 2015, 2014, 2013, 2012, 2010, 2009, 2008, 2005, 2004, 2003, 2002
Reese	Cory	USA	2016
Reicher	Jody-Lynn	USA	2005, 2004, 2002
Reily	Matthew	USA	2016
Reinbolt	Russ	USA	2015, 2014
Remington	Dave	USA	2007, 2002
Rennison	John	Canada	2007
Reutovich	Irina	Russia	2000
Ricca	Wagner	Brazil	2010
Rice	Chris	USA	2014
Richard	Reg	USA	2001
Rios	Parker	USA	2013
Rita	Jason	Australia	2012
Rivera	Will	USA	2016
Rizk	Levi	USA	2012
Roberts	Hannah	USA	2012
Robinson	Gillian	United Kingdom	2003
Roca	Byron	Guatemala	2015
Roman	Chris	USA	2012, 2011
Romero	Jason	USA	2015
Romesberg	Ephraim	USA	1999, 1998
Rosen	Tia B.	USA	2002
Rosenstein	Phil G	USA	2008
Rosmus	John	USA	1999, 1994
Ross	David	United Kingdom	2015
Rowe	Tom	USA	2001
Rubino	Vito	Italy	2014
Runions	Neil	Canada	2007, 2006
Russias	Pierre	France	1999
Ryan	Emily	USA	2016, 2015
Ryan	Lucy	Canada	2012
Ryerse	Jan	USA	2002
Rzeszotko	Leszek	Poland	2012
Sa	Carlos	Portugal	2014, 2013
Saffery	Clive	United Kingdom	2009, 2000, 1999
Sagastume	Juan Carlos	Guatemala	2014
Saito	Kazuyoshi	Japan	2014
Sakurai	Kaname	Japan	2000
Sanchez	Federico	Mexico	2000 2015, 2014
Sanchez	Juan	Mexico	2013, 2014

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Last Name	First Name	Nationality	Finishes
Sanchez	Ray	USA	2016, 2015, 2014, 2013, 2012, 2011,
			2010, 2009, 2008
Sanderson	Marc	USA	2006
Sandlin	Michael	USA	1992
Santilhano	Michele	United Kingdom	2008
Savage	Jonathan	USA	2014
Scharffenberg	Del	USA	1997
Scherz	Alexander	Switzerland	2014
Schlereth	Joe	USA	1994
Schlett	Stefan	Germany	1991
Schlundt	Margaret	USA	2002, 2000
Schmidt	Jeff	USA	2008
Schnyder	Sepp	Switzerland	2001
Schoeneck	Bernard	Germany	1998
Scholz	Monica	Canada	2009, 2008, 2006,
Senon	literieu	Cunudu	2005, 2004, 2003,
			2002
Schubert	Reiner	Germany	2008
Scot	Geoffrey	United Kingdom	2001
Scott	Charlie	USA	2015
Scott	Jim	USA	2004
Scott	Lloyd	United Kingdom	1998
Seger	Nikki	USA	2007, 2005
Segger	Jen Lee	Canada	2008
Segura Romero	Pablo	Spain	2016
Sekiya	Ryoichi	Japan	2011
Sell	Christine	Germany	2005
Sentinella	Terry	USA	2012, 2011
Sessions	Matthew	Canada	2005
Sesterheim	Bernhard	Germany	2005
Shand	Stacey	Canada	2015, 2013
Shane	Cory	USA	1995
Sharma	Brijmohan	India	2016
Shehedy	John	USA	1993, 1992
Sheridan	Molly	USA	2009
Shura	Nancy	USA	2003
Sichel	William	United Kingdom	2005
Sieminowski	Tammy	Canada	2000
Sieveking	Cristian	Chile	2011
Silver	Steven R.	USA	2010
Sliver	Steven K.	USA	2002, 2001, 2000, 1999, 1997, 1996
Silverman- Vulgarian	Rick	USA	2001
Simmons	Stephen	USA	1999
Simonsen	Jacqueline	USA	2005
Simpson	Wayne	United Kingdom	2005, 2004
Sitler	Bob	USA	2002
Sizemore	Frank	USA	2016
Skagerberg	Marvin	USA	1990

Last Name	First Name	Nationality	Finishes
Smit	Robin	USA	2007, 1999, 1992, 1991
Smith	Carolyn	USA	2004
Smith	James L.	USA	2008, 2007, 2004
Smith	Mike	USA	2002
Smith	Mosi	USA	2015, 2012
Smith-Batchen	Lisa	USA	2008, 2007, 2006, 2003, 2002, 2000, 1998, 1997, 1995
Smithberger	Jay	USA	2015, 2013
Snowbarger	Marvin	USA	2006, 2004
Snyder	Scott	USA	2008, 2006
Sobieraski	Brett	USA	2016
Spajic	Jovica	Serbia	2015
Spears	Randy	USA	1992
Spector	Josh	USA	2014
Spencer	Eric	USA	2014
Springman	Alisa	USA	2010, 2009, 2008
Stark	Lynne	United Kingdom	2004
Steele	Eric	USA	2000
Steiner	Manfred	Austria	2011
Stephens	Larry	USA	2011 2016, 2014
Stephens	Mike	USA	2010, 2011
Stone	Paul	USA	2004
Straw	Keith	United Kingdom	2002, 2001, 2000
Shaw	Ketti	Childed Kingdolin	2010, 2013, 2014, 2013, 2012, 2011, 2010, 2009
Struck	Jared	USA	2016
Strychalski	Dariusz	Poland	2014
Styllas	Michael	Greece	2000
Stypula	Elaine	USA	2013, 2012
Sublett	Brett	USA	2007
Suckling	Sandy	Australia	2016
Supler	Blaise	USA	2002
Sutton	Dale	USA	1999, 1997
Sutton	Glenn	New Zealand	2015, 2014
Sweeney	Mike	USA	2005
Tabios	Gerald	Philippines	2016, 2015, 2014
Talley	Joshua	USA	2015
Tamati-Lusskandl	Lisa Yvonne	New Zealand	2009, 2008
Taquet	Herve	France	2008
Teal	Steve	USA	2010, 2008, 2007, 2006, 2005
Teeples	John	USA	2011
Teres Costa	Francisco (Xesc)	Spain	2009
Thomas	Michael	USA	2011
Thomas	Tracy	USA	2007
Thompson	Bill	USA	2016, 2014, 2013
Thurston	Jarom	USA	2009, 2008
	Mick	Australia	2016, 2015
Thwaites	IVIICK		

<b>BADWATER 135</b>	OFFICIAL	<b>FINISHERS:</b>	1987-2016
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Last Name	First Name	Nationality	Finishes
Tieger	Julie	USA	1998
Tilden	Michael	USA	2005
Todd	Catherine	Australia	2013, 2012
Toepke	Matthew	USA	1997
Toler	Beacham	USA	1997, 1995
Toumazou	Vincent	France	2010
Treptow	Thorsten	Germany	2005, 2004
Trevino	Mike	USA	2001
Treyens	Cliff	USA	1998
Tripp	Ian	United Kingdom	2001
Triumph	Tom	USA	2007
Tuller	Rob	USA	1991
Ulm	Rob	USA	2014
Ulrich	Marshall	USA	2015, 2013, 2012, 2011, 2010, 2008, 2007, 2005, 2004, 2003, 2002, 2001, 1999, 1998, 1996, 1995, 1993, 1992, 1991, 1990
Ulrich	Willette	USA	1995
Vajda	ZoltÃjn	Hungary	2016
Valentin	Simone	Brazil	2014
Vallée	Albert	France	2007, 2005
Vance	Fred	USA	1998, 1997
Veics	Arthurs	Latvia	2011
Velazco	Andy	USA	2003
Venti	Alyson	USA	2016, 2014
Verdenet	Gerard	France	2001, 2000
Verdier	Philippe	France	2014
Vieler	Jens	Germany	2011
Vila Casanovas	Joan	Spain	2014
Villar do Amaral	Marcio	Brazil	2010
Villines	Sandra	USA	2016
Vis	Prisca	Netherlands	2015
Vogel	Jennifer	USA	2011
Vogel	Lane	USA	2013, 2010
Volkenand	Rob	USA	1997, 1994
Vondruska	Jerry C.	USA	2007
Walker	David	New Zealand	2010
Walker	Jim	USA	1989
Wallington	Lee	United Kingdom	2014
Walther	Tammy	USA	2011
Wardian	Michael	USA	2011
Warren	Barbara	Austria	1999, 1991, 1990, 1989
Warren	Nancy	USA	2006, 2005
Webb	Arthur	USA	2012, 2011, 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2002, 2001, 2000, 1999, 1998

Last Name	First Name	Nationality	Finishes
Weber	Scott	USA	2009, 2008, 2006, 2005, 2003, 2001, 2000, 1999, 1998, 1997, 1996, 1995, 1994
Weber	Uli	Germany	2004, 2002, 2001, 2000
Weidemann	Friedhelm	Germany	2006
Weir	Sam	Australia	2016
Weiss	Erhard	Germany	2010, 2009, 2008, 2007, 2006
Weiss	Heidi	Germany	2006
Weiss	Jodi	USA	2016, 2015
Weiss	Ху	USA	2006
Welch	Tim	United Kingdom	2010
Werner	Lynne	USA	2000
West	Dick	USA	1990
West	Michelle	USA	2015
Westergaard	Danny	USA	2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007
Whalen	Mike	USA	2009, 2008
Wheeler	Craig	USA	2015, 2014
Wiaderek	Markus	Germany	2010
Wilkie	Jose	USA	1997, 1996
Wimmer	Robert	Germany	2004
Wog	John	USA	2015
Woods	Andy	USA	2014
Woody	Gavin	USA	2014
Woolley	Mark	United Kingdom	2013, 2010
Worts	Darren	USA	2002
Wynd	Nikki	Australia	2016, 2015, 2014
Yasso	Bart	USA	1989
Yeager	Henry	USA	1990
Youngren	Kathy	USA	2016, 2009
Youngren	Robert	USA	2014, 2011
Yucra	Iso	Bolivia	2010
Zaide	Thomas	USA	2014
Zama	Eris	Italy	1997
Zdon	William	USA	2012
Zeigle	Mike	USA	1998
Zemach	Ken	USA	2013
Zwarkowski	Cheryl	USA	2016, 2014, 2013, 2012, 2011, 2009, 2008



I

ER

DWATER THIRTY FIVE

1

Lab:

2016 STYR Labs Badwater 135 women's champion Alyson Venti (now Allen) and her support crew broke the six-year-old women's course record with a time of 25:53:07, also placing fifth overall. This was her third consecutive appearance, her second finish, and second victory (with one DNF in 2015.)



ER

a



**OFFICIAL FINISHER** 

111

WHTER

BADWATER

10

Cheryl Zwarkowski, 58 but ageless, of Victorville, CA was the final female finisher at the 2016 STYR Labs Badwater 135, with a time of 46:36:43. This was her eight appearance at the world's toughest foot race, and seventh finish.

ATER RTY FIVE

**STYR Lab** 

B

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BRDWATER OFFICIAL FINISHER

**OFFICIAL FINISH** Bradford Lombardi, 47, of Panamint Springs, CA was the final male finisher at the 2016 STYR Labs Badwater 135, with a time of 47:49:05. After a DNF at his first appearance in 2012, the "Salty Peacock"—the only entrant in this year's race who actually lives in Death Valley—has now finished the race three times in a row (2014-16).

16

ADWATER

#### 2017 OFFICIAL RACE ROSTER

#### 8:00PM START

Bib	First Name	Last Name	City	State	Country	Nationality	M/F	Age	Vet?
100	Mohammad	Al Swaiti	Amman		Jordan	Jordan	М	46	No
23	Noora	Alidina	Clearwater	FL	USA	Jordan	F	60	Yes
14	Marcus	Berggren	Ljusdal	12	Sweden	Sweden	M	42	Yes
51	Kimberlie	Budzik	Friendswood	TX	USA	USA	F	57	Yes
10	Pamela	Chapman-Markle	San Leon	TX	USA	USA	F	61	Yes
57	David	Coats	Houston	TX	USA	USA	M	56	Yes
33	Catra	Corbett	Fremont	CA	USA	USA	F	52	No
40	Siria	Costa	Quatro Barras	0.1	Brazil	Brazil	F	40	No
82	Juan	Craveri	Buenos Aires		Argentina	Argentina	M	48	Yes
29	Kayla	Delk	Greeneville	TN	USA	USA	F	30	Yes
30	Kevin	Delk	Greeneville	TN	USA	USA	M	34	Yes
90	James	Ehasz	Hereford	AZ	USA	USA	M	64	Yes
15	Shannon	Farar-Griefer	Hidden Hills	CA	USA	USA	F	56	Yes
64	Patrick	Hameau	Paris	0.11	France	France	M	45	No
68	Jack	Humphrey	Arvada	СО	USA	USA	M	60	Yes
96	Monique	Jacques	Sanger	CA	USA	USA	F	30	No
11	David	Jones	Murfreesboro	TN	USA	USA	M	65	Yes
66	Nick	Kaminski	Burleson	TX	USA	USA	M	44	No
49	Karla	Kent	Las Vegas	NV	USA	Czech Republic	F	54	Yes
17	Ashley	Lindsey	Capitola	CA	USA	USA	F	35	Yes
48	Frank	McKinney	Delray Beach	FL	USA	USA	M	55	Yes
63	Mark K.	Olson	Covina	CA	USA	USA	M	70	Yes
70	Michelle	Payne	Southend on Sea	en	United Kingdon		F	48	No
85	Augusto	Pinto Oliveira	Paredes		Portugal	Portugal	M	44	No
88	Antonette	Prather	Garner	NC	USA	USA	F	48	Yes
77	John	Radich	Monrovia	CA	USA	USA	M	63	Yes
27	Emily	Ryan	Washington	DC	USA	USA	F	42	Yes
62	Lisa	Sherak	Lawrenceville	GA	USA	USA	F	42 55	Yes
46	Neil	Smith	Dallas	TX	USA	USA	M	46	No
40 7	Lisa	Smith-Batchen	Jackson	WY	USA	USA	F	40 56	Yes
81	Gerald	Tabios	Elmhurst	NY	USA	Phiippines	г М	30 47	Yes
				IN I			F		
5	Eloiza	Testolin Rodrigues	Caxias do Sul, RS,	CO	Brazil	Brazil		38	No Vaz
21 71	Marshall Jodi	Ulrich Weiss	Evergreen	CO FL	USA USA	USA USA	M F	66 47	Yes
			Highland Beach					47	Yes
26	Colleen	Zato	Henderson	NV	USA	USA	F	36	No
50	Cheryl	Zwarkowski	Victorville	CA	USA	USA	F	59	Yes
9:30	PM START								
Bib	First Name	Last Name	City	State	Country	Nationality	M/F	Age	Vet?
53	Hector	Bengolea	Ljusdal		Argentina	Argentina	М	53	No
18	Ricarda	Bethke	Solothurn		Switzerland	Germany	F	53	Yes
45	Ariovaldo	Branco	Praia Grande		Brazil	Brazil	Μ	48	Yes
54	Adam	Connor	Artarmon		Australia	Australia	М	50	No
13	Dale	Cougot	Garland	TX	USA	USA	Μ	51	Yes
73	Nathan	DeWall	Lexington	KY	USA	USA	Μ	37	No
61	Roberto Mario	Gili Farina	Cordoba		Argentina	Argentina	Μ	44	No
59	Jeff	Gleason	Wexford	PA	USA	USA	Μ	59	Yes
34	Krasimir Nicola	evGueorguiev	Jackson	WY	USA	Bulgaria	Μ	43	No
80	Carl	Hineline	Plano	TX	USA	USA	Μ	42	Yes
8	Kerri	Kanuga	Grand Cayman		Cayman Islands	Cayman Islands	F	47	Yes
20	Nick	LaBoffe	Cincinnati	OH	USA	USA	Μ	36	No
75	Jason	LeDoyen	Cary	NC	USA	USA	М	46	No
39	Ken	Lewis	Los Angeles	CA	USA	USA	М	54	No
19	Joel	Livesey	Los Angeles	CA	USA	USA	М	39	No
91	Bradford	Lombardi	Death Valley	CA	USA	USA	Μ	48	Yes
72	Francisco Simo	n Manzanares Ramirez	Chihuahua		Mexico	Mexico	Μ	47	Yes
78	Kevin	Marasco	Jacksonville Beach	FL	USA	USA	М	42	No
93	Marco	Mazzi	Valeggio sul Mincio		Italy	Italy	М	50	No
74	Matthew	Reily	Oklahoma City	OK	USA	USA	М	42	Yes
98	Russ	Reinbolt	La Jolla	CA	USA	USA	М	52	Yes

#### **RACE ROSTER**

#### 9:30PM START (Cont.)

Bib	First Name	Last Name	City	State	Country	Nationality	M/F	Age	Vet?
86	Tim	Robert	Honolulu	HI	USA	USA	М	52	No
87	Kleber	Santos	Caxambu		Brazil	Brazil	М	37	No
89	Franco	Soriano	Livermore	CA	USA	Philippines	М	46	No
60	Keith	Straw	Malvern	PA	USA	United Kingdom	n M	62	Yes
31	Uli	Stuwe	Ventura	CA	USA	Germany	М	43	No
95	Brian	Tjersland	Dartmouth	MA	USA	USA	М	50	No
69	Gilberto	Toigo	Porto Alegre		Brazil	Brazil	М	55	No
92	Jens	Vieler	Solothurn		Switzerland	Germany	М	50	Yes
52	Sandra	Villines	San Jose	CA	USA	USA	F	44	Yes
22	Michelle	West	Santa Monica	CA	USA	USA	F	45	Yes
84	Danny	Westergaard	Palos Verdes Estate		USA	USA	M	58	Yes
3	Marcia	Zhou	Hong Kong		Hong Kong	USA	F	28	No
5	marcha	Liidu	Hong Rong		Hong Rong	0.011	1	20	110
11:0	OPM START								
Bib	First Name	Last Name	City	State	Country	Nationality	M/F	Age	Vet?
97	Marco	Bonfiglio	Abbiategrasso		Italy	Italy	М	39	No
4	Chavet	Breslin	Denver	CO	USA	USA	F	35	No
25	Amy	Costa	Jacksonville	FL	USA	USA	F	52	Yes
55	Luigi	Dessy	Ponce	PR	USA	USA	Μ	39	Yes
16	Ed	Ettinghausen	Wildomar	CA	USA	USA	Μ	54	Yes
67	Kyle	Fahrenkamp	Cincinnati	OH	USA	USA	Μ	40	Yes
12	Jared	Fetterolf	Dallas	TX	USA	USA	Μ	28	Yes
76	Brenda	Guajardo	Austin	TX	USA	USA	F	40	Yes
24	Jonathan	Gunderson	San Francisco	CA	USA	USA	М	39	Yes
36	Joshua	Holmes	Los Angeles	CA	USA	USA	М	39	Yes
65	Wataru	Iino	Chennai		India	Japan	М	37	No
44	Nobumi	Iwamoto	Okinawa		Japan	Japan	М	51	Yes
28	Michael	Jimenez	Marina	CA	USA	USA	М	43	Yes
42	Tetsuo	Kiso	Moriya		Japan	Japan	М	49	No
47	Andrea	Kooiman	Mission Viejo	CA	USA	USA	F	42	Yes
1	Pete	Kostelnick	Hannibal	MO	USA	USA	М	29	Yes
35	Harvey	Lewis III	Cincinnati	OH	USA	USA	М	41	Yes
2	Oswaldo	Lopez	Madera	CA	USA	Mexico	М	45	Yes
6	Szilvia	Lubics	Nagykanizsa		Hungary	Hungary	F	43	No
94	Camilo	Martinez	New York	NY	USA	Colombia	М	36	Yes
56	Mark	Matyazic	Irvine	CA	USA	USA	М	52	Yes
9	Grant	Maughan	Dudley		Australia	Australia	М	53	Yes
37	Dan	McHugh	Key Largo	FL	USA	USA	М	46	No
43	HIroyuki	Nishimura	Kamagaya	Chiba	Japan	Japan	М	47	Yes
79	Federico	Sanchez	Saint Helena	CA	USA	Mexico	М	47	Yes
83	Juan	Sanchez	Saint Helena	CA	USA	Mexico	М	48	Yes
41	Ray	Sanchez	Sacramento	CA	USA	USA	М	50	Yes
38	Eric	Spencer	Coconut Grove	FL	USA	USA	М	38	Yes
99	Noelani	Taylor	Ponte Vedra Beach	FL	USA	USA	F	37	No
58	Jim	Trout	East Grand Rapids	MI	USA	USA	М	47	No
32	Nelva	Valladares	Los Angeles	CA	USA	Mexico	F	32	No
-			0	-				-	



#### US MATERIALS ★ US MANUFACTURING ★ US WORKERS

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#### AVAILABLE NOW Sport and Run Socks

#### FEATURING

#### \* COMFORT COMPRESSION Provides all day comfort and reduces

foot fatigue.

\* SEAMLESS TOE CLOSURE Reduces bulking in the toe box to minimize blister formation.

#### AVAILABLE IN MEN'S & WOMEN'S Ultralight and Lightweight styles in different heights and cushioning.



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Blue Ridge Compression, W's Greensboro 3/4, Damascus 1/4, W's Roanoke Low

#### **2017 ROSTER QUICK-REFERENCE**

Bib	Wave	First	Last	Bib	Wave	First	Last
1	2300	Pete	Kostelnick	51	2000	Kimberlie	Budzik
2	2300	Oswaldo	Lopez	52	2130	Sandra	Villines
3	2130	Marcia	Zhou	53	2130	Hector	Bengolea
4	2300	Chavet	Breslin	54	2130	Adam	Connor
5	2000	Eloiza Te	estolin Rodrigues	55	2300	Luigi	Dessy
6	2300	Szilvia	Lubics	56	2300	Mark	Matyazic
7	2000	Lisa	Smith-Batchen	57	2000	David	Coats
8	2130	Kerri	Kanuga	58	2300	Jim	Trout
9	2300	Grant	Maughan	59	2130	Jeff	Gleason
10	2000	Pamela	Chapman-Markle	60	2130	Keith	Straw
11	2000	David	Jones	61	2130	Roberto Mario	Gili Farina
12	2300	Jared	Fetterolf	62	2000	Lisa	Sherak
13	2130	Dale	Cougot	63	2000	Mark K.	Olson
14	2000	Marcus	Berggren	64	2000	Patrick	Hameau
15	2000	Shannon	Farar-Griefer	65	2300	Wataru	Iino
16	2300	Ed	Ettinghausen	66	2000	Nick	Kaminski
17	2000	Ashley	Lindsey	67	2300	Kyle	Fahrenkamp
18	2130	Ricarda	Bethke	68	2000	Jack	Humphrey
19	2130	Joel	Livesey	69	2130	Gilberto	Toigo
20	2130	Nick	LaBoffe	70	2000	Michelle	Payne
21	2000	Marshall	Ulrich	71	2000	Jodi	Weiss
22	2130	Michelle	West	72	2130	Francisco Simon	Manzanares Ramirez
23	2000	Noora	Alidina	73	2130	Nathan	DeWall
24	2300	Jonathan	Gunderson	74	2130	Matthew	Reily
25	2300	Amy	Costa	75	2130	Jason	LeDoyen
26	2000	Colleen	Zato	76	2300	Brenda	Guajardo
27	2000	Emily	Ryan	77	2000	John	Radich
28	2300	Michael	Jimenez	78	2130	Kevin	Marasco
29	2000	Kayla	Delk	79	2300	Federico	Sanchez
30	2000	Kevin	Delk	80	2130	Carl	Hineline
31	2130	Uli	Stuwe	81	2000	Gerald	Tabios
32	2300	Nelva	Valladares	82	2000	Juan	Craveri
33	2000	Catra	Corbett	83	2300	Juan	Sanchez
34	2130	Krasimir Nicolaev	Gueorguiev	84	2130	Danny	Westergaard
35	2300	Harvey	Lewis III	85	2000	Augusto	Pinto Oliveira
36	2300	Joshua	Holmes	86	2130	Tim	Robert
37	2300	Dan	McHugh	87	2130	Kleber	Santos
38	2300	Eric	Spencer	88	2000	Antonette	Prather
39	2130	Ken	Lewis	89	2130	Franco	Soriano
40	2000	Siria	Costa	90	2000	James	Ehasz
41	2300	Ray	Sanchez	91	2130	Bradford	Lombardi
42	2300	Tetsuo	Kiso	92	2130	Jens	Vieler
43	2300	HIroyuki	Nishimura	93	2130	Marco	Mazzi
44	2300	Nobumi	Iwamoto	94	2300	Camilo	Martinez
45	2130	Ariovaldo	Branco	95	2130	Brian	Tjersland
46	2000	Neil	Smith	96	2000	Monique	Jacques
47	2300	Andrea	Kooiman	97	2300	Marco	Bonfiglio
48	2000	Frank	McKinney	98	2130	Russ	Reinbolt
49	2000	Karla	Kent	99	2300	Noelani	Taylor
50	2000	Cheryl	Zwarkowski	100	2000	Mohammad	Al Swaiti

### adventure corps°

# BADWATER 135 + Salton Sea + Cape Fear ULTRA CUP

The **BADWATER® ULTRA CUP** comprises *Badwater Cape Fear* in March, *Badwater Salton Sea* in late April, and *Badwater 135* in July. Those runners who complete all three full-distance events in the same calendar year will be featured on the Badwater website and their virtues will be extolled throughout the Internet and in future editions of BADWATER Magazine.

First	Last	City	State	Country	Nationality	Age	M/F	Cape Fear	Salton Sea	BW135	Combined
2014											
Lorie	Alexander	Calgary	AB	Canada	Canada	55	F	11:08:00	22:31:03	36:32:37	70:11:40
Jeff	Gleason	Wexford	PA	USA	USA	56	М	9:49:00	19:39:00	36:21:55	65:49:55
Phil	Nimmo	Mansfield	ΤX	USA	USA	50	М	11:37:00	22:31:03	36:23:41	70:31:44
Anthony	Portera	White Plains	NY	USA	USA	43	М	12:03:00	24:44:00	37:09:21	73:56:21
Eric	Spencer	Miami Beach	FL	USA	USA	35	М	10:07:00	25:24:00	36:45:49	72:16:49
Keith	Straw	Malvern	PA	USA	UK	58	М	9:57:00	19:39:00	42:21:30	71:57:30
Bill	Thompson	Moon Township	PA	USA	USA	48	М	9:49:00	19:39:00	43:16:16	71:44:16
2015											
Jill	Andersen	Reno	NV	USA	USA	38	F	10:00:00	24:53:54	34:04:14	68:58:08
Jodi	Weiss	Highland Beach	FL	USA	USA	45	F	10:27:01	22:37:40	43:37:51	76:42:32
Emily	Ryan	Washington	DC	USA	USA	40	F	10:48:00	23:45:25	45:26:46	80:00:11
Norma	Bastidas	Delta	BC	Canada	Canada	47	F	11:14:01	23:57:30	45:44:15	80:55:46
Phil	Nimmo	Mansfield	TX	USA	USA	51	М	10:15:02	21:18:20	36:20:15	67:53:37
Russ	Reinbolt	La Jolla	CA	USA	USA	50	М	8:20:00	23:31:00	37:26:08	69:17:08
Dale	Cougot	Garland	TX	USA	USA	49	М	9:57:00	22:48:28	39:23:47	72:09:15
Keith	Straw	Malvern	PA	USA	USA	60	М	8:47:02	25:30:53	40:14:10	74:32:05
Bob	Becker	Ft. Lauderdale	FL	USA	USA	70	М	11:20:00	25:30:53	41:30:21	78:21:14
2016											
Amy	Costa	Jacksonville	FL	USA	USA	51	F	10:00:00	17:33:00	32:47:57	60:20:57
Sandra	Villines	San Jose	CA	USA	USA	43	F	10:01:00	20:47:00	36:35:37	67:23:37
Gina	Fioroni	Lakewood	СО	USA	USA	39	F	9:28:00	22:21:00	38:22:36	70:11:36
Kayla	Delk	Greeneville	TN	USA	USA	29	F	10:54:00	25:08:00	45:32:01	81:34:01
Cheryl	Zwarkowski	Victorville	CA	USA	USA	58	F	10:12:00	25:44:00	46:36:43	82:32:43
Grant	Maughan	Dudley	NWS	Australia	Australia	52	М	8:23:00	17:33:00	26:44:36	52:40:36
Jared	Fetterolf	Dallas	ΤX	USA	USA	27	М	7:14:00	14:56:00	30:39:39	52:49:39
Mark	Matyazic	Irvine	CA	USA	USA	51	М	7:36:00	16:02:00	29:40:42	53:18:42
Luigi	Dessy	Ponce	PN	USA	USA	38	М	8:24:00	18:50:00	32:38:01	59:52:01
William	Gane	Chicago	IL	USA	UK	40	М	10:12:00	21:18:00	35:22:34	66:52:34
Phil	Nimmo	Mansfield	ΤX	USA	USA	52	М	9:48:00	18:20:00	38:46:48	66:54:48
David	Coats	Houston	TX	USA	USA	55	М	11:45:00	21:31:00	37:23:34	70:39:34
Keith	Straw	Malvern	PA	USA	UK	61	М	8:21:00	23:58:00	38:44:59	71:03:59
Carl	Hineline	Plano	TX	USA	USA	41	М	8:57:00	22:21:00	41:12:14	72:30:14
Dale	Cougot	Garland	TX	USA	USA	50	М	9:48:00	27:27:00	40:36:11	77:51:11
Kevin	Delk	Greeneville	TN	USA	USA	33	М	10:54:00	25:08:00	45:32:01	81:34:01

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#### **2017 BADWATER ULTRA CUP CURRENT STANDINGS**



Pamela Chapman-Markle Combined Time: 32:21:38



**Catra Corbett** Combined Time: 35:20:10



Kayla Delk Combined Time: 34:55:20



Andrea Kooiman Combined Time: 31:54:45



**Antonette Prather** Combined Time: 36:58:57



Lisa Sherak Combined Time: 34:02:51



Sandra Villines Combined Time: 28:11:10



**David Coats** Combined Time: 32:06:09



Dale Cougot Combined Time: 35:37:31



**Kevin Delk** Combined Time: 35:37:31



Luigi Dessy Combined Time: 28:11:49



Jared Fetterolf Combined Time: 27:02:04



**Carl Hineline** Combined Time: 28:21:10



Joshua Holmes Combined Time: 30:37:52



**Ray Sanchez** Combined Time: 29:58:27



**Camilo Martinez** Combined Time: 27:25:04



**Keith Straw** Combined Time: 31:57:23



Mark Matyazic Combined Time: 26:02:06



الالفيك فيهدم العم

**Russ Reinbolt** Combined Time: 30:20:52



# Run run run eat run run run...





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