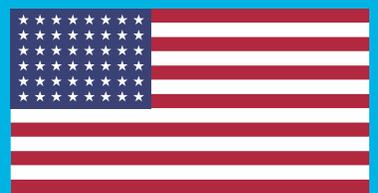
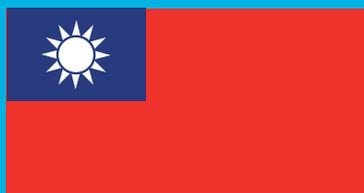


#BadwaterStrong
World's Toughest



July 2020



L-R: The Kostman Family: Chris, Shelby, Keith, and Wayne. Keith heads up the Badwater 135 webcast each year and has supported Chris' events since 1985. Wayne and Shelby volunteered at many dozens of events that Chris produced from 1984 all the way to 2014, when they supported the Badwater 135 that year. It was from these amazing parents - who took Keith and Chris on not one, but two, one-year-long travels through Europe and North Africa during their childhood in Volvo station wagons - that the Kostman brothers learned their appreciation for travel, adventure, "foreign" cultures, languages, history, and so much more.

Welcome to the July 2020 edition of BADWATER® Magazine! We are AdventureCORPS®, an athlete-run firm producing and promoting ultra-endurance sports events and the BADWATER® brand. Adventure is our way of life, so we are pleased to host the 43rd anniversary Badwater® 135 Ultramarathon, known globally as "the world's toughest foot race," on July 6-8, 2020. This magazine celebrates that race and its setting, as well as the entire Badwater® / AdventureCORPS® series of races, and what we like to call the Badwater Family and the Badwater Way of Life.

This year's race celebrates the 43rd anniversary of Al Arnold's original trek from Badwater Basin to Mt. Whitney in 1977. Arnold, an ultrarunning pioneer, human potential guru, and health club manager, competed in a solo effort: it was just Arnold and his support crew against the elements and the clock. It took him three efforts before he was successful, having first attempted the route in 1974 and then 1975. It took four more years until Jay Birmingham also completed the course, in 1981. We have run in their footsteps ever since.

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. We are extremely proud of our safety record and the high esteem in which this race is held. We are equally - if not more - proud that this event has become the de facto "Olympics of Ultra Running" with its incredible international appeal and participation.

This year we had intended to have 27 nations represented—as featured on our magazine cover—along with more than twenty different American States! But alas, with the pandemic making

international travel impossible, perhaps none of our non-USA-based runners will be able to compete. That is a real shame. They will be with us in spirit, and will be guaranteed entry next year. To those who are able to join us, we welcome everyone to what we like to call "Mother Nature's Greatest Sports Arena" for this "Challenge of the Champions."

This year marks 21 years of AdventureCORPS producing this historic and legendary race. Yours truly took the event over after the 1999 edition. (I had been invited to compete in 1991 - when I was 24 years old - but I ended up accepting a race directing job in Canada that summer instead. I have been organizing ultra endurance events for as long as I have been competing in them - since 1984.)

It's been a privilege and an honor—and an epic challenge far surpassing anything I could have ever imagined—to organize and direct this race for more than 20 years. I humbly thank everyone - especially the incredible race staff as well as our colleagues at the National Park Service, U.S. Forest Service, Inyo County, Department of Transportation, and California Highway Patrol—for their important roles in hosting this race and helping to ensure that it runs smoothly, safely, and fairly.

Long live Badwater 135 and may we all forever remain #BadwaterStrong!

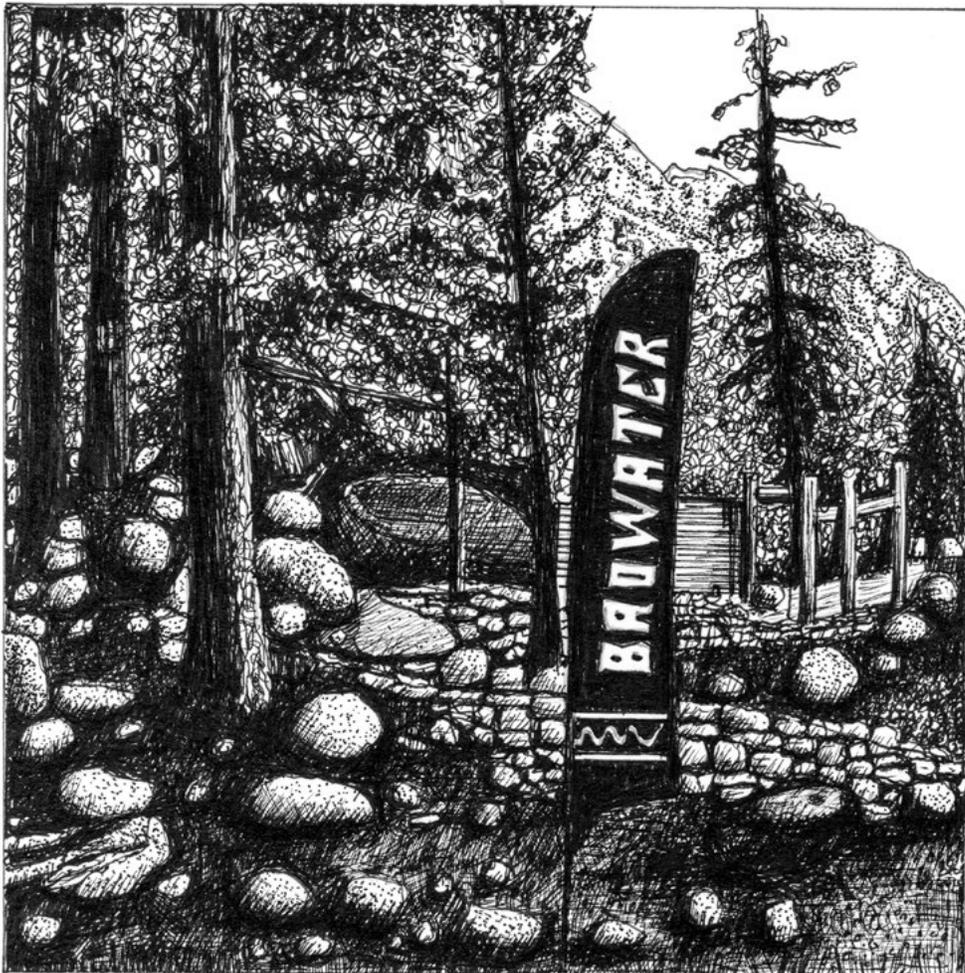
Yours in sport,

Chris Kostman

Race Director and Chief Adventure Officer

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All hand-drawn art within these pages courtesy Badwater athlete Rich Peers.

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





ARTSAKH ULTRA

In 2021, AdventureCORPS® - organizers of the world-famous Badwater® ultramarathon running races in Death Valley and across the USA - will host a six-day, point-to-point, 160-mile (260km) trail running stage race in the Republic of Artsakh, the democratic, Christian, Armenian homeland located just east of Armenia itself. Formerly known as Nagorno-Karabakh during the Soviet era, Artsakh is a fascinating, wonderful country that few people have even heard of, and even less have visited. AdventureCORPS aims to change both of those facts by bringing runners from all over the world to compete in the Artsakh Ultra™. The inaugural race will be held in the first week of September, 2021, with the exact date to be announced shortly. The event will be held annually thereafter and AdventureCORPS already has plans underway to develop additional endurance sports events and adventure travel opportunities in Artsakh in the near future. See Badwater.com for all the info.

The Artsakh Ultra race will be held primarily on the Janapar Trail, a hiking trail network which stretches from adjacent Armenia into

and across Artsakh. The route is primarily held on jeep tracks, along with single track trails, some dirt roads, and about 10 miles (16km) of paved roads.

The race will be organized in a "stage race" format, in which runners will run a certain section of the Janapar Trail each day. Each day's "stage" will be timed separately, and overall results will be calculated by adding all six days' times together. The first stage will be 22mi / 36km; the next four stages will vary from 26 to 34 miles (42 to 55km), while the final stage will be 16mi / 26km. With a total distance of 160mi (260km), there is a cumulative total of 26,000 feet (8000m) of elevation gain along the route.

Beginning in the northeastern Armenian city of Vardenis, after 15 miles (24km) and at the top of a 9000-foot (2743m) pass, competitors in the Artsakh Ultra will leave Armenia and cross into the Republic of Artsakh. From here they will follow the Janapar Trail - with a few side diversions to see ancient sites - and transect the



majority of this magnificent country. The six nights on the trail will include tent camping the first three nights and hotel stays the final three nights. Luggage transport will be provided each day and most breakfast and dinner meals will be provided. (Runners will provide their own energy food while running, and will be on their own for restaurant dining on two nights: in Vank and in Stepanakert.)

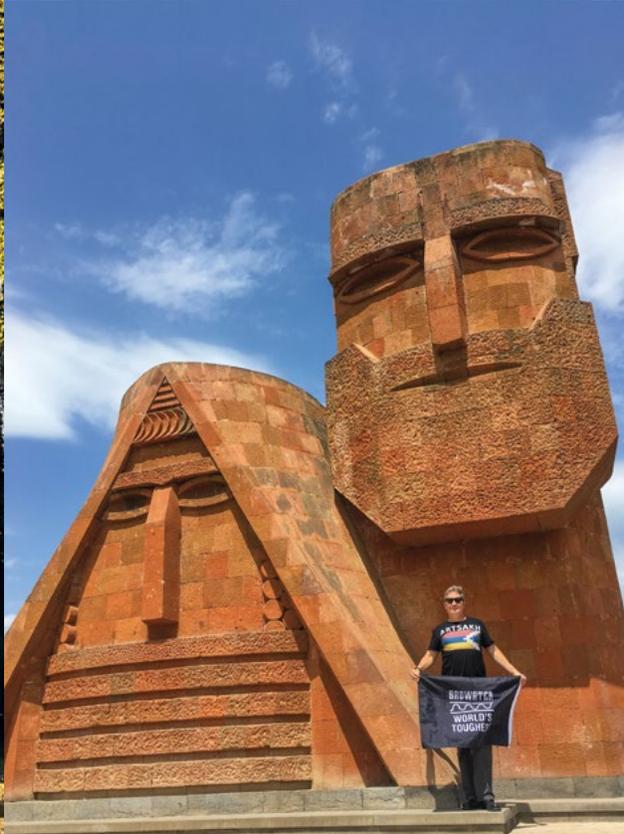
Some of the exciting landmarks along the route include the monasteries of Dadivank, Gandzasar, and Hakobvank, Zuar hot springs, the lofty peak of Kachaghakaberd, the “We Are Our Mountains” sculpture in Stepanakert, and Hunot Canyon. Towns and villages along the route include Tsar, Karvachar, Zuar, Vank, Patara, Stepanakert, and Shushi.

The final stage will begin with a festival hosted by the Artsakh government in the capital city of Stepanakert, and will conclude with a celebratory bonfire, music, food, and dinner party in the city of Shushi, known as Artsakh’s cultural capital.

While the route will be incredibly beautiful and challenging, the race itself will also be a culturally immersive experience. Each day’s route will pass through one or more villages, while the overnights will be in or near villages and cities. Runners will eat the local, super healthy, incredibly fresh food. They will enjoy Armenian music, dance, and culture. Along the way, the runners will visit 1000-year-

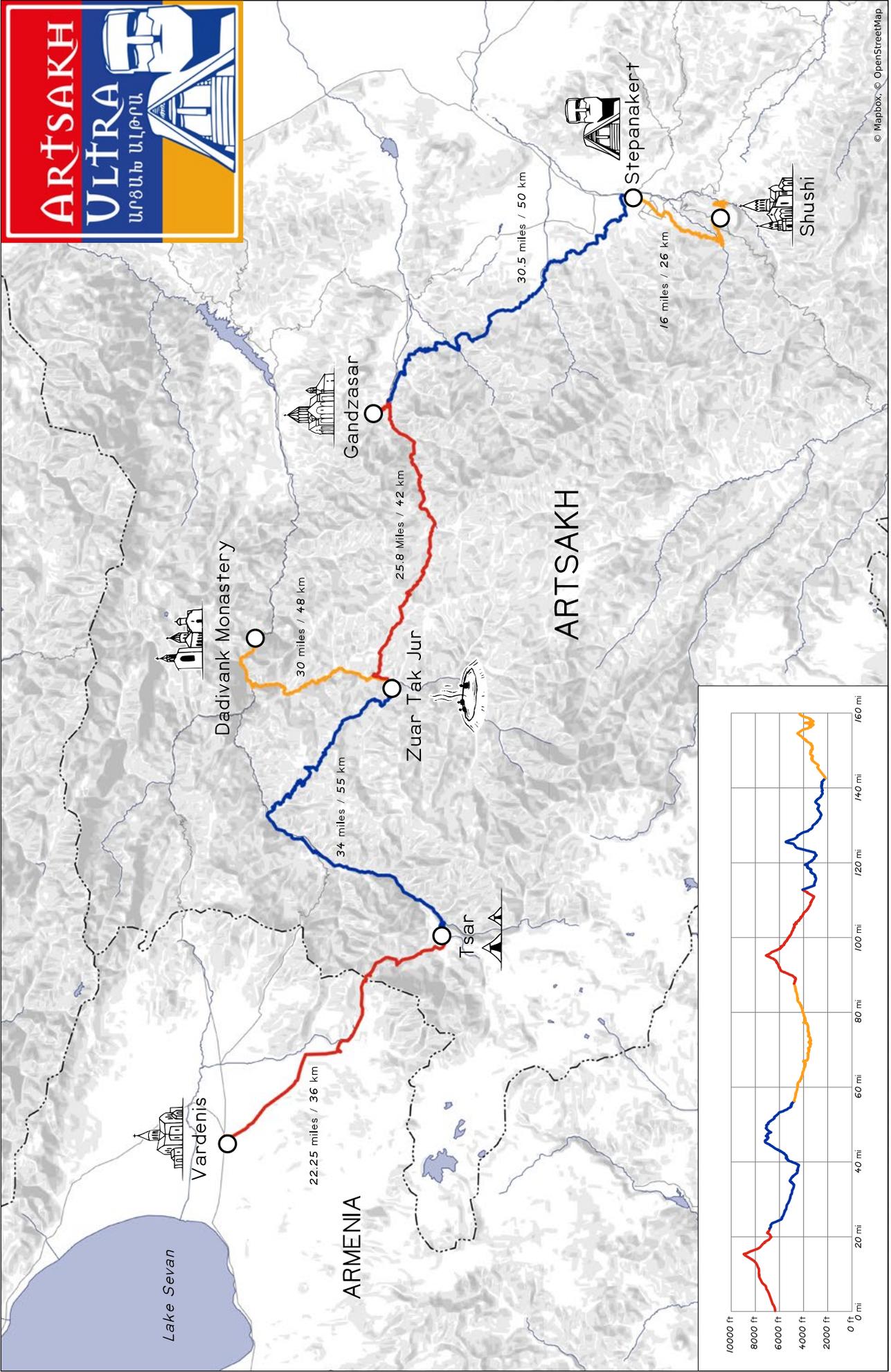
old Armenian churches, monasteries, and historic sites. And while each competitor will run as part of an international field of runners, they will be embraced, surrounded, and supported by the people of Artsakh and their Armenian food, music, language, and culture.







Artsakh Ultra Race Map



ARTSAKH ULTRA ENTRY: What's Included

- Hotel Rooms for Four Nights: Locations: Yerevan (pre-race), Vank at the end of Stage 4, Stepanakert at the end of Stage 5, and Shushi at the end of Stage 6.
- Shuttle upon arrival in Armenia from Yerevan Airport to the host hotel in Yerevan. Likewise, shuttles back to Yerevan Airport at the conclusion of the race.
- Bus Transportation from Yerevan to Vardenis (three-hour drive, prior to Stage 1).
- Bus Transportation from Shushi to Yerevan (five-hour drive, the day after the final stage).
- Tent Camping on three nights (end of Stages 1, 2, and 3).
- Breakfast each morning.
- Dinners at the end of Stages 1, 2, and 3, plus a finish line buffet followed by a race banquet at the end of Stage 6. (Runners will eat on their own in hotel-adjacent restaurants after Stage 4 in Vank and Stage 5 in Stepanakert.)
- Baggage Transport throughout the race. (Runners only must carry running clothing, gear, water, and food while running.) Bag size and weight will be limited, but will be sufficient to carry clothing, camping gear, and food for the duration.
- Very detailed, laminated Route Cards will be provided for each stage which include the location of potable water springs along the route, stores, and tourist facilities where water and sometimes food may be purchased, along with all of the routing details, elevation profile, and map. Additionally, we will provide one or two Water Stops along the route each day, as needed.
- Course Marking.
- Any Entry Fees associated with visiting Dadivank Monastery, Gandzasar Monastery, Zuar Hot Springs, and other tourist sites.
- Tourist Visa to visit the Republic of Artsakh.
- Various cultural and festival activities along the route.
- Medical Support. (However, all runners must show proof of Evacuation Insurance.)
- Commemorative Items (Artsakh Ultra Magazine / Route Book, T-Shirt, Hat and more) and a Finisher's Belt Buckle.

Visit Badwater.com for all the info! Registration will be open soon and will be discounted \$300 below the standard \$3200 entry fee until March 1.

Race Schedule

Stage	Start	Finish	Distance	Elevation Gain	Sleep	Notes
Racer Check-In	Yerevan	Yerevan	0	0	Yerevan Hotel	
Stage 1	Vardenis	Tsar	22.25 miles / 36km	3000' / 1000m	Tsar Camping	3-hour drive to start
Stage 2	Tsar	Zuar Tak Jur	34 miles / 55km	4400' / 1382m	Zuar Camping	Hot Springs at finish
Stage 3	Zuar Tak Jur	Zuar Tak Jur	30 miles / 48km	1800' / 555m	Zuar Camping	Out-and-Back route
Stage 4	Zuar Tak Jur	Gandzasar	25.8 Miles / 42km	5127' / 1563m	Vank Hotel	Restaurant Dining
Stage 5	Vank	Stepanakert	30.5 miles / 50km	6200' / 1890m	Stepanakert Hotel	Restaurant Dining
Stage 6	Stepanakert	Shushi	16 miles / 26km	5256' / 1600m	Shushi Hotel	Race Banquet
Drive to Yerevan	Shushi	Yerevan	Five-hour drive	Fly home this evening	Hotel, if needed	Fly out of Yerevan

The BADWATER® ultra running experience returns to the (B)east Coast when the seventh BADWATER CAPE FEAR race takes place on Bald Head Island, North Carolina on March 20, 2021.

With 50km and 51-mile race options, Badwater® Cape Fear features a twelve-mile warm-up on the car-free, one-lane-wide roads and trails of Bald Head Island, followed by either 19 or 38 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® races.

Bald Head Island and nearby Southport, NC (featured in the film “Safe Haven”) are ideal vacation get-away spots for the entire family, located less than one hour from Wilmington, NC and its major airport with Delta and US Airways service. (Flying into Myrtle Beach, SC is another convenient option.) Due to the remarkable beauty and quaint southern charm of this area, as well as this impeccable, authentic BADWATER race experience, many Badwater Cape Fear participants are now making this race an annual pilgrimage!





Historical Data, Badwater Cape Fear, 2014-2019:

Total Number of Participants: 833 (263F / 570M)

Total Number of Unique Entrants: 619

Total Number of Unique Finishers: 607

Nationalities Represented:

Armenia: 1	Mexico: 3
Australia: 1	Philippines: 10
Canada: 13	Portugal: 1
Cayman Islands: 1	Singapore: 1
Colombia: 3	Turkey: 1
Germany: 2	United Kingdom: 9
India: 2	USA: 783
Japan: 1	Venezuela: 1

American States Represented: 38

Hats Off to our four Six-Time Finishers!

- Bob Becker, Fort Lauderdale, FL, age 68-73
- Timothy Henderson, Sayville, NY, age 44-49
- Keith Straw, Malvern, PA, age 59-64
- Gerald Tabios, Elmhurst, NY, age 44-49





The Official Charity of BADWATER CAPE FEAR is the Bald Head Island Conservancy, a leader in barrier island conservation, preservation and education. Race participants will appreciate that BHIC cares for this race route's pristine setting and its role as sea turtle nesting site, and will be encouraged to fundraise for BHIC and support its mission. Learn more at www.bhic.org. The goal of this race is annually raise \$10,000 for the Bald Head Island Conservancy, which is enough to purchase one of the special UTV vehicles which BHIC uses to patrol the beach and care for sea turtle nesting sites.



2019 SEA TURTLES

Bald Head Island, North Carolina

84 UNIQUE INDIVIDUAL MOMS

74% OF THOSE WERE NEW MOTHERS TO BHI

HIGHEST NESTERS

1 2 3 4 5 6

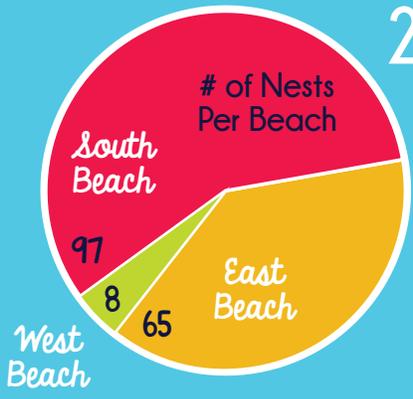
two moms | SANDY TURQUOISE

honorable mention - five nests each

FANCY NANCY | TTL518 | TTL500

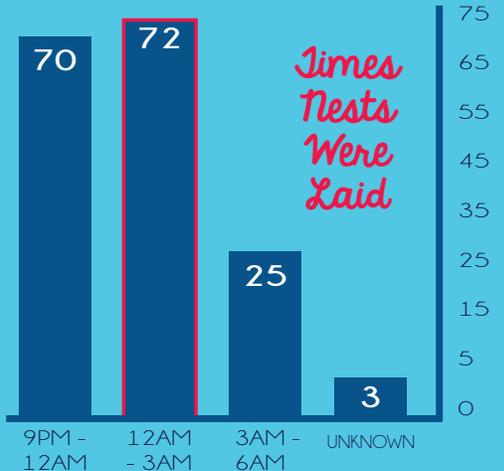
LAI BY THOMASINA

MOST EGGS IN ONE NEST **161**



267 FALSE CRAWLS

170 NESTS



APPROXIMATELY

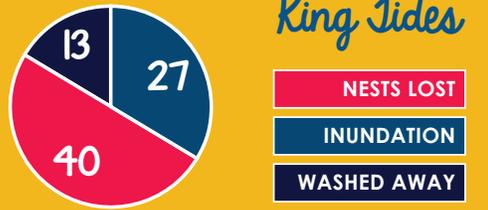
52%

HATCHING SUCCESS RATE

26% OF NESTS WERE RELOCATED

APPROXIMATELY TOO CLOSE TO HIGH TIDE

THE IMPACT OF Hurricane Dorian & King Tides



APPROXIMATELY

9,600 hatchlings

WENT TO SEA FROM BHI

OVER 100 HATCHLINGS

OVER 2,000 EGGS

APPROX. 6% OF NESTS

LOST TO PREDATION

NESTS LAID BY NEW & RETURNING MOMS

NEW MOMS

RETURNING MOMS

UNKNOWN

AS OF 12.2019

Category	Count
NEW MOMS	66
RETURNING MOMS	100
UNKNOWN	4

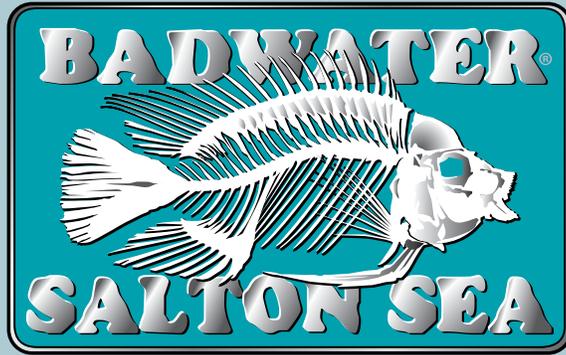


100% OF NESTS WERE ADOPTED THROUGH ADOPT-A-PROGRAM

6 LEGACY SEA TURTLES NESTED

SANDY WILLINE SCARLETT

TURQUOISE MARY JANE



AdventureCORPS®, Inc. has hosted BADWATER® Salton Sea annually in late April since 2013. This remarkable event challenges up to 45 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. 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 known as the California Riding and Hiking 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).

The seven previous editions were received with wide acclaim. The eighth edition – with a limit of approximately 115 runners – will tentatively be held April 25-26, 2021.



Historical Data, Badwater Salton Sea, 2013-2019:

Total Number of Participants: 516 (166F / 350M)

Total Number of Unique Entrants: 371

Total Number of Unique Finishers: 325

Nationalities Represented:

Armenia: 2	Mexico: 8
Australia: 5	Netherlands: 1
Belarus: 1	Peru: 1
Bolivia: 1	Philippines: 4
Brazil: 3	Poland: 2
Canada: 15	Serbia: 1
Cayman Islands: 1	Singapore: 1
Colombia: 1	Slovakia: 1
Czech Republic: 2	South Korea: 1
Denmark: 3	Sweden: 2
Germany: 7	Switzerland: 3
India: 1	United Kingdom: 10
Italy: 1	USA: 424
Japan: 14	

American States Represented: 39

Hats Off to our Six-Time Finisher!

- Emily Ryan, Washington, DC, age 39-44



The Official Charities of AdventureCORPS include the Challenged Athletes Foundation, Major Taylor Association, Caring House Project Foundation, Death Valley Natural History Association, and Bald Head Island Conservancy. A primary goal and purpose of our events is to raise funds for, and awareness of, these wonderful and important organizations.



Since 2002, the original Official Charity of AdventureCORPS has been the **Challenged Athletes Foundation**. One of the goals of our events is to raise funds for, and awareness of, this wonderful organization.

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 \$112 million and more than 26,000 funding requests from challenged athletes in all 50 states and over 40 countries supporting 103 different sports have been satisfied. CAF's outreach efforts reach another 200,000 individuals each year. Whether it's a \$2,500 grant for a handcycle, helping underwrite a carbon fiber running prosthetic foot not covered by insurance, or making the introduction to a mentor who has triumphed over a similar challenge, CAF provides those with the desire to live active, athletic lifestyles every opportunity to compete in sports and physical activities.

Eighty cents of every dollar raised by CAF provides funding and programs that get challenged athletes into the game. (CAF has a Four-Star rating by Charity Navigator.)

Since 2002, AdventureCORPS has raised over \$500,000 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 education. 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 sea turtle nesting site and sanctuary. The Conservancy also serves as the host and finish line for our event. As such, our goal is to annually 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 in 2003 by ten-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 2020, more than 12,000 children and their families have been provided with a new concrete home, and countless more are alive because of CHPF's efforts. In 2020 CHPF completed its 29th self-sufficient village in Haiti. The 2020 village will contain a total of 40 concrete houses, a concrete community center, a school, 10 4-stall latrines with 40 total bathroom stalls, 1 solar array for the community center and school, 40 goats, 40 water filters, 1 entrance signs, 80 fruit trees, and 80 chickens. Thank you for all you do, Frank and Nilsa!

Website: www.chpf.org

Environment

AdventureCORPS events happen not in a human-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 3000 companies that donate at least 1% of their sales to a network of thousands of vetted environmental nonprofit partners in over 60 countries. 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 hundreds of millions of dollars in positive environmental change (for example, \$24 million in just 2018).

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 of outdoor businesses whose collective contributions support grassroots environmental organizations and their efforts to protect wild places where outdoor enthusiasts recreate. Alliance funds have helped protect 73 million acres and 3.575 river miles, remove or halt 35 dams, purchase 17 climbing areas, and designate five marines reserves.



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 more than \$24 million to grassroots conservation groups throughout North America.

In 2014, 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.



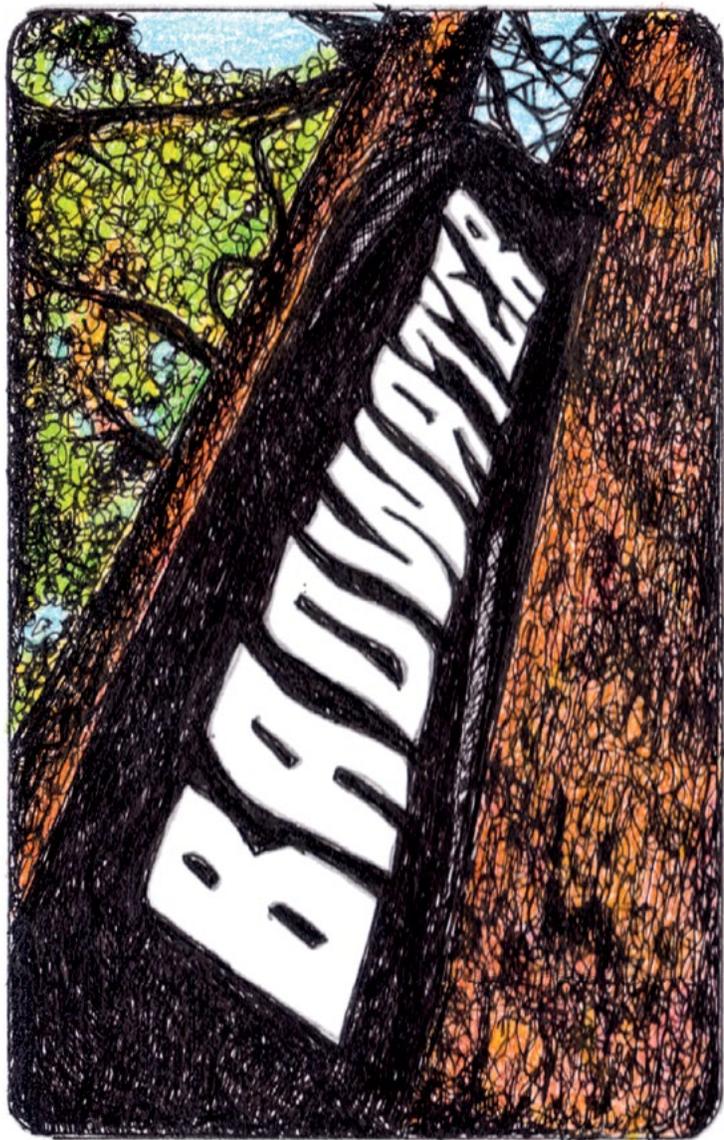
Additionally, we have championed other environmental causes including the **Los Angeles County Bicycle Coalition**, a nonprofit organization

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 a Life Member and began recognizing DVNHA as an Official Charity of AdventureCORPS in 2009. DVNHA is a non-profit organization supporting education, research, and preservation in Death Valley 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.)

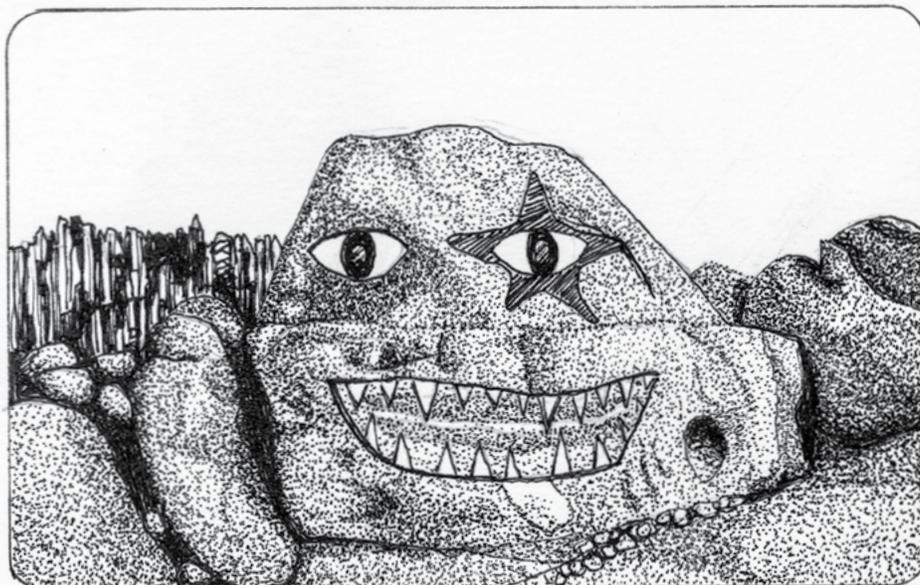


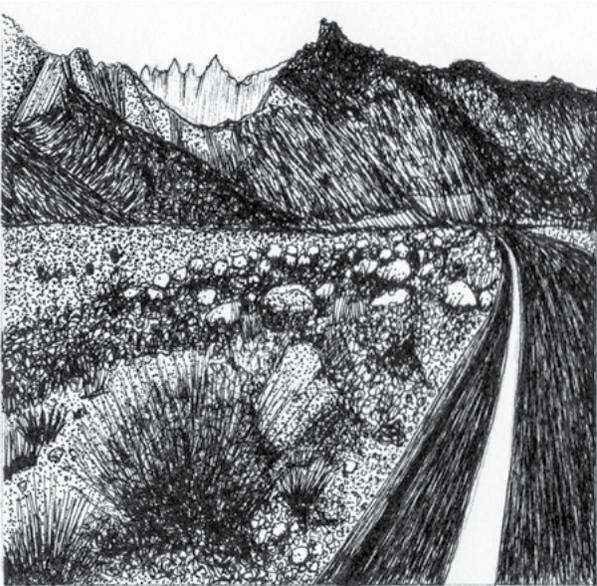
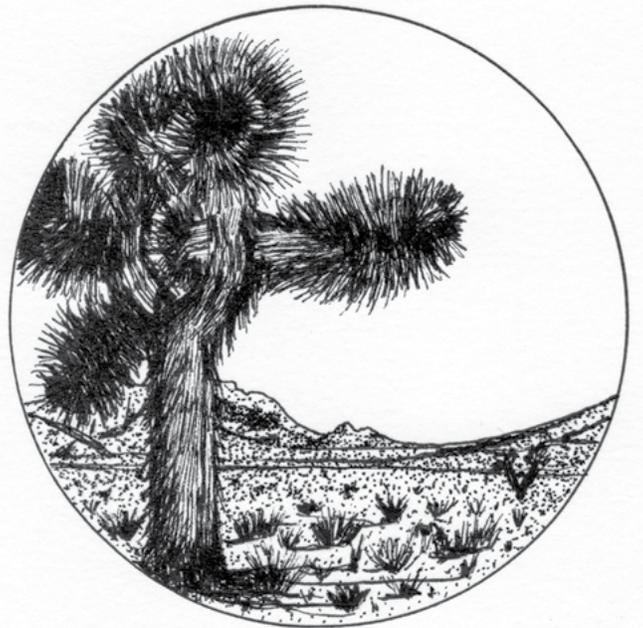
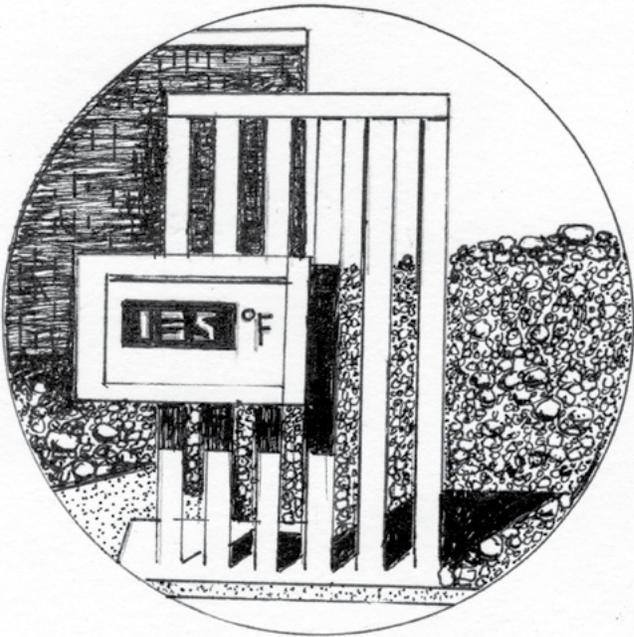
BADWATER ART OF RICH PEERS

Rich Peers of Kitchener, ON, Canada is a finisher of Badwater Cape Fear in 2017-2019 and Badwater Salton Sea in 2018. He is also a veteran crew member and race staffer for Badwater 135. He had intended to compete in all three Badwater races in 2020, but that dream is on hold for 2021. He is also a very talented artist and we are pleased to feature his work throughout this magazine.

Follow him on Instagram

@RichPeersArt and @Run.Adventures







THE DANGERS OF RUNNING IN THE HEAT

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

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

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

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

Heat Illnesses

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

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

Heat exhaustion: Losing fluid and electrolytes through sweat leads to dizziness and weakness if the lost fluids are not replaced. Heat exhaustion is characterized by a moderate rise in body temperature, dizziness, nausea and vomiting, and a headache. You might also experience weakness, lack of coordination, heat cramps, heavier than usual sweating accompanied by moist and cold skin, and “goose bumps.” Your heart rate may rise and you won’t be able

to run as fast due to fatigue. Many runners—even those who are well trained—will suffer from mild heat exhaustion after running for several hours in hot and humid conditions. If you experience the signs of heat exhaustion, stop running immediately and drink fluids containing electrolytes, cool your body with wet towels, lie down and elevate your feet a few inches above your heart, and immediately get out of the sun. Since heat exhaustion can lead to the most severe form of heat-related illness, heat stroke, seeking prompt medical attention for heat exhaustion is also highly recommended.

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

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



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.

HEAT EXHAUSTION		OR	HEAT STROKE	
Faint or dizzy			Throbbing headache	
Excessive sweating			No sweating	
Cool, pale, clammy skin			Body temperature above 103° Red, hot, dry skin	
Nausea or vomiting			Nausea or vomiting	
Rapid, weak pulse			Rapid, strong pulse	
Muscle cramps			May lose consciousness	
<ul style="list-style-type: none"> • Get to a cooler, air conditioned place • Drink water if fully conscious • Take a cool shower or use cold compresses 			<p>CALL 9-1-1</p> <ul style="list-style-type: none"> • Take immediate action to cool the person until help arrives 	

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2020 Badwater 135 COVID-19 Mitigation Plan

All runners, support crew, and staff MUST follow at all times!

Pre-Race Meeting

- This will be held online in 2020 instead of in person. Viewing is mandatory for all runners and crew.

Start Line

- There be approximately seven waves of 10 runners in 30-minute intervals.
- Waves will be assigned. Arrive exactly 25 minutes ahead of your designated start time. Do not arrive early. (It is 17.5 miles from Furnace Creek to Badwater Basin with a speed limit of 45mph - sometimes less - but we recommend driving more slowly and cautiously as there will be runners on the road. Allow 30 minutes for the drive.)
- At the race start, Support Crew may NOT go down to the Badwater Basin boardwalk. Stay near vehicle.

Post-Race Pizza Party in Lone Pine

This will NOT be held in 2020.

Spectators

Spectators are not allowed along the course or at the finish line. Please spread the word. (Immediate family who aren't on the support crew may be at the finish line during their runner's finish.)

Facial Coverings

- All individuals must wear a facial covering if six feet of distance from individuals who are not a member of their race team cannot be maintained.
- All individuals must wear a facial covering when indoors in public places (restaurants, stores, hotel lobbies, etc.) This includes during Racer Check-In.
- Runners (Racers and Pacers) must carry a mask at all times while racing, but only must wear it when near others, such as in a restroom or business.

Social Distancing

- Maintaining Social Distancing is required during Racer Check-In, and when near others and in gathering spots such as Furnace Creek and Lone Pine businesses.
- Runners and their personal support crew members are considered "family" or "co-habitants" and need not wear masks nor social distance while together within just their group.
- Racers may not run with other racers; social distancing must be maintained along the race course.

General Health, Hygiene, and Attestations

- All runners, crew, and staff are encouraged to put extra effort into staying COVID-free in the weeks leading up to the race, and to wear a facial covering at all times while in airplanes, airports, and traveling.
- In the two weeks leading up to the event, all runners, crew, and staff who test positive for COVID-19, live with someone who is positive, or exhibit symptoms of COVID-19 must refrain from attending the event.
- Runners and Support Crews must prioritize personal hygiene and hand-washing (or use of hand gel) at all times during the race and race activities. Hand gel or hand-washing supplies must be brought by each runner's support team and used frequently.
- Hand gel will be available at Racer Check-In, start line, and timing checkpoints along the route. (But all teams must also bring their own to use throughout the event and their travels.)
- The location of restrooms along the route will be provided to all participants (in the magazine, P29.)
- During Racer Check-In, the "Check-In Form" required for each Racer will require that each Racer and each Crew Member self-certify that they are currently not sick with COVID-19, nor displaying symptoms, to be reviewed by the Race Medical Staff.
- Race staff are required to self-certify that they are currently not sick with COVID-19, nor displaying symptoms, to be reviewed by the Race Medical Staff.



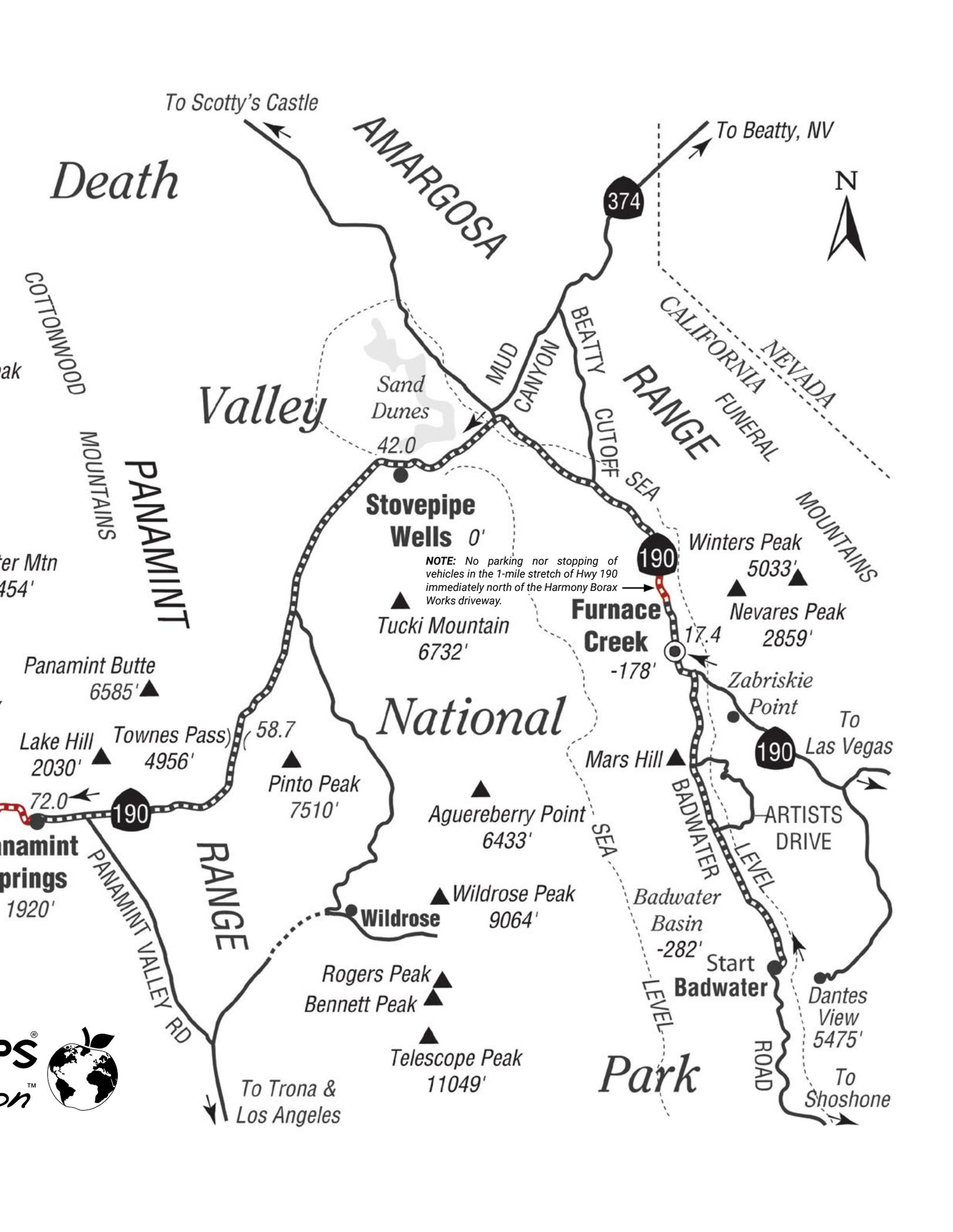
BADWATER ULTRAMARATHON

The Challenge of the Champions



NOTE: Between Panamint Spring and Panamint Pass, support vehicles may only park in eight designated locations, as described in the text version of the route sheet. Also, on this stretch of the route, crew members—other than pacers—may NEVER cross the highway; only pacers and racers may cross the highway.

adventureCORPS
Chasing the Horizon



Schedule of Events

SUNDAY, JUNE 28

800-930am: Online Pre-Race Meeting: ALL racers, ALL crew chiefs, and ALL crew members must attend / view the Online Pre-Race Meeting. It will be archived for later viewing for those who can not watch it live. A special code will be given out to prove it was watched.

SUNDAY, JULY 5

100-600pm: Racer Check-In and Registration / Retail of BADWATER Gear: Held in the 1849 Buffet at The Oasis in Furnace Creek (next door to the Saloon.) Each Racer and their designated Crew Chief must attend; all crew are welcome to attend. (Racers will be assigned to check in today, or tomorrow.)

MONDAY, JULY 6

900am-1200pm: Racer Check-In and Registration / Retail of BADWATER Gear: Held in the 1849 Buffet at The Oasis in Furnace Creek (next door to the Saloon.) Each Racer and their designated Crew Chief must attend; all crew are welcome to attend. (Racers will be assigned to check in either this day or the day prior.)

Afternoon Rest & Relaxation; Vehicle Prep; Buy Ice and Supplies: Other options: Enjoy the pool – fed by Furnace Creek – at The Oasis, or go visit Badwater Basin to take photos next to the sign. Get your preparations done, but relax and rest while you can!

130-200pm: Media Check-In and Briefing: All journalists / media / photographers must attend. This will be brief and with social distancing. Held in the 1849 Buffet at The Oasis (next door to the Saloon.)

200-300pm: Private Staff Meeting: This will be brief and with social distancing. Held in the 1849 Buffet at The Oasis (next door to the Saloon.)

800pm: 1st Wave Starts at Badwater Basin: ALL Wave 1 racers must check in at 730pm.

830pm: 2nd Wave Starts at Badwater Basin: ALL Wave 2 racers must check in no later than 805pm.

900pm: 3rd Wave Starts at Badwater Basin: ALL Wave 3 racers must check in at 835pm.

930pm: 4th Wave Starts at Badwater Basin: ALL Wave 4 racers must check in at 905pm.

1000pm: 5th Wave Starts at Badwater Basin: ALL Wave 5 racers must check in at 935pm.

1030pm: 6th Wave Starts at Badwater Basin: ALL Wave 6 racers must check in at 1005pm.

1100pm: 7th Wave - if applicable - Starts at Badwater Basin: ALL Wave 7 racers must check in at 1035pm.

TUESDAY, JULY 7

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. Stop there to load up on plenty of ice, food, snacks, and drinks.

400am: Stovepipe Wells General Store and Gas Station Opens. By special arrangement, the General Store and Gas Station in Stovepipe Wells will open at 400am during the first night (first morning) 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 RACERS, 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 RACERS, regardless of starting wave, to pass Mile 72 (Panamint Springs Resort.) Panamint Springs Resort has restaurant food, snacks, drinks, ice, and much more. Please support them, and stock up heavily!

WEDNESDAY, JULY 8

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

Afternoon: Fourth Time Cut-Off: ALL RACERS should pass Mile 122 (Lone Pine Time Station) within 42 hours of their own elapsed time, depending on starting wave.

800-1100pm: Course Closes for 1st Wave Racers at 800pm, and then closes every 30 minutes for each wave of racers until – potentially – 1100pm (There is a 48 hour time limit, based on start time.)

* * *

SUNRISE / SUNSET (July 15, using Ridgecrest for reference):
Morning Civil Twilight: 5:11am | Sunrise: 5:41am | Moonset: 7:01am.
|Sunset: 8:09pm | Evening Civil Twilight: 8:39pm | Moonrise: 9:47pm
| Note: July 5 is the full moon.

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

Official Race Route

LANDMARK	Dist. (MI)	Ele. (FT)	MARKER
<i>NOTE: TL = Traffic Light; SS = Stop Sign; T-Int = T-Intersection; Jct. = Junction</i>			
Badwater Basin: Head north	0	-282	
<i>Crews will be held for 10 minutes after each wave begins, then released in small batches.</i>			
Former location of Telescope Peak Sign on L.	1.8	-200	
Wide Shoulder on Right	3.1		
<i>Natural Bridge turnoff on R (PACERS MAY JOIN AGE 65+ RUNNERS HERE)</i>	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. (45 MPH) (TOILET)	14.5	-165	
Jct. Hwy 190 & Badwater Rd. (SS): Go Left onto 190 north (Cell Service Begins)	16.5	0	
<i>Watch Speed Limit! (Don't be like that Aussie team in 2015!)</i>			
Timbisha Shoshone Reservation on L.	17.2	-140	
The Oasis (Furnace Creek Ranch) on L.: General Store open until 300am (TOILET)	17.5	-165	
<i>Park in lots, not along roadway, throughout Furnace Creek!</i>			
Furnace Creek Fuel on L. (Time Station #1 located here.). (TOILET)	17.6		
<i>Dumpsters available to dump garbage and recycling at Gas Station.</i>			
Park Service Visitor's Center on L. (Please use running path on left of roadway)	17.7	-165	
Furnace Creek Campground on L.	17.8	-170	
Harmony Borax Works on L.: <i>Park here and let runner go ahead</i> (45 MPH)	18.2	-170	
<i>NO STOPPING, SLOWING, or PARKING NEXT 1 MILE! Drive to beyond curves!</i>			
<i>Parking allowed beyond curvy section, where safe.</i>	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		MM 93.5
Sea Level sign on L.	35.4	0	
<i>MINIMAL PARKING NEXT 6 MILES! SOFT SHOULDERS. Do not get stuck in sand.</i>			
Devil's Cornfield sign on R.	36.3	-80	MM 91.5
Small Parking Area on R. (Space for 2-3 cars only)	37.1		
Camera Sign pullout on R. (Space for 4-5 cars only)	37.5		
Sand Dunes Parking Lot on R. (35 MPH) (TOILET)	40.2	0	
Approaching Stovepipe Wells (Cell Service Begins)	41	0	
Stovepipe Wells Village Welcome sign: Gas / Food / Store opens at 400am!	42	0	
Time Station #2 & Medical HQ on L. by hotel courtyard & flag. (TOILET)	42.2		
<i>(PACERS MAY JOIN RUNNERS OF ANY AGE HERE.)</i>			
<i>It's a long climb, and a long way, to Panamint Springs, 30 miles away! Be ready!</i>			
<i>It is CRITICAL to stock up on water, ice, and snacks, plus real food for the crew!</i>			
<i>Also, take advantage of the low gas prices while you are here!</i>			
Mosaic Canyon turnoff on L.	42.4	5	
1000' Elevation sign on R. (65 MPH)	46.8	1000	
Short downhill (Cell Service ends along the ascent of Towne Pass)	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 parking lot on R. (TOILET)	51.2	2450	
<i>Please park neatly and use designated spaces. Don't park "haphazardly."</i>			

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 parking 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	
Large Paved pullout on L.	65.3		
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 Springs Resort: Gas / Mini Mart / Food / Hotel (35 MPH). (TOILET)	72.7	1970	
Time Station #3 on L. at resort hotel, NOT at 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 at the Resort			
WARNING: Parking only allowed in designated locations for next 12.2 miles: follow odometer 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! (TOILET)			
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		
One hundred miles! (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 direction.			
4000' Elevation sign on R. before "Gunsite Notch" (Cell Service Begins)	102.2	4000	

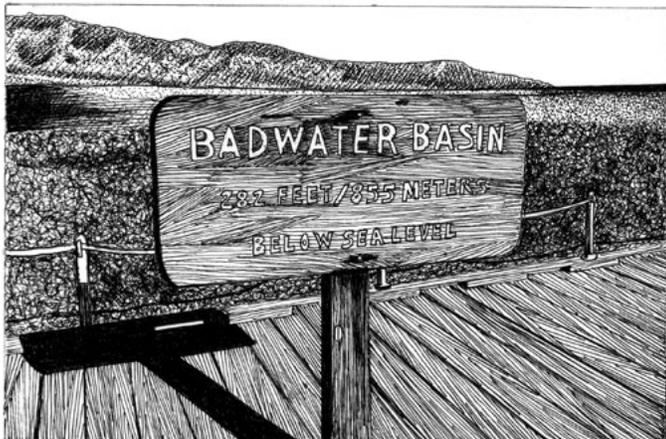
LANDMARK	Dist. (MI)	Ele. (FT)	MARKER
Jct. Hwy 136 & Hwy 190: Go straight / north onto Hwy 136 "Lone Pine 19mi"	103.4	3935	
SOFT SHOULDERS NEXT EIGHT MILES: BE CAREFUL! DO NOT GET STUCK!			
4th Marathon	104.8	3800	MM 16.5
"100 Sulfate Road" sign	106.5		
Keeler City sign at Cerro Gordo Rd. on R.	108.1	3610	
Adopt-a-Highway sign on R. after solar panel array	109.1	3605	
Dolomite Loop Road on R.	113.2	3600	
Dolomite Loop Road on R.	117.5	3510	
Cross Owens River: View of Whitney Portal Rd. is straight ahead!	118.3	3500	
Jct. Hwy 136 & Hwy 395: Go Right / North	121	3696	
Runners may run on right side of road into and through Lone Pine: stay well away from traffic lane.			
WARNING: SPEED LIMITS DROP TO 25mph as you pass through town!			
Comfort Inn on R. (45 MPH)	121.1		
Chevron / Lee's Frontier Deli / Mini Mart (Great sandwiches!) on L. (TOILET)	121.3		
Best Western on R. (35 MPH)	122		
Lone Pine City Limits sign on R. (25 MPH)	122.3		
McDonald's on L. (TOILET)	122.6	3610	
Dow Villa on R.: Time Station #5 & Medical HQ (TOILET)	122.7	3610	
All racers must pass within 42 hours of their individual wave start!			
All racers with time penalties must "check in" and serve penalty time here before continuing.			
Portal Road (the only traffic light in Lone Pine): Go left	122.8	3610	
Tuttle Creek turnoff on L.	123.3	3770	
WARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!			
Los Angeles Aqueduct	123.4	3855	
Lone Pine Creek	124.5	4200	
Movie Flat Road on R.	125.5	4590	
WARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!			
Lone Pine Creek	125.7	4800	
Horseshoe Meadow turnoff on L.	125.9	5000	
Cuffe Ranch turnoff on R.	127.1	5100	
WARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!			
Whitney Vista Drive on L	127.4		
Olivas Ranch Road on L.	128.4	5300	
"Entering Active Bear Area"	129.2		
WARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!			
Lone Pine Campground on L.	129.3	5700	
Lone Pine Creek	129.6	6000	
"Inyo National Forest" sign on R. (Sign was missing in May, 2015)	129.8	6400	
5th Marathon at Indian Creek Rd. on R.	131	7000	
Time Station #6 in Large gravel pullout on R.	131.1	6890	
Road makes a 180-degree switchback to L.	132	7215	
Vista Point on Left at large gravel pullout	132.8	7400	
"Campsites 39-44" and "Whitney Portal Recreation Area" signs	133.7	7700	
WARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!			
Meysan Lakes trailhead on L.	133.9	8035	
Family Campground on L.: Support vehicles should drive ahead to park!	134	8100	
Overflow Parking Lot on L.	134.6	8200	
Finish 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.

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Course Description

Badwater Basin, Death Valley (280ft / 85m below sea level), Mile Zero (Start Line)

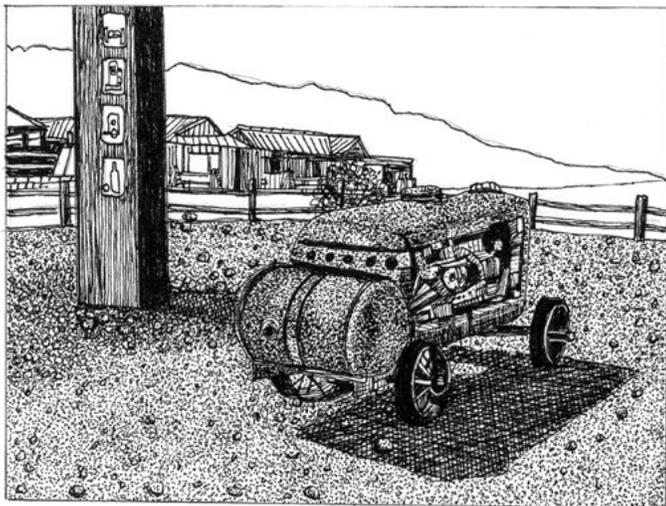


The race begins here adjacent to a pool of saltwater located at the lowest place in North America. There are toilets, but no other services.

Furnace Creek Ranch (170' / 51m below sea level), 17.5mi / 28.2km (Time Station #1)

The first oasis in our journey. Two hotels, gas station, general store, restaurants, camping, and ice are available. Stock up here on ice, water, food, supplies, and gas both before the race and when you pass through during the race!

Stovepipe Wells (Sea Level), 42.2mi / 68km (Time Station #2)



A general store, gas station, restaurant and motel. Location of the race's Medical HQ for most of first 15 hours of the race. It is critical that you stock up on ice, water, food, supplies, and gas when you pass through here during the race!

Towne Pass (4956' / 1511m), 58.7mi / 94.5km

The first oasis in our journey. Two hotels, gas station, general store, restaurants, camping, and ice are available. Stock up here on ice, water, food, supplies, and gas both before the race and when you pass through during the race!

Panamint Springs Resort (2000' / 610m), 72.7mi / 117km (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' / 1219m), 80.65mi / 130km

The bathrooms and parking lot that designate this viewpoint are not the top of this ascent, though you may hope so. The road continues to rise to 5000' / 1524m over rolling hills, then eventually descends into the Owen's Valley.

Darwin Turn-Off (5050' / 1540m), 90.6mi / 146km (Time Station #4)

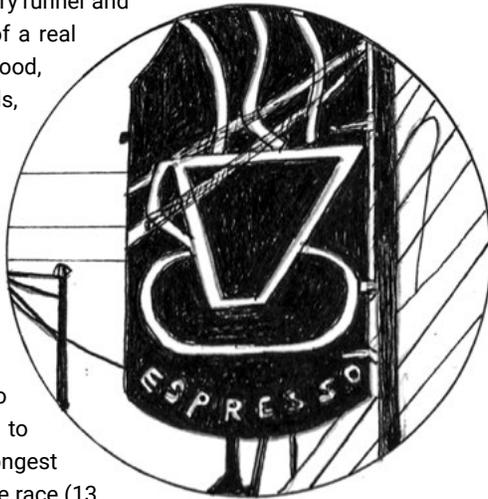
There are no services here, but just a few miles to the south of our route is the small inhabited ghost town of Darwin, the website for which touts "NO broadcast TV; NO AM/FM radio, NO cell signal; NO stores; NO restaurants." The Darwin time station is where the race usually starts to get serious for all entrants. Look for Mile Marker 28 about nine miles ahead to indicate your 100-mile mark! The generally flat or slightly downhill stretch ahead can be tedious and demoralizing; Mt. Whitney is visible ahead and never seems to get closer!

Keeler (3610' / 1100m), 108.1mi / 174km

This is a small mining town with no facilities which abuts the Owens Dry Lake Bed on 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 high in the mountains.

Lone Pine (3610' / 11km), 122.7mi / 197.5km (Time Station #5)

Lone Pine offers the weary runner and crew all the amenities of a real town: café fare, fast food, pizza, restaurants, motels, gas stations, a grocery store, and much more, not to mention our Race Headquarters at the Dow Villa. Restock here for the climb to Whitney Portal as there no services after Lone Pine. Turn left onto the Whitney Portal Road to begin the final leg, the longest and steepest climb of the race (13 miles or 21km with 5000 feet or 1524m of elevation gain). Temperatures will steadily decrease during the ascent (though depending on time of day). As you ascend Mt. Whitney, be sure your support vehicle is always parked completely off of the road and that you do not block traffic, not even for a moment.



Mt. Whitney Trailhead, (8360' / 2548m), 135mi / 217km



Congratulations! You have finished The World's Toughest Foot Race! A small burger shack / 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!).

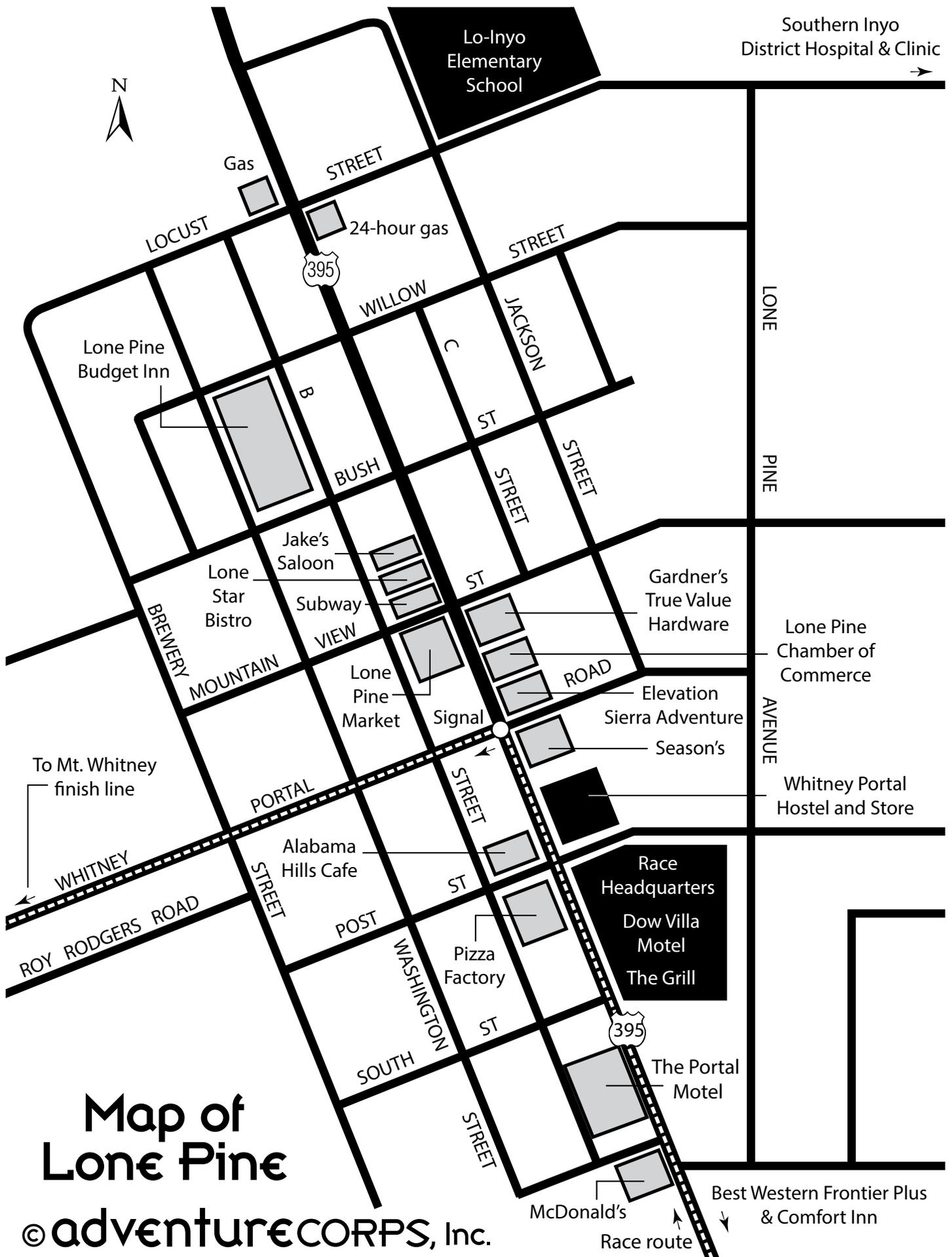
Portal Road / Base of the Switchbacks (6890' / 2100m), 131.1mi / 211km (Time Station #6)

After the turn from Hwy 395 in Lone Pine, it's 8.4 miles or 13.5km to Time Station #6, located at the start of the switchbacks. Be prepared with extra layers of clothing and rain gear the final few miles; at night it can approach freezing temperature. Drive and park very carefully!



TOILET LOCATIONS ALONG THE ROUTE

- 14.5 Golden Canyon (top end of parking lot; right side of road)
NO WASHING FACILITY
- 17.6 Furnace Creek Gas Station (left side of road)
- 40.2 Sand Dunes Parking lot (right side of road)
NO WASHING FACILITY
- 42.2 Stovepipe Wells Gas Station (right side of road, and at the hotel on the left)
- 51.2 Wildrose Station (parking lot on Towne Pass; right side of road) NO WASHING FACILITY
- 72.7 Panamint Springs Resort (left side of road)
- 80.6 Father Crowley's Point (right side of road)
NO WASHING FACILITY
- 121- Various location along Hwy 395 in Lone Pine
- 122.8 (restaurants and hotels)
- 135 Mt. Whitney Portal / Finish Line NO WASHING FACILITY



Map of Lone Pine

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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.

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

Best Western Frontier Hotel	
1008 S Main Street	760-876-5571
Comfort Inn	
1920 S Main Street	760-876-8700
Dow Villa Motel	
310 S Main St (<i>Race HQ</i>)	760-876-5521
Portal Motel	
425 S Main St	760-876-5930
Whitney Portal Hostel (and Store)	
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 7am-5pm daily
The Grill at 446 S Main St. (Located on the southern end of the Dow Villa parking lot. Great food and great location!)	
760-876-4240	Open 7am-9pm 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

Season's Restaurant at 206 S Main St
760-876-8927 Open 5pm-10pm daily

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 St
760-876-0030 Open 7am-9pm daily in July

Elevation Sierra Adventure at 150 S Main St
760-876-4560 Open 9am-630 or 7pm daily

Lone Pine Market at 119 S Main St
760-876-4378 Open 8am-9pm daily

Gardner's True Value Hardware 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



Badwater 135 Race Rules and National Park Service Regulations

General Race Rules

1. Racers in the 2020 Badwater Ultramarathon will begin the race in 30-minute intervals starting at 800pm on July 6, 2020) with ten racers assigned to each wave, but all racers in all groups are competing in the same race. Runners must check in at the start line, ready to race, exactly 25 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 bib 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. The Pacer Bib numbers must also be worn similarly by any pacer / crew member who is running along with his or her racer.
4. 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, based upon start time. 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.
5. 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 "unofficially" 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.
6. 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.

7. 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).
8. Racers must make their presence known at all Time Stations located along the route.
9. As it has since 1989, the race ends at Mt. Whitney Portal. If any entrant or crew member chooses to hike on the Mt. Whitney Trail, official race logos must not be worn and the appropriate permits must be obtained from the Forest Service.
10. Racers, crew, and staff must not litter, mar, or pollute the landscape or environment.
11. 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 be used in any commercial or promotional manner except under license from AdventureCORPS, Inc. In particular, t-shirts (such as for crew members, friends, supporters) 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 must have a designated Crew Chief and his or her name and email address must be provided to the race organizers at least eight 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 (preferably eight weeks.) 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.

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 and Crew must attend / view the Online 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 DISQUALIFIED 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. Inside the envelope, the Secret Code mentioned in the online Pre-Race Meeting must be written.

14. During Racer Check-In, all entrants must display a minimum of two running-style reflective vests - which will be worn and utilized by the racer and pacer (if a pacer is used) during nighttime periods of the race – and eight blinking red lights for racers, pacers, and crew members to wear at night. 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 3 reflectivity garment for each crew member to wear at all times during the event. See point 4 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. See website for Biffy Bag discount.) 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 Racer Check-In. Runners will not be allowed to check-in 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 – Darwin, 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. 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. ALL support crew members (except those actively pacing their racer) must wear OSHA Class 3 high-visibility / reflectivity clothing at all times during the event. 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 3 shirts / jackets. Please note: Running-type reflective vests, such as those by Nathan Sports, do NOT meet OSHA Class 3 requirements. **NOTE: New for 2020, Class 2 garments are no longer allowed during the day. Crew must wear Class 3 at all times unless running as a pacer.**
5. Racers and Pacers may dress as they choose during daylight. At night, Racers and Pacers must wear 360 degree reflectivity (such as runner-type reflective vests by Nathan Sports) and front and rear blinky lights. Racers and Pacers are not required to wear the specific 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. (Pacers may run next to their Racer briefly, when handing off supplies or spraying their Racer, but only on the left of the Racer.)

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 - for more than a few moments - 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.

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 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 walkie-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 80" in width, per official manufacturer spec's. Small Cars, Minivans, and SUVs are recommended. Oversize SUVs, vans, and trucks, or other types of oversize vehicles are strongly discouraged. Motorhomes, RVs, "SportsMobiles," Sprinter Vans (and similar, such as the Dodge Ram 1500 / 2500), vehicles with extra high rooflines, and all types of Hummers are specifically not allowed. Support vehicles may not pull trailers of any kind. (The largest vehicle currently allowed at the event is the Nissan NV3500.)

3. 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 - if needed - at no charge by the race organizers at Racer Check-In.

4. All support vehicles must have their racer's bib number easily and clearly visible on both sides, the front, and the left rear. Sticky racer bib numbers will be provided to ALL racers at no charge during Racer Check-In: these racer numbers must be displayed on all four sides of the support vehicle.

5. 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.

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

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

8. Driving must be done at the speed of traffic, without 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. Vehicles must "leapfrog" the runner at all times. Each "leapfrog" should generally be two miles or more in length. Racers may not be "shadowed" (driving a vehicle at the runner's speed.) Driving may never be at the speed of any racer.

9. All support vehicles must have their headlights on while driving, 24 hours a day.

10. Vehicles must be parked completely off the road surface

whenever they are stopped (with all four tires right of the white line). Many areas of the route have very little shoulder for parking so care must be taken in choosing stopping places. When stopping/parking, vehicles may not stop on the left side of the road, except in parking lots or exceptionally large pullouts. 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. When parked, 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.)

12. 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.

13. 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).

14. On the Father Crowley 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, 7.9, 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. See website for more details and photos.

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 actions and their crew's actions; crews are responsible for both their own actions 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 - rather than the racer crossing to the crew / vehicle. 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 physically mark 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 withdraw from the race are encouraged - and expected - to come to the finish line and the post-race party (not in 2020) to greet and celebrate with their fellow racers and crews.

4. All Emergency Medicine and/or Emergency Evacuation costs for participants, crew members, or staff will be borne by that person or their heirs. The race organizers are in no way liable or responsible for medical care, nor 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. 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

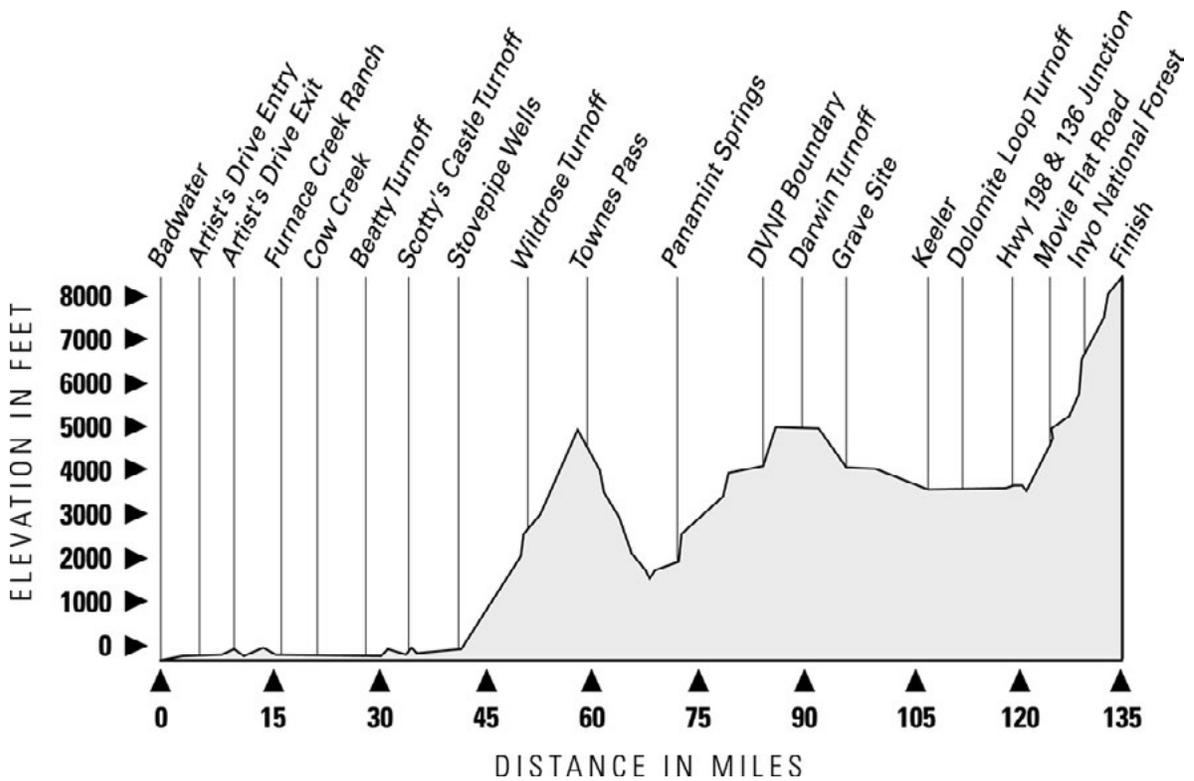
Have fun and keep smiling! Remember, you chose to be here!

SAMPLE TIME SPLITS FROM ACTUAL BADWATER 135 FINISHERS

Do you want to see how you are doing compared to previous finishers of the race? Here are several actual time splits from the past few years for your reference. This data is useful before the race for planning and visualizing, but also during it, to make sure your current pace is reasonable or feasible. The splits are grouped into 34, 40, 44, and 46 hour finishing times so you have a few samples for each finishing time. Use these to help stay on track for YOUR finish!

Sample Splits								
FC / 17	SPW / 42	PSR 72	Darw 90	LP 122	P Rd. 131	Whitney 135	Who	When?
2:55	7:22	14:55	20:34	29:06:00	32:49:00	33:57:14	Ray Sanchez	2015
2:23	6:39	12:41	17:01	29:34:00	32:46:00	34:00:10	Michele Graglia	2016
3:19	8:30	17:01	23:09	30:38:00	32:58:00	34:04:14	Jill Anderson	2015
2:36	6:40	13:40	18:57	29:01:00	32:47:00	34:10:50	Ed Ettinghausen	2016
3:31	8:19	15:38	22:11	33:54:00	38:31:00	39:59:59	Jason Romero	2015
3:17	8:21	15:22	20:42	34:56:00	38:42:00	40:14:10	Keith Straw	2015
2:46	8:08	16:58	24:04:00	34:59:00	38:50:00	40:36:11	Dale Cougot	2016
3:34	9:50	20:04	27:43:00	38:58:00	42:10:00	43:37:51	Jodi Weiss	2015
2:49	7:42	16:19	26:09:00	38:30:00	42:18:00	44:05:40	Joao Dami	2016
3:24	9:17	19:55	28:33:00	38:54:00	42:40:00	44:15:53	Derek Dowell	2016
3:32	9:22	18:40	27:48:00	38:44:00	42:52:00	44:17:16	Michelle Payne	2017
3:42	9:58	21:47	30:16:00	40:39:00	44:13:00	46:01:29	Tess Leono	2016
3:26	8:58	19:22	27:37:00	40:16:00	44:21:00	46:11:42	Eric Gelder	2015
3:53	10:41	22:33	31:57:00	42:22:00	45:12:00	46:36:43	Cheryl Zwarkowski	2016

My Splits							
FC / 17	SPW / 42	PSR 72	Darw 90	LP 122	P Rd. 131	Whitney 135	Date



Badwater Ultramarathon 135, 1990-Present

Year	Starters	Finishers	Buckle Cut-Off	Sub 60hr	Sub 48hr	Sub 40hr	Sub 34hr	New Record: Men	New Record: Women
2019 (PM)	95	79	48 Hours	N/A	83%	56%	24%	21:33:01	24:13:24
2018 (PM)	99	69	48 Hours	N/A	70%	39%	23%		
2017 (PM)	95	75	48 Hours	N/A	79%	52%	16%		
2016 (PM)	97	84	48 Hours	N/A	87%	55%	25%	21:56:32	25:53:07
2015 (PM)	97	77	48 Hours	N/A	81%	57%	20%		
5 Year Avg	96.6	76.8			80%	52%	22%		
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%		
1998 (AM)	29	20	48 Hours	69%	41%	17%	10%		
1997 (AM)	27	20	48 Hours	74%	44%	26%	3%		
1996 (AM)	23	14	45 Hours	61%	35%	1%	4%		
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%	26:18:00	
1991 (PM)	14	14	60 Hours	100%	71%	36%	14%	26:34:10	36:19:20
1990 (PM)	21	17	70 Hours	81%	29%	29%	14%	27:56:20	39:27:00
5 Year Avg	17.2	14		84%	42%	21%	13%		

Unique Finishers' Nationality

Argentina	5
Australia.....	21
Austria.....	12
Belgium.....	1
Bermuda	1
Bolivia	1
Brazil	30
Bulgaria.....	1
Canada.....	28
Cayman Islands.....	1
Chile	1
China	2
Colombia	1
Czech Republic.....	3
Denmark	5
El Salvador.....	1
France	32
Germany	46
Greece.....	3
Guatemala	3
Hungary	6
India	7
Iran	3
Ireland.....	5
Israel	1
Italy	18
Japan.....	12
Jordan.....	2
Kazakhstan.....	1
Latvia	1
Luxembourg.....	2
Malaysia	1
Mexico	10
Netherlands.....	1
New Zealand	5
Philippines.....	5
Poland.....	8
Portugal.....	4
Romania.....	1
Russia	4
Serbia.....	2
Singapore.....	3
Slovenia	1
South Africa.....	3
South Korea	1
Spain	6
Sweden	4
Switzerland.....	6
United Kingdom.....	48
Uruguay.....	1
USA	534
Total Non-USA	364
Total	898

Age Group and **Overall Course Records

Age Group	Men	Time	Women	Time
10-19	Nickademos 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	Yoshihiko Ishikawa, 31, Japan, 2019**	21:33:01	Alyson Venti (Allen), 34, USA, 2016	25:53:07
40-49	Valmir Nunes, 43, Brazil, 2007	22:51:29	Patrycja Bereznowska, 43, Poland, 2019**	24:13:24
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, 63, USA, 2019	34:03:47
70-79	Arthur Webb, 70, USA, 2012	33:45:40	N/A	N/A
Youngest Ever	Nickademos 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 1987-2019

Total Number of Entrants: 1976

* 1565 Males, 412 Females (79% / 21%)

Total Number of Unique Entrants: 1005

* 791 Males, 214 Females (79% / 21%)

Total Unique Finishers, (any time limit): 898

* 693 Males, 205 Females (77% / 23%)

* Time limits have been 70 hrs, 60 hrs, then 48 hrs

Total Unique Finishers (48 hrs or less): 775

* 597 Males, 178 Females (77% / 23%)

Total Unique Finishers (36 hours or less): 261

* 197 Males, 51 Females (80.5% / 19.5%)

Comparison: Total Number of Mt. Everest

Summits, as of 2016:

7,646 summits by 4,469 people

Numbers of Official Finishes, through 2019

1-Time Finishers: 602

(467 Males and 135 Females; 78% / 22%)

2-Time Finishers: 161

(125 Males and 36 Females; 78% / 22%)

3-Time Finishers: 58

(45 Males and 13 Females; 77% / 23%)

4-Time Finishers: 26

(16 Males and 10 Females; 62% / 38%)

5-Time Finishers: 13

(10 Males and 3 Females; 77% / 23%)

6-Time Finishers: 8

(7 Males and 1 Females; 88% / 12%)

7-Time Finishers: 8 (Kimberlie Budzik,

Shannon Farar-Griener, Monica Scholz, Jonathan Gunderson, Grant Maughan, Frank McKinney, Mark Olson, Anthony Portera)

8-Time Finishers: 7 (Karla Kent, Cheryl Zwarkowski,

Eberhard Frixe, Oswaldo Lopez, Mark Matyazic, Ian Parker, Keith Straw)

9-Time Finishers: 3 (Ed Ettinghausen, Chris Frost,

Harvey Lewis)

10-Time Finishers: 3 (Lisa Smith-Batchen,

David Jones, Dean Karnazes)

11-Time Finishers: 1 (Pam Reed)

12-Time Finishers: 3 (Jack Denness,

Dan Marinsik, Ray Sanchez)

13-Time Finishers: 2 (Scott Weber,

Danny Westergaard)

14-Time Finishers: 2 (John Radich, Arthur Webb)

20-Time Finishers: 1 (Marshall Ulrich)

Men Who Have Run Under 26 Hours

Name	Age	Nationality	Year	Time
Yoshihiko Ishikawa	31	Japan	2019	21:33:01
Pete Kostelnick	28	USA	2016	21:56:32
Valmir Nunez	43	Brazil	2007	22:51:29
Mike Morton	40	USA	2012	22:52:55
Jorge Pacheco	40	Mexico	2008	23:20:16
Pete Kostelnick	27	USA	2015	23:27:10
Oswaldo Lopez	40	Mexico	2012	23:32:28
Marco Farinazzo	40	Brazil	2009	23:39:18
Harvey Lewis	35	USA	2016	23:40:52
Oswaldo Lopez	39	Mexico	2011	23:41:40
Akos Konya	32	Hungary	2007	23:47:47
Akos Konya	33	Hungary	2008	23:49:44
Dan Lawson	43	United Kingdom	2016	23:52:43
Mick Thwaites	42	Australia	2016	23:52:43
Harvey Lewis	38	USA	2014	23:52:55
Oswaldo Lopez	37	Mexico	2009	24:36:07
Scott Jurek	31	USA	2005	24:36:08
Carlos Sa	39	Portugal	2013	24:38:16
Grant Maughan	50	Australia	2014	24:43:08
Zach Gingerich	30	USA	2010	24:44:48
Sekiya Ryoichi	44	Japan	2011	24:49:37
Michele Graglia	34	Italy	2018	24:51:47
Grant Maughan	49	Australia	2013	24:53:57
Iino Wataru	37	Japan	2017	24:56:19
Oswaldo Lopez	38	Mexico	2010	25:05:38
Zach Gingerich	29	USA	2009	25:06:12
Anatoli Kruglikov	42	Russia	2000	25:09:05
Dusan Mravljje	47	Slovenia	2000	25:21:20
Oswaldo Lopez	41	Mexico	2013	25:27:03
Oswaldo Lopez	43	Mexico	2015	25:28:32
Jared Fetterolf	29	USA	2018	25:33:42
Scott Jurek	32	USA	2006	25:41:18
Marco Bonfiglio	39	Italy	2017	25:44:18
Charlie Engle	46	USA	2009	25:45:11
Zach Gingerich	32	USA	2012	25:49:40
David Goggins	32	USA	2007	25:49:40
Harvey Lewis	37	USA	2013	25:49:50
Akos Konya	31	Hungary	2006	25:58:42

Women Who Have Run Under 30 Hours

Name	Age	Nationality	Year	Time
Patrycja Bereznowska	43	Poland	2019	24:13:24
Alyson Venti	34	USA	2016	25:53:07
Jamie Donaldson	35	USA	2010	26:16:12
Jamie Donaldson	33	USA	2009	27:20:18
Jamie Donaldson	34	USA	2009	27:20:18
Nikki Wynd	43	Australia	2015	27:23:27
Pam Reed	47	USA	2009	27:42:52
Pam Reed	41	USA	2002	27:56:47
Brenda Guajardo	41	USA	2019	28:23:10
Pam Reed	43	USA	2003	28:26:52
Alyson Venti	32	USA	2014	28:37:28
Brenda Guajardo	39	USA	2016	28:40:13
Pam Smith	43	USA	2018	28:47:53
Sumie Inagaki	45	Japan	2011	28:49:27
Pam Reed	48	USA	2009	29:03:09
Nikki Wynd	44	Australia	2016	29:06:00
Monica Scholz	37	Canada	2004	29:22:29
Gina Slaby	38	USA	2019	29:26:45
Pam Reed	53	USA	2014	29:30:04
Jennifer Vogel	30	USA	2011	29:42:12
Nikki Wynd	42	Australia	2013	29:44:33
Irina Reutovich	50	Russia	2000	29:48:27
Iris Cooper-Imhof	52	Canada	2011	29:51:23
Sumie Inagaki	46	Japan	2012	29:53:09
Catherine Todd	43	Australia	2013	29:55:29

To study and parse data and results from all the Badwater® races, visit:
dbase.adventurecorps.com.



Yoshihiko Ishikawa, 31, of Naruto City, Japan broke the men's world record at the 2019 Badwater 135 with a winning time of 21:33:01. But if that wasn't exciting enough, he got down on one knee shortly after breaking the tape and proposed to his girlfriend, Miki Matsushima - and she said yes! This was Yoshihiko's first Badwater 135 appearance and he broke Pete Kostelnick's previous course record by 24 minutes.



Patrycja Bereznowska, 43, of Wieliszew, Poland was the second runner across the line at the 2019 Badwater 135, breaking the women's world record with a winning time of 24:13:24. Like men's champ Ishikawa, she was also the 2018 Spartathlon champion and a rookie at Badwater 135. She broke Alyson Venti's women's record by 1 hour, 40 minutes.



The final men's finisher of the 2019 Badwater 135 was rookie entrant Ted Williamson, 61, of Aliso Viejo, CA with a time of 46:45:59. Ted had served on a Badwater 135 support crew in 2018 and in 2019 he also completed Badwater Cape Fear and Badwater Salton Sea for the full Badwater Ultra Cup.



The final female finisher - and last across the line - of the 2019 Badwater 135 was long-time veteran Kimberlie Budzik, 59, of Friendswood, TX with a time of 47:34:29. This was Kim's seventh finish of the world's toughest foot race and perhaps her most hard-fought finish. Hats off to Kim and her crew!

2020 Official Race Roster

In honor of the 102 entrants who were confirmed to compete in 2020, we are listing ALL of them here. Sadly, many will not be on the start line due to travel restrictions or other reasons, but they will be us in spirit (and will be guaranteed to join us in 2021.) Additionally every flag of the 27 nations that would have been carried this year is featured on the cover of the magazine. For the official race roster, and wave start assignments, see dbase.adventurecorps.com.

Bib	First Name	Last Name	City	State	Country	Nationality	M/F	Age	B135 Finisher?
1	Peter	Kostelnick	Brunswick	Ohio	USA	USA	Male	32	Yes
2	Oswaldo	Lopez	Madera	California	USA	Mexico	Male	49	Yes
3	Xibo	Gu	Beijing		China	China	Male	35	No
4	Laura	Watts	Bognor Regis	West Sussex	United Kingdom	United Kingdom	Female	43	No
5	Jonathan	Reid	Phoenix	Arizona	USA	USA	Male	41	No
6	George	Chmiel	San Diego	California	USA	USA	Male	39	No
7	Nancy	Levene	New York	New York	USA	USA	Female	52	No
8	Kerri	Kanuga	George Town	Grand Cayman	Cayman Islands	Cayman Islands	Female	50	Yes
9	Grant	Maughan	Fort Lauderdale	Florida	USA	Australia	Male	56	Yes
10	Pamela	Chapman-Markle	San Leon	Texas	USA	USA	Female	64	Yes
11	Rhys	Jenkins	Cardiff	Wales	United Kingdom	United Kingdom	Male	32	Yes
12	Praveen	Sharma	Noida	Uttar Pradesh	India	India	Male	33	No
13	Munish	Dev	Motia Khan	Delhi	India	India	Male	37	No
14	Mandeep	Doon	Gurgaon	Haryana	India	India	Male	42	No
15	Ashish	Kasodekar	Baner		India	India	Male	48	No
16	Ed	Ettinghausen	Murrieta	California	USA	USA	Male	57	Yes
17	Joshua	Stevens	Estes Park	Colorado	USA	USA	Male	49	Yes
18	Lori	Mitchener	Lynnfield	Massachusetts	USA	USA	Female	43	No
19	Scott	Waldrop	Wake Forest	North Carolina	USA	USA	Male	44	No
20	Nick	LaBoffe	Cincinnati	Ohio	USA	USA	Male	39	Yes
21	Michael	McKnight	Smithfield	Utah	USA	USA	Male	30	No
22	Michelle	West	Costa Mesa	California	USA	USA	Female	48	Yes
23	Chris	Cavanaugh	Cincinnati	Ohio	USA	USA	Male	49	No
24	Jonathan	Gunderson	San Bruno	California	USA	USA	Male	42	Yes
25	Amy	Costa	Ponte Vedra Beach	Florida	USA	USA	Female	55	Yes
26	Caryn	Lubetsky	Miami Shores	Florida	USA	USA	Female	49	Yes
27	Emily	Ryan	Washington	District of Columbia	USA	USA	Female	45	Yes
28	John	Stocker	Bicester	Oxfordshire	United Kingdom	United Kingdom	Male	40	No
29	Lorie	Alexander	Calgary	Alberta	Canada	Canada	Female	61	Yes
30	Kevin	Delk	Greeneville	Tennessee	USA	USA	Male	37	Yes
31	Raphael	Bonatto	Curitiba	Paraná	Brazil	Brazil	Male	40	Yes
32	Tsai Tsung	Chen	Taichung City		Taiwan	Taiwan	Male	42	No
33	Jiri	Halek	Strakonice		Czech Republic	Czech Republic	Male	33	No
34	Brett	Sanborn	Albuquerque	New Mexico	USA	USA	Male	34	No
35	Harvey	Lewis III	Cincinnati	Ohio	USA	USA	Male	44	Yes
36	Joshua	Holmes	Los Angeles	California	USA	USA	Male	42	Yes
37	Dan	McHugh	Snowmass Village	Colorado	USA	USA	Male	49	Yes
38	Deysi	Osegueda	Los Angeles	California	USA	Mexico	Female	38	No
39	Andrzej	Radzikowski	Kiścinnie	Czosnów	Poland	Poland	Male	39	No
40	Michael	Ohler	Kandel	Rheinland-Pfalz	Germany	Germany	Male	51	No
41	Ray	Sanchez	Sacramento	California	USA	USA	Male	53	Yes
42	Kelly	O'Dell	Circleville	Ohio	USA	USA	Female	42	No
43	Hiroyuki	Nishimura	Kamagaya	Chiba	Japan	Japan	Male	50	Yes
44	Telma Ghazarian	Altoon	Porter Ranch	California	USA	Armenia	Female	45	No
45	Lelis	Gonzalez	Leadville	Colorado	USA	Venezuela	Male	36	No
46	Leanne	Rive	St Martin	Jersey	United Kingdom	Ireland	Female	46	No
47	Suzi	Swinehart	Fort Wayne	Indiana	USA	USA	Female	48	Yes
48	Maria	Poso	West Covina	California	USA	Philippines	Female	48	No
49	Karla	Kent	Las Vegas	Nevada	USA	Czech Republic	Female	57	Yes
50	Hiroto	Akaba	Kawaguchi	Saitama	Japan	Japan	Male	50	No
51	Kimberlie	Budzik	Friendswood	Texas	USA	USA	Female	59	Yes
52	Wanderley	Reis	Layton	Utah	USA	USA	Male	52	No
53	Richard	Heath	Heswall	Merseyside	United Kingdom	United Kingdom	Male	48	No
54	Sandy	Geisel	Marietta	Georgia	USA	Canada	Female	56	No
55	Tapani	Tarnanen	Helsinki	Helsinki	Finland	Finland	Male	55	No

Bib	First Name	Last Name	City	State	Country	Nationality	M/F	Age	B135 Finisher?
56	Peggy	Ward	Wichita	Kansas	USA	USA	Female	56	No
57	Oscar	Hernandez	San Bernardino	California	USA	Mexico	Male	38	No
58	Alexis	Garcia	Pembroke Pines	Florida	USA	USA	Male	58	No
59	Hans	Siemelink	Houston	Texas	USA	Netherlands	Male	59	No
60	Jose	Nicolas	Dubai	Dubai	United Arab Emirates	Canada	Male	52	No
61	Norma	Roberts	Calgary	Alberta	Canada	Canada	Female	61	No
62	Mark	Marzen	Wheat Ridge	Colorado	USA	USA	Male	33	No
63	Shin-Yen	Ho	Taipei City		Taiwan	Taiwan	Male	61	No
64	Todd	Nott	Plattsmouth	Nebraska	USA	USA	Male	56	No
65	Nicola	Placucci	Cesena	Forli-Cesena	Italy	Italy	Male	37	No
66	Peter	Matus	Homestead	Florida	USA	Slovakia	Male	53	No
67	Ta'Mara	Aarin	Woodland Hills	Florida	USA	USA	Female	52	No
68	Dawn	Lisenby	Flagler Beach	Florida	USA	USA	Female	52	No
69	Will	Litwin	Cutler Bay	Florida	USA	USA	Male	51	No
70	Rich	Peers	Kitchener	Ontario	Canada	Canada	Male	49	No
71	Jodi	Weiss	Washington	District of Columbia	USA	USA	Female	50	Yes
72	Leslie	Carboni	Sacramento	California	USA	USA	Female	46	No
73	Aleksey	Diuzhakov	Cherkizovo	Moscow	Russia	Russia	Male	47	No
74	Brian	Medley	Folsom	California	USA	USA	Male	46	No
75	Billy	Richards	Central Islip	New York	USA	USA	Male	38	No
76	Lisa	DeVona	Pompano Beach	Florida	USA	USA	Female	44	Yes
77	Sally	McRae	Huntington Beach	California	USA	USA	Female	41	Yes
78	Benedict	Meneses	Quezon City	Metro Manila	Philippines	Philippines	Male	41	No
79	Stine	Rex Christensen	Aalborg	Nordjylland	Denmark	Denmark	Female	41	No
80	Scott	Jenkins	London		United Kingdom	United Kingdom	Male	39	No
81	Gerald	Tabios	Elmhurst	New York	USA	Philippines	Male	50	Yes
82	Kelaine	Conochan	Washington	District of Columbia	USA	USA	Female	37	No
83	Rhea	Loney	Philadelphia	Pennsylvania	USA	USA	Female	37	No
84	Danny	Westergaard	Palos Verdes Estates	California	USA	USA	Male	61	Yes
85	Joshua	Kline	St. Augustine	Florida	USA	USA	Male	44	No
86	Lee	Whitaker	Fort Mill	South Carolina	USA	USA	Male	46	Yes
87	Kenneth	Ringled	Simi Valley	California	USA	USA	Male	39	No
88	Igor	Gotsuliak	Kyiv	Kyiv	Ukraine	Ukraine	Male	31	No
89	George	Myers	Frisco	Texas	USA	USA	Male	48	Yes
90	John	Kohler	Olathe	Kansas	USA	USA	Male	40	Yes
91	James	Bennett	Herne Bay	Kent	United Kingdom	United Kingdom	Male	29	No
92	Glenn	Rosales	Market Area	Sta. Rosa, Laguna	Philippines	Philippines	Male	49	No
93	Ryan	Fecteau	Danvers	Massachusetts	USA	USA	Male	27	No
94	Isamu	Sato	Funabashi	Chiba	Japan	Japan	Male	48	No
95	Brian	Hill	Ft Worth	Texas	USA	USA	Male	46	Yes
96	Bobby	Seeberger	Draper	Utah	USA	USA	Male	56	No
97	Marc	Siques Llagostera	Barcelona		Spain	Spain	Male	38	No
98	Kevin	Spruell	New Orleans	Louisiana	USA	USA	Male	42	No
99	Walker	Higgins	Baton Rouge	Louisiana	USA	USA	Male	38	Yes
100	Joao	Andrade	Vila Nova de Gaia	Porto	Portugal	Portugal	Male	38	No
113	David	Jones	Murfreesboro	TN	USA	USA	Male	68	Yes
200	Candice	Burt	Leavenworth	WA	USA	USA	Female	38	No



Printing should not be an
Endurance Sport

You won't need to stay up
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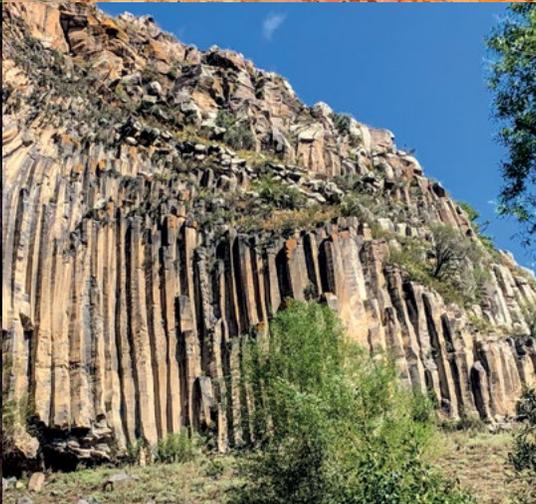
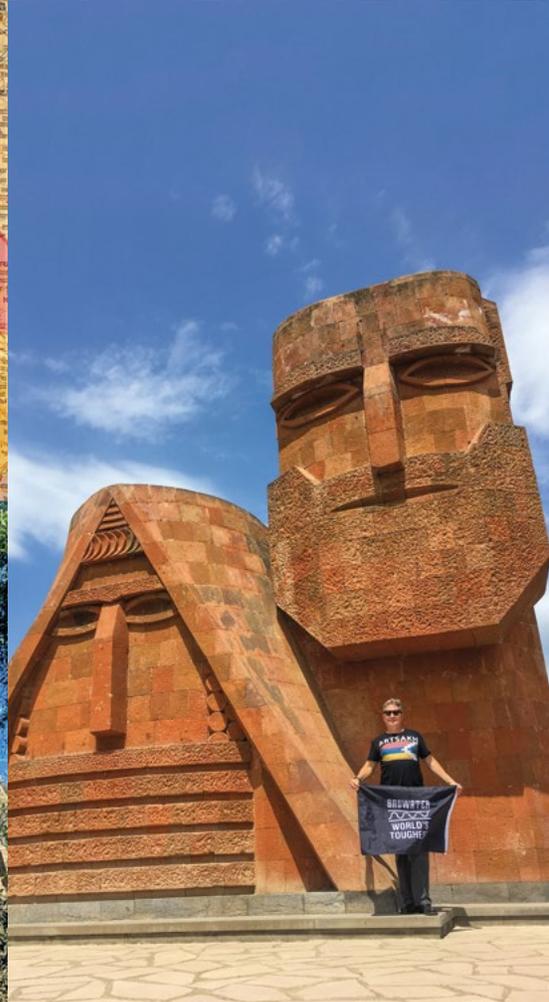
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