

BADWATER®



May 2018

2019

Badwater presents

NEW YEAR'S AT CAPE FEAR

12- and 24-Hour Race and Running Party



Bald Head Island, North Carolina on December 31, 2018 until January 1, 2019!

Come do what runners love to do - finish the year running AND start the new year running - in an official Badwater® race, in the company of new and old friends, on a beautiful island, with incredible support, and tons of fun (most of the time)!

This is not a track race, nor a boring one- or two-mile loop around a park! NO WAY, NOT AT ALL! This is a Badwater race, after all! New Year's at Cape Fear features a 7.5-mile loop on the car-free, paved, one-lane-wide roads of Bald Head Island, including about one mile of running on the secluded sandy beach around Cape Fear itself. It is effectively a dead flat route. Near the end of the race, when runners no longer have time to run an additional 7.5-mile loop, they will be diverted onto a one-mile loop until the clock runs out. Running this remote coast and on this incredible island is a dramatic, invigorating, and inspiring manner in which to experience the Cape Fear region in all its grandeur!

Two aid stations will be provided, on opposite sides of the island (one next to Old Baldy Lighthouse and one at the Bald Head Island Conservancy, about 3-4 miles apart.) Both will have food and drinks, friendly volunteers, propane heaters, indoor space, chip timing control, a place for runner "drop bags," and an EMT / Public Safety Officer. The aid station at the BHI Conservancy will also have a steady stream of hot food and drinks, especially throughout the night, plus indoor space available for resting or warming up.

The challenge will be formidable, but the support will be great!

Solo and two-person relay divisions are offered for both the 12-hour race (with a 900pm start time) and the 24-hour race (with a 900am start time) on December 31, 2018. All races conclude at 900am on New Year's Day, 2019 with a catered post-race breakfast and social time.

Entry includes Badwater t-shirt, Badwater hat, Badwater sunglasses, Badwater tote bag, chip timing, support of the Village of Bald Head Island Public Safety staff, two fully stocked aid stations, and Badwater Bragging Rights!

All finishers will receive a nice BADWATER NEW YEAR'S AT CAPE FEAR Medal, while those solo runners who log 100 miles or more in the 24-hour race will receive a special New Year's at Cape Fear Badwater Belt Buckle.

Get all the info and register at www.badwater.com/



Founded in 1984 by yours truly, AdventureCORPS®, Inc. is an athlete-run producing the world's toughest races and promoting the world's toughest brand, BADWATER®.

Welcome to the Spring 2018 edition of BADWATER Magazine, our semi-annual publication that celebrates the life "out there" with a particular emphasis on running long distances in exotic, challenging locations.

Adventure is our way of life, so we are extremely pleased to host the 6th Badwater Salton Sea, the second leg of the Badwater Ultra Cup, on April 29-30, 2018. This three-event series kicked off on March 17 with Badwater Cape Fear (see the other half of this magazine) and concludes July 23-25 with the Badwater 135 Ultramarathon.

A truly epic event in an otherworldly location, Badwater Salton Sea pits up to 105 of the world's toughest athletes, competing together on teams of either two or three, against one another, the route, and the elements.

Covering 81 miles (131km) non-stop from Salton Sea to Palomar Mountain and with a team ultra running format unique to this race, it is the one of the most demanding and extreme running races on the planet, one truly deserving of its "BADWATER" moniker.

The start line is the shoreline of the Salton Sea at Salton City, located at 234' (71m) below sea level in Imperial County. The race finishes atop Palomar Mountain, San Diego County's almost tallest peak at 5500' (1676m) and the home of the world famous Palomar Observatory. The race course covers two major mountain ranges for a total of 9,000' (2743m) of cumulative vertical ascent.

We thank and salute the County of Imperial, County of San Diego, California Department of Transportation, and Anza-Borrego Desert State Park, whose staff—and permits—oversee this event. We thank all the AdventureCORPS staff for their hard work in hosting a smooth and successful race. We thank everyone involved with the event for their sense of adventure and unassailable commitment to sportsmanship, fair play, and esprit de corps.

We wish everyone—racers, crews, staff, sponsors, media, and fans—a safe and successful race this year. May this truly be a life-changing experience for everyone. Welcome, or welcome back, to the Badwater Family!

Yours in sport,

Chris Kostman

Race Director and Chief Adventure Officer

AdventureCORPS, Inc.

638 Lindero Canyon Rd. #311 Oak Park, CA 91377 USA

www.adventurecorps.com / www.badwater.com

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Flip this magazine over for the March / Cape Fear edition of BADWATER Magazine!

adventureCORPS®
 "Out There Since 1984"
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Team Beauty & The Beasts placed 3rd 3x team in 19:05:10 in 2017. L-R, they are: Michael Ramsdell, Carl Hinline, and Sandra Villines.

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



Printing should not be an
Endurance Sport

You won't need to stay up
 all night or take a week off
 after working with us!

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Bob Corman
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bob@infinitypress.net
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SCHEDULE OF EVENTS

Friday, April 27, 2017

700pm: Meet for dinner (no host) at the Borrego Springs Resort (across the driveway from the hotel lobby at The Arches.) The cool kids get to town on Friday in order to kick off things in style!

Saturday, April 28, 2017

700-830am: Road and trail run around Borrego Springs past many of the incredible metal sculptures which dot the landscape and are known as Galleta Meadows. Depart on foot from hotel lobby at 700am. (Approximately six miles with several stops for photos.)

1015am: Optional: Meet at Hotel Lobby to carpool to Salton City to visit the start line area and first 35 miles of the Badwater Salton Sea race route.

1030am: Optional: Depart for Salton City. (All are responsible for their own transportation. Please carpool.)

300-400pm: Runner Check-In and Photos

400-500pm: Pre-Race Meeting

Sunday, April 29, 2017

0500 Runners/Crews must depart Borrego Springs to the start line.

0530 Civil Twilight (first light in the sky)

0556 Sunrise

0600 Absolute deadline to arrive at the start line at: 905 Sea Port Ave, Salton City, CA 92274

0630 RACE START

0705 Moonrise

1530 Time Cut-Off at Mile 35.23 (Borrego Springs)

1730 Time Cut-Off at Mile 40.6 (Lower Trailhead)

1900 "Nighttime" as defined by us; follow nighttime protocols.

1923 Sunset

1949 Civil Twilight (no light left in the sky)

Monday, April 30, 2017

0529 Civil Twilight (first light in the sky)

0556 Sunrise

1030 RACE COURSE CLOSES (28 Hour Limit)

1030 Post-Race Brunch, at the finish line

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CREATIVE DESIGN
BRANDING DESIGN, LOGOS, BROCHURES, ADVERTISING,
ANNUAL REPORTS, CATALOGUES, AND MORE...

Contact: kevin@kfungdesign.com

COURSE RECORDS

Team	Names	Category	Year	Grp	Elapsed
The Septemberists	Pete Kostelnick & Jon Juehler	2x Men	2017	20+	14:04:20
J-RAY	Jared Fetterolf & Ray Sanchez	2x Men	2016	30+	14:56:00
100MileClub.com	Joseph Nakamura & Robert Whited	2x Men	2015	40+	16:08:03
Prickly Pair	Rober Buruss & Keith Straw	2x Men	2016	50+	23:58:00
Echo 37	Jane Cyphers & Will Gane	2x Mixed	2016	30+	21:18:00
Los Aventureros	Nelva Valladares & Mark Matyazic	2x Mixed	2016	40+	16:02:00
DingoBlonde	Amy Costa & Mark Matyazic	2x Mixed	2016	50+	17:33:00
Wingman Foundation	Monique Jacques & Brittany McCullough	2x Women	2016	30+	18:55:00
Sweat It Out	Molly Troy & Cheryl Tulkoff	2x Women	2016	40+	19:27:00
Beast Mode	Catra Corbett & Teresa Hillstrom	2x Women	2016	50+	22:36:00
Disney McFarland USA	Carlos Cabanillas, Diego Diaz, Oswaldo Velasquez	3x Men	2015	30+	15:09:42
Miami Thrice	Bradford Lombardi, Dave Krupski, Grant Maughan	3x Men	2013	40+	17:02:00
Yinzers	Keith Straw, Jeff Gleason, Bill Thompson	3x Men	2014	50+	19:39:00
Youth & Inexperience	Mike Arnspiger, Bob Becker, Keith Straw	3x Men	2015	60+	25:30:53
RVLVR	Ben Brown, Katya Meyers, and Mike Trevino	3x Mixed	2017	30+	19:38:14
Texas Relentless Roadrunners	Brian Hill, Alison Miller, and Brian Miller	3x Mixed	2017	40+	18:23:40
The Dharma Bums	Boni Collins, Jodi Samuels, Jodi Weiss	3x Women	2015	40+	22:37:40





MEET TRES AMIGOS CRUCE USA!

The 2018 edition of Badwater Salton Sea features the 3-mixed team of runners called Tres Amigos Cruce USA who share a lot in common: All three of these Badwater Salton Sea veterans are Trans-America record holders and Badwater 135 champions! With all due respect to the innumerable super athletes who have or will compete at Badwater Salton Sea, never has such incredible talent and history been represented by just one team. As such, we are excited to profile them in this magazine, and to have them join the race on April 29-30!

Sandra Villines, Age 45 Madera, CA

- Trans-USA (SF to NYC) World Record, 2017, age 45: 3126 miles; 54 days, 16 hours, and 24 minutes
- 2017 Badwater 135: 34:34:43; 1st female and 18th overall
- 2016 Badwater 135: 36:35:37; 8th female and 38th overall
- 2017 Badwater Salton Sea: 19:05:10
- 2016 Badwater Salton Sea: 20:47:00
- 2015 Badwater Salton Sea: 24:00:55
- 2017 Badwater Cape Fear 51.4mi: 9:06:00
- 2016 Badwater Cape Fear 51.4mi: 10:01:00
- 2015 Badwater Cape Fear 51.4mi: 10:15:01

“Badwater Salton Sea is a very memorable race for me, as it was the first time I proved to myself what I am capable of when I believe. It led me to where I am now and the things I have accomplished. Being a part of my most favorite race with my two heros is the utmost epic experience, and I am truly blessed to be a part of the team that ran across America.” —Sandra Villines

Pete Kostelnick, Age 30 Hannibal, MO

- Trans-USA (SF to NYC) World Record, 2016, age 29: 3067 miles; 42 days, 6 hours, and 30 minutes
- 2017 Badwater 135: 28:18:07; 5th place
- 2016 Badwater 135: 21:56:32; 1st place and Course Record
- 2015 Badwater 135: 23:27:10; 1st place and Course Record
- 2014 Badwater 135: 30:38:09; 14th place
- 2017 Badwater Salton Sea: 14:04:20; 1st place and Course Record
- 2015 Badwater Cape Fear 51.4mi: 6:38:00; 3rd place

“Running across America for speed is a beautiful, yet in some ways traumatic experience we chose to do. I’m looking forward to recollecting many similar stories with Marshall and Sandra, but also learning more about how their experience has been since their runs across America as we work together during Badwater Salton Sea.” —Pete Kostelnick

Marshall Ulrich, Age 66 Evergreen, CO

- Trans-USA (SF to NYC) World Record, 2007, age 57: 3063 miles; 52 days, 11 hours, and 58 minutes
- Twenty-time Badwater 135 finisher: 1990, 1991, 1992, 1993, 1995, 1996, 1998, 1999, 2001, 2002, 2003, 2004, 2005, 2007, 2008, 2010, 2011, 2012, 2013, and 2015.
- Four-time Badwater 135 Champion in 1991, 1992, 1993, and 1996, with a personal record of 26:18
- 2014 Badwater Salton Sea: 26:16:31
- 2013 Badwater Salton Sea: 23:40:25

“Running the Badwater Salton Sea race has always been one of my favorite Badwater races because of the team format. I’m honored and feel privileged to have been asked to be on a team with not only two winners of the Badwater 135 race, but also champions record holders of Running Across America.” —Marshall Ulrich

I have a strong belief that things happen for a reason as they should, at the right time. Completing a Transcontinental run was the farthest thing from my mind and I never would have known about it if I hadn't been a part of the Badwater family.

The road that led me, was chasing a dream to complete the "World's toughest Footrace" which was influenced by my first half marathon back in 2010. Upon learning about Dean Karnazes (the race was named after him), ultra-running and Badwater, that's where my crazy passion started. Always looking for the next thing to challenge myself as well as be a positive role model for my daughter and those around me, I became very determined to apply to Badwater and run it someday. After a couple years of consistent 100 mile race completions, and endless training, I was accepted in 2016. It was here where I was privileged to meet and have the support of so many of my Badwater family members. I often admired most from afar and was so honored to even be able to participate in an event with the World's toughest athletes.

I remember meeting Pete Kostelnick the morning after Badwater at breakfast and was in awe. He was so nice, genuine, and warmly congratulated me on my race. The one thing about our family is they are so kind, caring and supportive. It was not too long after that I heard about Pete's quest to run across America. I became deeply intrigued and thought 135 miles in the elements was challenging?! I was like who does that?? I secretly followed every day and became so inspired, I was in awe and amazement of what the body can do when the mind is silenced. I then got the notion that I wanted to do something amazing like this! Actually I wanted to run across America too!

Fast forward 12 months and my Badwater family were able to make that dream a reality for me. Without the support of Chris Kostman, and all the Badwater family, this would never have happened for me. I will forever be grateful and thankful for the experience and memories of a lifetime at having been able to complete my run across America.

—Sandra Villines





I love telling my story about how Badwater relates to my running as a whole, because it's 100% true.

I grew up loving road trips with my family to national parks and going on long hikes in canyons and on mountains. There was one long hike in particular that got me into running—hiking Mt. Whitney when I was 14 years old in 2002.

Fast forward half a decade to college, and I read about this crazy race called the Badwater 135 in a mainstream sports magazine. I told a girl I was trying to impress that I was going to do stuff like that someday.

I had never even run a half marathon, and I looked more like a rock band drummer than a runner. Somehow, I found myself at the start line of the Badwater 135 in 2014, which, to me was even more of a surprise than going back to finish first in 2015 and 2016. Badwater proved to me that maybe the craziest idea or dream I can think of is not so crazy after all.

The day after I finished in 2015, I was already making plans with one of my crew members to run across America in 2016. All four of my permanent team in running across America were from three entirely different Badwater connections, in addition to two particular men named Charlie and Marshall who were my original inspiration. Ending the story right there would probably give most readers all the reason why I put Badwater at the top of my list of running events to take part in each year.

But, to be honest, it's become much more than that to me. I crave seeing other Badwater runners and family at various Badwater events each year. The venues are also what keep me coming back. Beautiful landscapes almost entirely our own, at least for a little while.

Chris wants you to experience all the venues have to offer, which in turn leaves a more memorable experience of not only the race itself, but the people and place that forever become a part of you.

— Pete Kostelnick

To say that I owe Death Valley and the Badwater race a whole hell of a lot may be the understatement of almost 30 years, as that's how long I've been running across and around the area. Since 1990 I've covered almost 5,000 miles on foot in and around Death Valley National Park. It's fair to say that the Valley has helped shape the person I am today: runner, athlete, adventurer, mountaineer, and man.

As a farm boy from the plains of Colorado, I was used to hard, physical labor in all types of weather. But I didn't start running until I was 28, and first ran over 100 miles (122 miles in 24 hours) in 1988 when I was almost 37 years old. On an airplane in 1989, I picked up Hemispheres magazine and read an article by Bart Yasso of Runner's World fame. In his typical funny, self-deprecating way, he shared his experience running an obscure race in Death Valley, where he came in third, second, and first in the same race (seriously: ask him about it sometime). The race started at the Badwater basin, the lowest point in U.S., and continued for 146 miles to the summit of Mount Whitney, the highest point in the lower 48 states. I was intrigued.

My running resume wasn't long, but I was the first to finish all six (that's all there were at the time!) 100 mile trail runs, so I threw my shoes in the fire and got invited to the next Badwater 146 race. Never having been to Death Valley before, and having only seen the first 42 miles of the course, I really had no idea what I was in for: oppressive heat, blast furnace winds, the endless road, and the relentless hills. Badwater punished and chastised me; strangely, just what I desperately needed, but didn't even know. The majestic wilderness became a stage set for extreme adventures and dark nights of the soul.

The Badwater race became more than a nearly annual event for me. The heat helped forge enduring friendships: like my dearly departed friend Gary Adams, the Mayor Badwater Ben and First Lady Denise Jones, the Grinder Art Webb, the Mayor of Malibu Chris Frost, my little sister Lisa Smith-Batchen, savior of women and children Sister Mary Beth Lloyd, leading race director Chris Kostman, staff and creative medal creators Phil and Kari Marchant, "adversaries" like Tommy Possert, and crew-members extraordinaire including Keith Pippin, Gary Kliewer, Murray Griffin, Dr. Bob Haugh, Perry Gray, Jill Andersen, Cinder Wolff and so many more. Every athlete, crew, and staff member that gets to take part is touched by some level of greatness: a sense of the magnitude of the event, the place, and the kind of people that are drawn to the stage.

I was lucky enough to win the race a few times and still hold the record to the summit (33:54 for you young-guns out there. You can do it!). Of course, we never "win" in nature; rather, we are granted safe passage. The beauty, splendor, and diversity of the landscape and the mystical aura that surrounds Death Valley make it a sacred place for me, as it is for the Timbisha Shoshone Tribe. It has been my stage – for other adventures like The Quad, The Solo, and The Circumnav – but I am just a small player upon that platform, lost in the vastness of the desert and the stars, just a speck of sand in the universe.

Struggling through Death Valley helped me gain an understanding of what it means to be human. Strangely enough, that insignificant feeling gave me confidence to reach for more, including adventure racing and fulfilling my life-long dream of climbing Mount Everest. As I did the Seven Summits, I returned to the Badwater race each July, as it continued to be the stepping stone beneath my feet, leading the way.

One "last" thing remained: running across America. I had dreamed of crossing the country on foot for as long as I had been running. Perhaps over the hill and too old to do so, at least at what I hoped would be record-setting pace, I finally got my opportunity in 2008 at the age of 57. Luckily, I had found my wife, Heather, years before The Run and she was there to hold me up, along with my Badwater family, who were there too. Every step of the way. If not in the flesh, in spirit. They helped me cross more than 3,000 miles in just over 52 days; through deserts and mountains, across the plains and twisting river valleys, in heat, wind, rain and snow. They kept me going, no matter what.

So, as I look back on my Badwater experiences and family, I'm grateful for what I've learned and for the inspiration and love they've given me throughout the decades. I am a creature, a creation, of Death Valley and its people. I am a lucky man indeed.

— Marshall Ulrich, 2018,
extreme athlete and author of *Running on Empty*



THE OFFICIAL CHARITIES

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



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

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

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

Website: www.challengedathletes.org



The Bald Head Island Conservancy was founded on Bald Head Island, NC in 1983 with a focus on barrier island conservation, preservation, and 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 raise \$10,000 to purchase one of the special UTV vehicles which BHIC uses to patrol the beach and care for sea turtle nesting sites.

Website: www.bhic.org



Since 2014, AdventureCORPS is proud to recognize **Caring House Project Foundation** as an Official Charity and support their efforts. Founded by 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 today 10,616 children and their families have been provided with a new concrete home, and countless more are alive because of CHPF's efforts. In 2017 CHPF completed its 24th self-sufficient village in Guimbi, Haiti. That's right, 24th self-sufficient village in 21 Haitian cities in last 14 years! Visit www.chpf.org to support Frank's efforts. Thank you for all you do, Frank and Nilsa!

Website: www.chpf.org

ENVIRONMENT

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

As such, we joined **One Percent For The Planet** on July 1, 2008, a growing global movement of more than 1200 companies that donate at least 1% of their sales to a network of more than 3600 approved environmental organizations worldwide. Therefore we donate at least 1% of total revenues (in other words, “off the top,” not just 1% of profit) to environmental causes. This is in addition to all the work we do on behalf of, and donations we make to, Challenged Athletes Foundation, Major Taylor Association, and Caring House Project Foundation, which are wonderful causes but not environmental in their focus. In the past ten years, we and our fellow One Percent For The Planet members have invested over \$100 million in positive environmental change.



In association with our membership in One Percent for the Planet, we have supported **The Conservation Alliance** since September, 2008. The Conservation Alliance is an organization of outdoor businesses whose collective contributions support grassroots environmental organizations and their efforts to protect wild places where outdoor enthusiasts recreate. Alliance funds have played a key role in protecting rivers, trails, wildlands and climbing areas throughout North America.



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

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.



W W W . L A - B I K E . O R G
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 Life Members and recognized DVNHA as an Official Charity of AdventureCORPS from 2009 through 2013. DVNHA is a non-profit organization supporting education, research, and preservation in Death 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.)

Borrego Springs Resort



The host hotel of BADWATER Salton Sea is the Borrego Springs Resort, located at 1112 Tilting T Drive, Borrego Springs, CA 92004. This is also the location for Racer Check-In and the Pre-Race Meeting on the day prior to the race, as well as for Time Station #2 located at Mile 35 during the race.

Borrego Springs Resort is an oasis of luxury nestled between the Anza-Borrego Desert and the foothills of the Santa Rosa Mountains. The Resort boasts a variety of recreational amenities, fine dining and comfortable accommodations all within ninety minutes of Palm Springs and San Diego.

In addition to golf, Borrego Springs Resort offers its guests a variety of recreational amenities to choose from including a full-service Spa Serenity with a privatized pool, a heated swimming pool, whirlpool spa, six lighted tennis courts and fitness center. More info at BorregoSpringsResort.com

Borrego Springs is also home to Galleta Meadows, featuring 130 full-size metal sculptures of prehistoric mammals, dinosaurs, wild horses, sabertooth tigers, and even a 350-foot long serpent, all designed by artist Ricardo Breceda and located on land provided by the late Dennis Avery. Providing an awesome setting in which to run and explore, it is open to the public 24/7 and free of charge. More info at GalletaMeadows.com



Salton Sea



In 1901, the California Development Company, seeking to realize the Imperial Valley's potential for unlimited agricultural productivity, dug irrigation canals from the Colorado River. Heavy silt loads, however, inhibited the flow and new residents of the valley became worried. This prompted the engineers to create a cut in the western bank of the Colorado to allow more water to reach the valley. Unfortunately, heavy flood waters broke through the engineered canal and nearly all the river's flow rushed into the valley. By the time the breach was closed, the present-day Salton Sea was formed.

One of the attractions of the Sea is the abundance of life, manifested in the hundreds of species of birds that reside in, or visit, this important wetland habitat, and the fish that inhabit the waters. That is why some scientists have called the Salton Sea "California's crown jewel of avian biodiversity" and perhaps was the most productive fishery in the world.

This abundance of wildlife is particularly critical given the decline of wetlands. Over 90 percent of the wetlands of California have been lost. As California's wetlands decline, the importance of the Sea as a habitat for inland wetland species increases. The Sea's habitats support up to 40 percent of the entire US population of the threatened Yuma clapper rail, 80 to 90 percent of the American white pelican, and 90 percent of the eared grebe.

Besides the opportunity for bird watching and for fishing, the Salton Sea and its immediate vicinity offer recreational opportunities including boating, camping, off-roading, hiking, hunting, use of personal watercraft and photography. One of the attractions, the Salton Sea State Recreation Area, has 1,400 campsites in five campgrounds, hundreds of picnic sites, trails, playgrounds, boat ramps and a visitors' center.

Salton Sea Statistics

The Salton Sea, located in the southeastern corner of California, is actually a lake which occupies a desert basin known as the Salton Sink. This body of water covers a surface area of 376 square miles, making it larger than Lake Tahoe and Mono Lake. In fact, the Salton Sea is the largest lake in California. The Sea's current elevation is about 227 feet below mean sea level, its maximum depth reaches 51 feet and its total volume is about 7.5 million acre-feet.

Excerpted from <http://saltonsea.ca.gov>: The Salton Sea Authority.

Photo by Chris Kostman near the race start line.



Anza-Borrego Desert State Park



Anza-Borrego Desert State Park is the largest state park in California, featuring 500 miles of dirt roads, 12 wilderness areas, and many miles of hiking trails provide visitors with an unparalleled opportunity to experience the wonders of the California Desert. The park is named for Spanish explorer Juan Bautista de Anza and the Spanish word borrego, or bighorn sheep. The park features washes, wildflowers, palm groves, cacti and sweeping vistas. Visitors may also have the chance to see roadrunners, golden eagles, kit foxes, mule deer and bighorn sheep as well as iguanas, chuckwallas and the red diamond rattlesnake.

The Park is located on the eastern side of San Diego County, with portions extending east into Imperial County and north into Riverside County. It is about a two-hour drive from San Diego, Riverside, and Palm Springs.

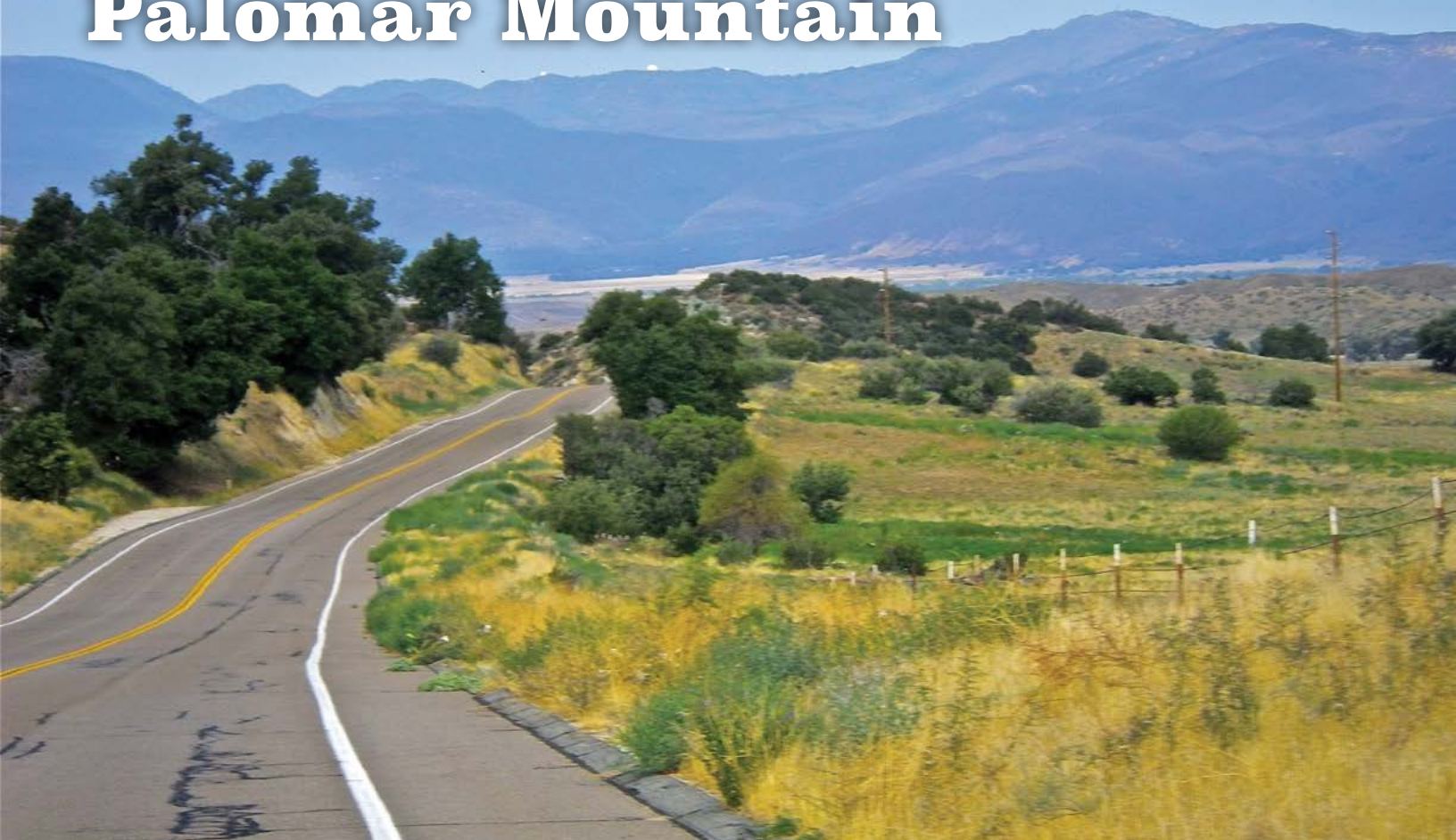
Most visitors approach from the east via Highways S22, S2, or 78. Visitors from San Diego via Highways 79 and 78 have the added pleasure of driving through the mountainous Cuyamaca Rancho State Park--quite a different experience from Anza-Borrego. The highways from the east climb to 2,400 feet or so and then descend about 2,000 feet to the valley. Where the highway breaks out of the high-country vegetation, it reveals the great bowl of the Anza-Borrego desert. The valley spreads below, and there are mountains all around. The highest are to the north--the Santa Rosa Mountains. The mountains are a wilderness, with no paved roads in or out or through. They have the only all-year-flowing watercourse in the park. They are the home of the peninsular bighorn sheep, often called desert bighorn.

There are more wonders in this desert than anyone could see in a lifetime, including wildflowers, which usually start blooming in force in late February or early March. Varieties of cactus bloom at all elevations but at different times, and for wildflower buffs they are the real prize. They tend to be "specimen" blossoms in colors ranging from red to yellow, and green. Other plants, such as the red chuparosa and the yellow brittlebush, show themselves as a mass of tiny flowers covering the surface of a shrub, or even a field of shrubs, or, in a good year, a broad expanse of pink sand verbena.

Excerpted from www.parks.ca.gov/?page_id=638

Photo by Ian Parker.

Palomar Mountain



Palomar Mountain is a mountain in the Peninsular Ranges in northern San Diego County. It is famous as the location of the Palomar Observatory and Hale Telescope, and known for the Palomar Mountain State Park.

The Luiseno Indian name for Palomar Mountain was “Paauw” and High Point was called “Wikyo.”

The Spanish name “Palomar,” in English meaning “pigeon roost,” comes from the Spanish colonial era in Alta California when Palomar Mountain was known as the home of Band-tailed Pigeons.

During the 1890s, the human population was sufficient to support three public schools, and it was a popular summer resort for Southern California, with three hotels in operation part of the time, and a tent city in Doane Valley each summer.

Palomar Mountain is most famous as being home since 1936 to the Palomar Observatory, and the giant Hale Telescope. The 200-inch telescope was the world’s largest and most important telescope from 1949 until 1992. The observatory currently consists of three large telescopes.

Palomar Mountain is the location of Palomar Mountain State Park, a California State Park. There are campgrounds for vacationers, and there was a campground for local school children until the San Diego Unified School District was forced to close it due to state budget cuts. The park averages 70,000 visitors annually. The campgrounds in the park were temporarily closed on October 2, 2011, due to state budget cuts, and the park was among 70 California State Parks threatened by budget cuts in fiscal years 2011-2012 and 2012-2013, but the park and the campgrounds remain open.

Palomar Mountain, especially in the state park area, is densely wooded with abundant oak and conifer tree species (pine, cedar, fir). Ferns are abundant everywhere in the shady forest. The forest is supported by annual precipitation totals in excess of 30 inches.

High Point in the Palomar Mountain range is one of the highest peaks in San Diego County, at 6,140 feet (1,871 m), surpassed by Cuyamaca Peak (at 6,512 feet (1,985 m)) and Hot Springs Mountain (the county’s highest point, at 6,533 feet (1,991 m)).

Excerpted from http://en.wikipedia.org/wiki/Palomar_Mountain

Photo by Chris Kostman. That white dot on the ridge line, a bit left of center, is the Observatory.

RACE RULES

GENERAL RACE RULES

1. All runners must check in at the start line, ready to race, at 0545 and the race will begin at 0630 on race day. (This requires departing Borrego Springs no later than 500am.)

2. There are only two divisions: Duo or Trio, which are then subdivided into men's team, women's team, and mixed team sub-categories.

3. The race bib must be worn and visible at all times during the race. It can be placed anywhere obvious: hat, hydration pack, number belt, chest or back of shirt, etc.

4. One GPS tracker per team will be issued at the start line and must be properly worn by one team member at all times. The tracker must never "ride in the support vehicle" during the race (get forgotten or placed there); teams that allow that to happen will be assessed a one-hour time penalty. Teams that lose the assigned GPS tracker will be disqualified and not receive finisher buckles, whether they finish or not.

5. There are mandatory intermediate cut-offs along the route. Specifically, all teams must have continued beyond the Borrego Springs Resort at mile 35.23 within nine hours of starting the race, while all teams must have continued onto the trail section which begins at mile 40.6 within eleven hours of starting the race. Teams / runners which exceed these deadlines will be declared DNF and MUST discontinue running and participation in the race.

6. All runners which begin the trail section of the race, which starts at mile 40.6, after 330pm (nine hours into the race) must carry a rain jacket, beanie, gloves, and a second set of new batteries for their light (or two separate lights / headlamps with new batteries), whistle, reflective gear and blinky lights, as well as cell phone, hydration and nutrition, and other supplies.

7. The clock does not stop for any reason until the race course officially closes after 28 hours. All racers must leave the course by the 28th hour (or sooner, if cut-offs are missed, as outlined above).

8. Running must always be single file and outside the white "fog line" on the edge of the roadway. Running should be off the left side of the road, facing traffic. Running well away from the pavement may be done on either side of the road, depending on which side is safest and has the best line of sight. The intent of the rules and the event's concept is that all running is done outside the white "fog line" and therefore never in any traffic lane (except during the first 6.9 miles through Salton City, where all running is along local roads.)

9. There is no "I" in "TEAM": All members of each team must remain together while running (within 25 meters) at all times. If members of a team become more than 25 meters apart, the lead runner, or runners, who allowed the gap to grow to more than 25 meters will be disqualified immediately. This applies for the entire 81 miles of the

race course, especially on the trail section where teams should make an even bigger effort to stay well within the 25 meter limit. (Teams are expected to run together, single-file, essentially at all times. The 25 meter limit is only intended to allow privacy during nature calls, not to allow the runners on a team to spread out.)

10. Teams must make their presence known at all Time Stations located along the route; they must arrive at all Time Stations together and may only depart each Time Station together, unless one runner is dropping out of the race at that location. Team arrival times at Time Stations will be recorded and made public.

11. All members of each team must run the entire distance and cross the finish line together to be considered Official Finishers and be ranked in the results. Teams which do not complete the course intact (i.e. one or two team members drops out along the way) will not be ranked, but the remaining team members are encouraged to complete the race under all applicable race rules. Finisher buckles will be awarded to all runners who complete the full 81-mile route within the guidelines of the race, but only intact teams will be ranked as Official Finishers.

12. Teams may not change division (for example, from Trio to Duo) any later than the day prior to the race. If a Trio has one runner drop out during the race, that team will NOT be re-categorized as a Duo. (The remaining runners are encouraged—and expected—to finish the race, will be listed as Official Finisher(s) if they finish, but will not be ranked.)

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

14. 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) may not state "Badwater" nor feature any version of the race logo. (Remember, all runners receive a free Badwater Salton Sea t-shirt, as do two crew members per team.)

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

3. All racers and all crew members must sign and fully complete the Accident Waiver and Release of Liability / Release of Name and Likeness. All racers must sign and fully complete the San Diego County Waiver and Release of Liability. Each team must also bring the properly completed Check-In Form to Runner Check-In.

4. All race vehicles must meet the minimum requirements of property damage and personal injury liability automobile

insurance for the State of California. All vehicle drivers must be fully licensed.

5. All racers and all support team members must attend Racer Check-In and the Pre-Race Meeting.

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

7. During Racer Check-In, all entrants must display ONE satisfactory reflective vest and TWO blinking red lights PER RUNNER and PER CREW MEMBER. These must be worn and utilized by the runners and crew at all times while outside of vehicles during nighttime periods of the race. Runners without satisfactory quality, or quantity, nighttime safety equipment will not be allowed to compete. (Hi-visibility clothing is highly recommended for both runners and crew members at all times, including during the day.)

8. All applicants must be a minimum of 18 years in age when submitting an application to race.

9. 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 - AND THEREFORE HIS OR HER TEAM - 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 Salton Sea finisher who fails a drug test within 36 months after competing in any edition of BADWATER Salton Sea will be retroactively disqualified from any and all previous BADWATER Salton Sea races, removed from all BADWATER Salton Sea race results, as well as banned for life from any AdventureCORPS events.

10. No commercial photographer / videographer may accompany or cover any racer or the race itself without the specific written permission of AdventureCORPS, Inc. Additionally, multiple government agencies may also require payment of a filming fee and signature of a filming agreement.

Support Crew and Assistance

1. Each team must be accompanied by a support crew comprised of no more than one four-wheeled motor vehicle and a minimum of two crew members - both of whom are legally licensed to drive and at least one of whom can speak English - at all times. Each team must have its own dedicated personal support crew and vehicle; crew and support vehicles may not be shared, except informally

in the spirit of the event, i.e., support crews may lend assistance to other teams, racers, or crews. "Unofficial crews or crew vehicles" and "family cheering squads" are not allowed at the race.

2. Runners must progress under their own power without drafting, helping, pushing, supporting, or any other type of physical assistance, EXCEPT from their teammates. (Teammates may help one another in any reasonable manner, including pushing, pulling, towing, and the like.)

3. 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.

4. Runners may not be accompanied by a crew member at any time while making forward progress on the race course, EXCEPT during brief moments when supplies are being handed off. Crew members that are handing off supplies, or otherwise providing aid to the runners, must be off the roadway at all times (i.e. outside the white line on the shoulder). Crew members may not run in front of race entrants at any time. Crew members may not accompany runners during the trail section of the race (mile 40.6 to mile 48.5.)

5. After mile 6.9 (leaving Salton City), runners must NEVER run abreast with other runners: All running must be single-file.

6. 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.

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

Support Vehicles

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

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

3. All race vehicles must have highly visible signage on the back of the vehicle stating "CAUTION RUNNERS ON ROAD," as

RACE RULES

provided by the race organizers at Runner Check-In. (Teams may provide their own signage for this purpose, but its suitability will be inspected.)

4. All support vehicles must have their Team Name easily and clearly visible on all four sides. The lettering must be at least 10" (26cm) tall. A high-visibility "paint pen" may be used to mark the team number in the lower right corner of the windows on all four sides of the vehicle, so long as it does not obstruct the view through any of the windows. (The race organizers will have several paint pens available for this purpose.) Alternatively, or additionally, teams may choose to have custom signage made to identify their vehicle.

5. Except as noted above, the view through vehicle windows may not be blocked or obstructed with any signage, paint, or the like. If a team's support vehicle is found with blocked windows during the race, that team will be forced to stop and wait while the vehicle's windows are unblocked and signage properly mounted.

6. Vehicles must "leapfrog" the runner at all times. Generally speaking, each "leapfrog" should be approximately THREE MILES in length during daylight, and ONE MILE or more in length during nighttime. Racers may never be "shadowed" (driving a vehicle at the runner's speed) and vehicles must not "caravan" (drive together, like a train, at any speed). Driving may never be at the speed of any racer. Driving must be done at the speed of traffic, never slowing down to encourage, talk to, or lend assistance to any racer while moving. All assistance must be provided by pedestrian crew members; handing off of supplies from the vehicle is never allowed.

7. All support vehicles must have their headlights on while driving, 24 hours a day. From 700pm to 700am (our definition of nighttime), at all times while stopped or parked off the road, support vehicles must have their headlights turned off and emergency flashers turned on.

8. Vehicles must be parked completely off the road surface whenever they are stopped - with all four tires right of the white line, preferably at least 8 feet beyond 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 VERY LARGE pullouts at which the vehicle will be at least 15 feet from the edge of the roadway.

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 must always be respected. The roads are not closed for this event and may be, 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. His or her teammates may continue as an unranked team.

3. From 700pm to 700am (our definition of nighttime), while out of doors on the race course, all racers and all crewmembers must wear reflective material facing in all four directions, as well as blinking red lights facing front and rear. Racers and crewmembers are encouraged to wear high-visibility clothing during the day as well. We highly recommend the products from ZombieRunner.com and XXYZZX.com.

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

5. Always look and listen both ways before crossing the highways. Remember that drivers will not expect to encounter a racer or parked vehicle out on the course. Remember we are on public roads with no road closures or traffic monitoring. Racers should not cross over the highway more than necessary; crew should cross the highway carefully to bring assistance to their racer.

6. All entrants and crew must study "Medical Risks in Badwater Salton," "Dangers of Running in the Heat," and "The Dangers of Hot Weather Running" as published at www.badwater.com.

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 or team needs to leave the course, his/her crew must note the exact location with some sort of marker left on the ground, as well as resetting their odometer to mark the distance to the location. The racer and his or her team must then resume the race from the same place that he/she left it. Racers may only leave the course for appropriate reasons such as rest or medical attention. Focus must be kept on the speedy completion of the course.

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

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

Awards

1. All racers who begin the event will receive a BADWATER Salton Sea race t-shirt and hat, BADWATER Magazine, as well as entry into the post-race brunch (for all racers and crew members).

2. All runners who complete the full 81-mile route within the guidelines of the race will receive the finisher's buckle and be recognized as

Official Finishers, but only intact teams will be ranked.

3. All runners who complete the full 81-mile route within the guidelines of the race will qualify for the Badwater Ultra Cup.

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:

- o First Penalty: One Hour
- o Second Penalty: Disqualification

4. Time penalties are imposed at the finish line by adjusting finishing times.

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

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

Finally

1. Have fun and keep smiling!

MEDICAL RISKS IN BADWATER SALTON SEA

This 81-mile race is one of the most physically taxing competitive events 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.

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 150-200 degrees. Proper foot care and 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 and potential health problems.

11th Annual Ultramarathon

MAY 19, 2018

"THE ORIGINAL" KEYS 100

100 Mile, 50 Mile & 50K Individual Races

See the website for details
www.keys100.com

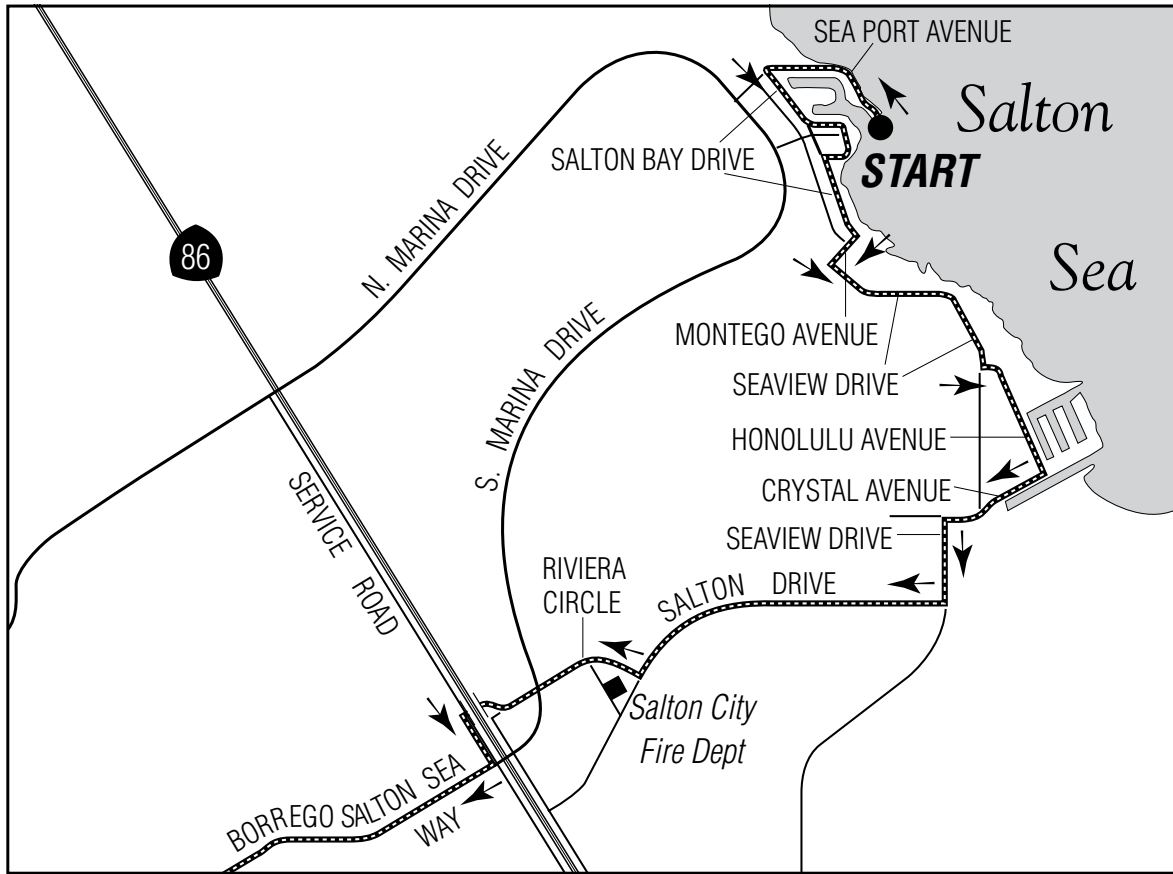
produced by
UltraSports

Run the islands of the Florida Keys!

MILE 100

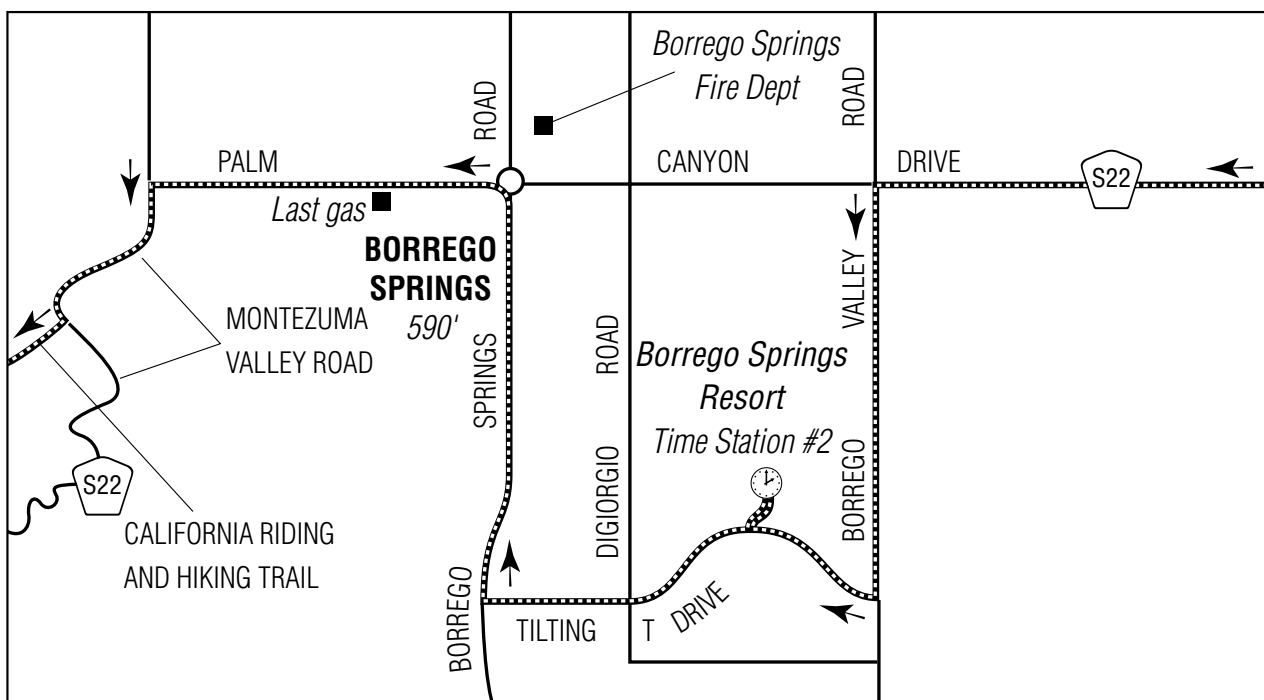


OFFICIAL RACE ROUTE



<i>Distance (ml.)</i>	<i>Landmarks</i>	<i>Time</i>
0	Salton Sea Start Line at end of Port Avenue	0630
0.65	Left Salton Bay Dr. Support Crews, drive directly to Mile 6.93, NOT on the runners' route. Runners must self-support until 6.93.	
0.93	Left Flamingo Ave.	
1.1	Cross Yacht Club Dr.	
1.22	Road bears right	
1.34	Left Salton Bay Dr.	
1.7	Right Montego Ave.	
1.87	Left Sea View Dr.	
2.46	Stay right on Salton Bay Dr.	
2.83	Left Honolulu Ave.	
3.4	Right Crystal Ave. (T-int)	
3.9	Left Sea View Dr. (SS, T-in)	
4.27	Right Salton Dr. (SS)	
5.8	Right Riviera Circle	
6.34	Cross South Marina Dr. (SS)	
6.5	Veer right towards wash (off-road)	
6.65	Cross under CA 86	
6.7	Left Service Rd.	
6.93	Right Borrego Springs Seaway / S22 (Last Gas until Borrego Springs) Crews drive directly here from start line.	

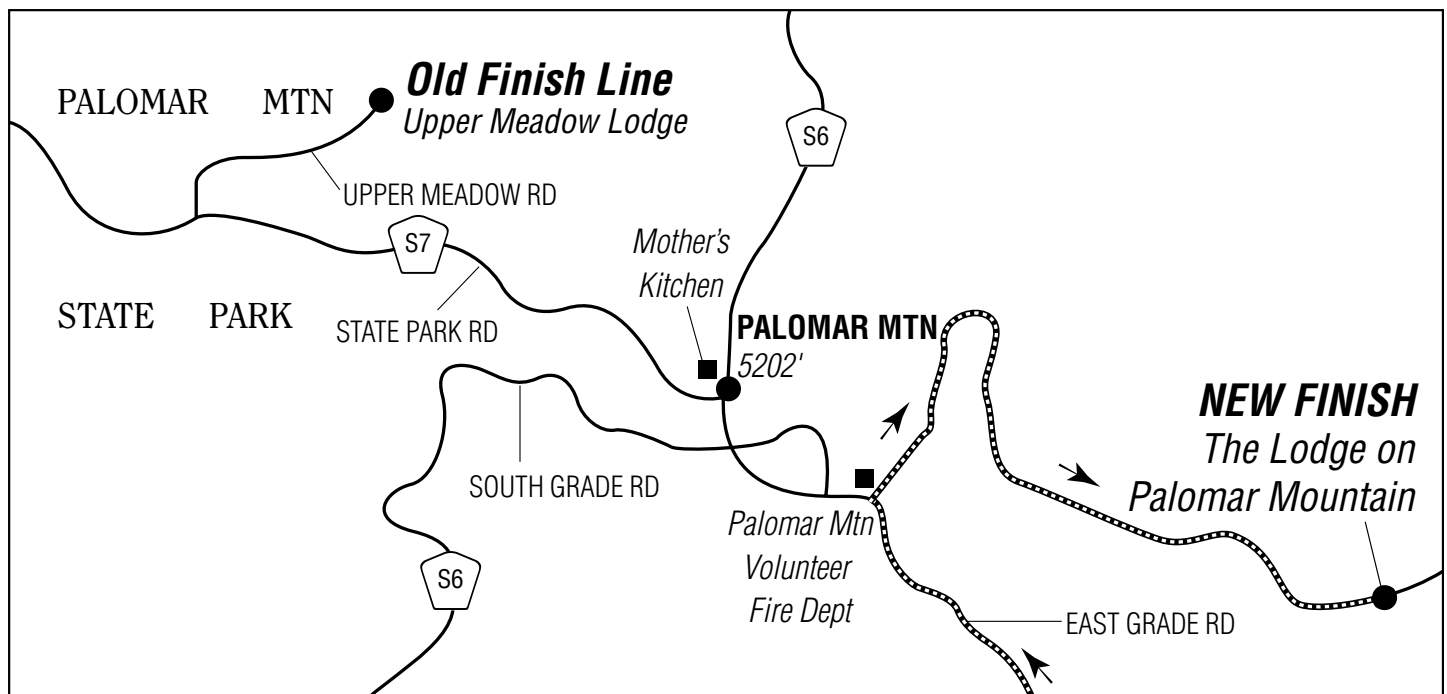
<i>Distance (ml.)</i>	<i>Landmarks</i>	<i>Time</i>
10.4	Cross Bantsch Trail (first climb)	
14.4	Time Station 1: USN Microwave Tower	
17.1	Big Scenic Overlook on Right	
19.3	Mile Marker 34	
23.15	Big walled pullout on left	
26.3	Mile Marker 27	
27.5	Pass Henderson Canyon Rd.	
28.3	Mile Marker 25	
29.15	Mile Marker 24	
30	Road bear right, becomes Palm Canyon Dr.	
31.35	Borrego Valley Airport & restaurant on right	
32.75	Left Borrego Valley Rd. (SS)	
34.46	Right Tilting T Dr.	
35.07	Right into Borrego Springs Resort	
35.23	Time Station 2: at resort lobby Runners must pass here by 1530!	
	U-turn here	
35.4	Right Tilting T Dr. (SS)	
36.6	Right Borrego Springs Rd. (SS)	
38.3	Left at Christmas Circle (runners may cut the corner)	
38.6	Pass The Mall: Café, Outfitters in back	
38.8	Last Chance for GAS!	
39.75	Left Montezuma Valley Road / S22	
40.55	Time Station 3: Right into dirt parking lot Runners must pass here by 1730!	
40.6	Enter California Right and Hiking Trail Support Crews, we recommend you go back into town for gas, supplies, and dinner, then proceed to 48.8.	
45.5	Pass east end of Culp Valley Fire Rd (connects to Montezuma Valley Rd)	



OFFICIAL RACE ROUTE

Support Crews: After runners depart up the California Riding & Hiking Trail, go back into Borrego Springs for any quick errands, otherwise drive uphill on Montezuma Valley Road and await your runners at the end of the trail (park on the right, just before the rocky summit of the road) or at the Ranchita Store. (Culp Valley Road, which cuts over to the trail, is a 4x4 track!)

<i>Distance (ml.)</i>	<i>Landmarks</i>	<i>Time</i>
48.5	Rejoin paved Montezuma Valley Road: turn right to go uphill	
48.8	Summit of Montezuma Valley Road Support Crews, park and wait in this vicinity while waiting for your runners to finish the trail section.	
50.2	Time Station 4: Ranchita Store on Right by "Rancheti"	
50.35	Fire Station	
55.25	Right S2 (T-int; yield)	
59.9	Left SR 79 (SS, T-int)	
61.6	Mataguay Scout Ranch on left	
62.2	100km Mark! Huge gravel pullout on right	
63.35	CA DOT "Lake Henshaw" HQ on right	
64.2	Right on SR 76	
67	Viewpoint / Call Box / Large pullout on right	
68	Time Station 5: Lake Henshaw Resort on left / Store / Fire Station	
Note:	Please Telephone Finish Line as Runners Pass Here!	
68.75	Right S7 / East Grade Road	
70.55	Mile Marker 1.8	
72.8	Mile Marker 4.0: View of the Pacific!	
76.8	Mile Marker 8.0	
78.9	Turn Right at Fire Station (just after Mile Marker 11: NEW DIRECTION FROM PREVIOUS YEARS!)	
80	Finish line at The Lodge on Palomar Mountain on LEFT at: 22228 Crestline Rd, Palomar Mountain, CA 92060	



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May 2014
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May 2015
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BADWATER
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May 2017

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March 2018

2019

Badwater presents

NEW YEAR'S AT CAPE FEAR

12- and 24-Hour Race and Running Party



Bald Head Island, North Carolina on December 31, 2018 until January 1, 2019!

Come do what runners love to do - finish the year running AND start the new year running - in an official Badwater® race, in the company of new and old friends, on a beautiful island, with incredible support, and tons of fun (most of the time)!

This is not a track race, nor a boring one- or two-mile loop around a park! NO WAY, NOT AT ALL! This is a Badwater race, after all! New Year's at Cape Fear features a 7.5-mile loop on the car-free, paved, one-lane-wide roads of Bald Head Island, including about one mile of running on the secluded sandy beach around Cape Fear itself. It is effectively a dead flat route. Near the end of the race, when runners no longer have time to run an additional 7.5-mile loop, they will be diverted onto a one-mile loop until the clock runs out. Running this remote coast and on this incredible island is a dramatic, invigorating, and inspiring manner in which to experience the Cape Fear region in all its grandeur!

Two aid stations will be provided, on opposite sides of the island (one next to Old Baldy Lighthouse and one at the Bald Head Island Conservancy, about 3-4 miles apart.) Both will have food and drinks, friendly volunteers, propane heaters, indoor space, chip timing control, a place for runner "drop bags," and an EMT / Public Safety Officer. The aid station at the BHI Conservancy will also have a steady stream of hot food and drinks, especially throughout the night, plus indoor space available for resting or warming up.

The challenge will be formidable, but the support will be great!

Solo and two-person relay divisions are offered for both the 12-hour race (with a 900pm start time) and the 24-hour race (with a 900am start time) on December 31, 2018. All races conclude at 900am on New Year's Day, 2019 with a catered post-race breakfast and social time.

Entry includes Badwater t-shirt, Badwater hat, Badwater sunglasses, Badwater tote bag, chip timing, support of the Village of Bald Head Island Public Safety staff, two fully stocked aid stations, and Badwater Bragging Rights!

All finishers will receive a nice BADWATER NEW YEAR'S AT CAPE FEAR Medal, while those solo runners who log 100 miles or more in the 24-hour race will receive a special New Year's at Cape Fear Badwater Belt Buckle.

Get all the info and register at www.badwater.com/!





2017: All images on this page were shot on 35mm film by Chris Kostman with a Minolta camera and lens.

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Flip this magazine over for the May / Salton Sea edition of **BADWATER Magazine!**

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"Out There Since 1984"



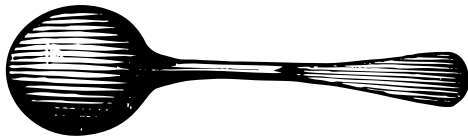
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Cover: Cary Morgan (L) and Micah Morgan of Vestavia, Alabama during the 2017 race. Cary ran the 50km in 5:19, placing 6th. Micah ran the 51.4mi in 7:42:02, winning the women's race, placing 4th overall, and earned a guaranteed entry to the 2018 Badwater 135. There was just one problem: She wasn't qualified to run the Badwater 135! As such she went on to run three 100-milers throughout 2018: First female and 4th overall at Keys 100 in 17:20; First overall and course record at Wildcat 100 in 19:16; and First female and 4th overall at Daytona 100 in 14:55. We are pretty sure she's now ready to toe that Badwater Basin start line in July this year! Photo by Robert Lee.

Photos courtesy Chris Kostman, Robert Lee II, Meredith Dolhare, Bald Head Island Conservancy, and others.

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



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ROASTERS

AT **BIG SPOON ROASTERS**, WE MAKE HANDCRAFTED NUT BUTTERS FROM SCRATCH WITH THE BEST POSSIBLE INGREDIENTS SOURCED FROM LOCAL AND LIKE-MINDED PRODUCERS WHO SHARE OUR DEDICATION TO AUTHENTIC QUALITY. EACH SMALL BATCH IS MADE TO ORDER, PRODUCING UNIQUELY FRESH, DELICIOUS, AND NUTRITIOUS NUT BUTTERS AND BARS. FROM DAY ONE, WE'VE SET THE STANDARDS FOR INTEGRITY, FLAVOR, AND FRESHNESS.



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Mark Overbay
MARK OVERBAY, FOUNDER

HANDCRAFTED TO ORDER IN DURHAM, NC





JAY BIRMINGHAM, THE SECOND PIONEER, will be running 2018 Badwater Cape Fear

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

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

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

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

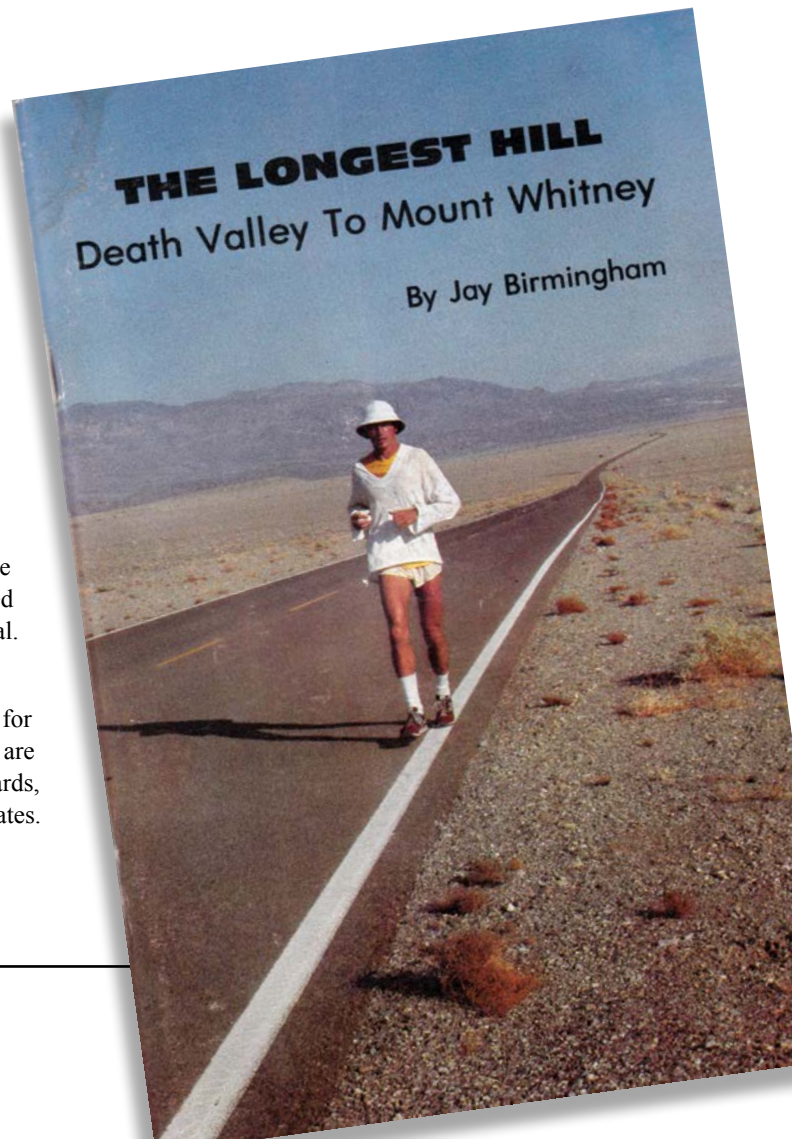
As I lived in north Florida, I trained on stairs, bridges, and sand dunes to strengthen my legs. One hundred mile weeks in heavy clothing enhanced my acclimation to heat.

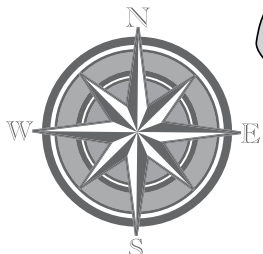
The details of my 1981 success are in *The Longest Hill*, my book which Chris Kostman has posted on the Badwater website. In short, I covered Arnold’s route in 75 hrs, 34 minutes. Max Telford (NZ) shattered my mark in 1982; Morris became the fourth to cover the route in 1983. The actual race began four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

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

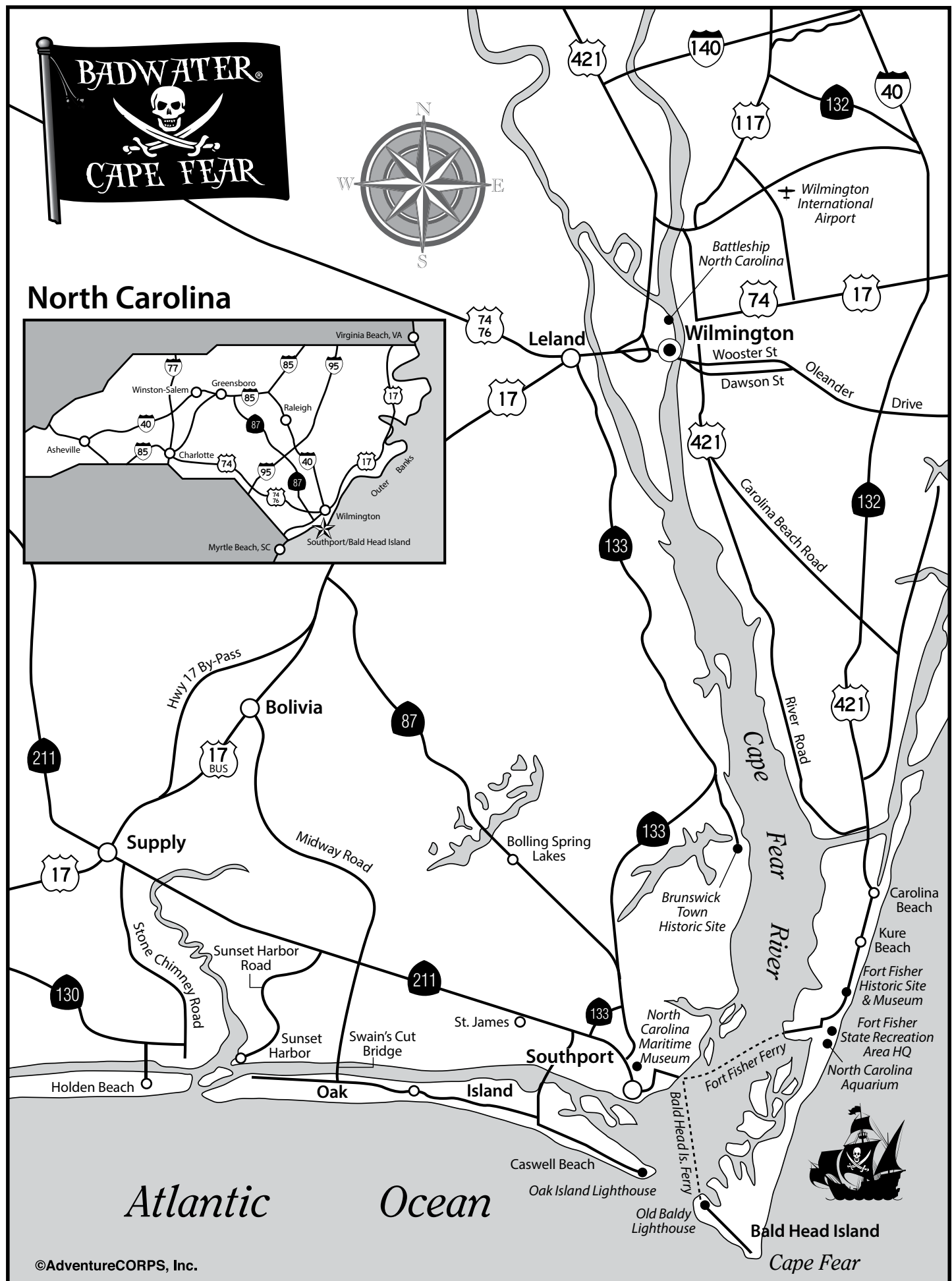
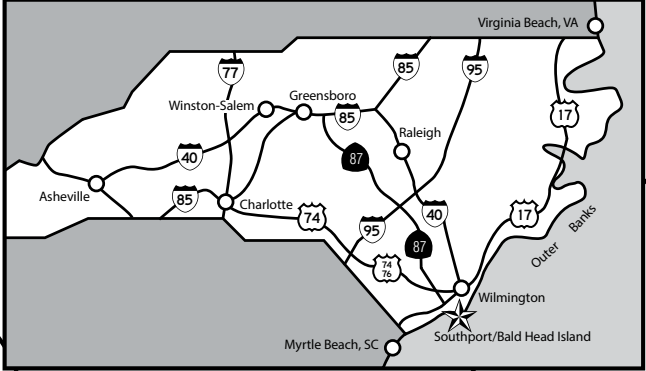
I am honored to have served on the Badwater 135 Application Committee for the past several years, evaluating the thousands of runners who, like me, are drawn to the challenge of the hottest place on Earth, to confront its hazards, and to ascend the side of the tallest mountain in the contiguous United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

—Jay Birmingham





North Carolina



Atlantic Ocean

Bald Head Island
Cape Fear

2018 SCHEDULE OF EVENTS

Friday, March 16

900am: No Host Coffee / Breakfast Meet-Up at Maritime Market. Come meet, or reconnect, with fellow Badwater family members while enjoying good drinks and food! There's no better way to start the day!

Suggestions: Enjoy a program with BHIC! (See box.) Climb to the top of Old Baldy Lighthouse! (The race will start at its foot and the view from up top is not to be missed! Info at OldBaldy.org)

300-500pm: Racer Check-In at Bald Head Island Conservancy: Racer Mugshots, Goodie Bags, Sign Waivers, etc.

400-600pm: Social Mixer for runners, staff, family, and friends – also at the Bald Head Island Conservancy (NEW LOCATION COMPARED TO PREVIOUS YEARS.) We will serve beer, non-alcoholic drinks, and snacks.

600pm onwards: \$10 Pasta Feed at Mojo's on the Harbor (no host).

Saturday, March 18

600am (recommended) or 700am (risky): Runners not staying on Bald Head Island must depart via ferry from Deep Water Marina in Southport. (Ferries depart hourly from SPT to BHI on the hour from 600am to 1100pm on Saturdays.)

620am: Sandpiper Coffee at Bald Head Marina opens extra early just for the runners and race fans coming over on the 600am ferry! Stop in for java and treats!

654am: Morning Twilight (First light in sky)

715am: Late Check-In at the start line for runners who did not come over on Friday to do so. (BUT PLEASE only check-in Saturday if absolutely necessary!)

719am: Sunrise

725am: 700am ferry from Southport arrives; it is a ten-minute walk from the ferry to the race start line at the lighthouse. Hurry!

745am: Race starts at Old Baldy Lighthouse

825am: High Tide

915am: First runners pass the 12-mile mark at BHIC.

1155am (app.): First runners return to BHIC at 50km mark

226pm: Low Tide

230pm (app.): First 51.4-mile finishers

345pm: Mandatory Cut-Off for 51.4-mile finishers to depart BHIC at mile 32 for their second loop to and from Fort Fisher

445pm: Mandatory Cut-Off for Officially Finishing the 50km Race (9 hour time limit)

721pm: Sunset

746pm: Evening Twilight (Last light in sky)

833pm: High Tide

945pm: 51.4-mile Race Course Closes at BHIC (14 hour time limit)

1130pm: Final ferry departure from BHI (Ferries depart hourly from BHI to SPT on the half hour from 630am to 1130pm on Saturdays.)

Sunday, March 19

830-1000am: Breakfast Buffet at Maritime Market, mid-island: Breakfast is complimentary for all registered racers and volunteers, and available for a nominal charge to all family and friends. See below for location and information.

Other Activity Suggestions: Enjoy a program with BHIC! (See box.) Lay on the beach, go swimming, kayaking, paddle boarding or kite surfing, cruise the island on a beach cruiser, shop at Coastal Urge, shop at the Conservancy's "Turtle Central" store, relax!

BHI CONSERVANCY PROGRAMS

Our friends at the BHIC offer interesting programs for children, grown-ups, and even ultra runners every day, so visit BHIC.org for the schedule and to register!



MARITIME MARKET

Location: 8 Maritime Way. Mid-island, near North Bald Head Wynd / Federal Road and Muscadine Wynd.

Main Number: 910-457-7450. Orders to-go, including pizza, family meals and platters: press 2, or dial direct: 910-269-2850. Online at maritimemarketbhi.com

Market Hours:

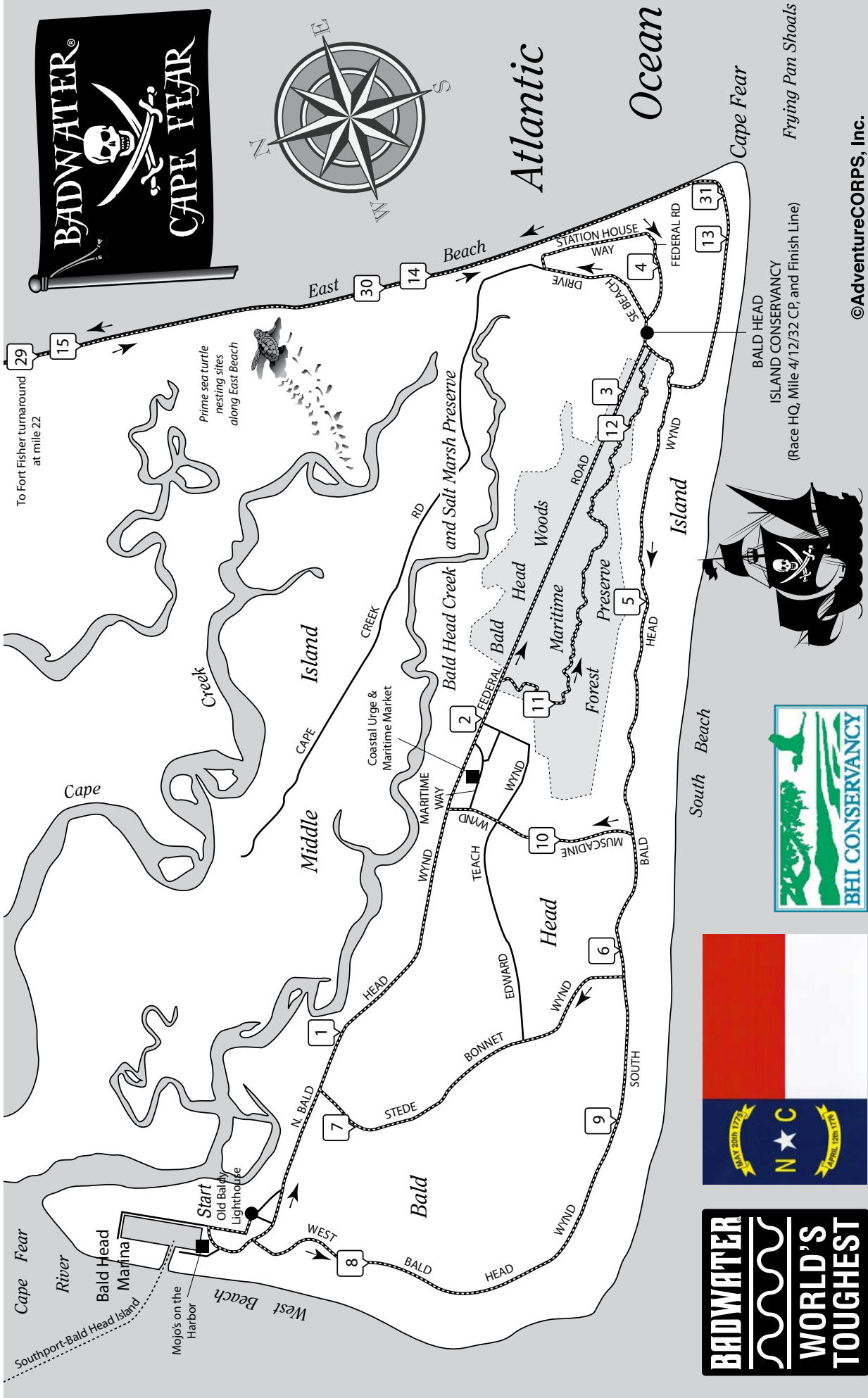
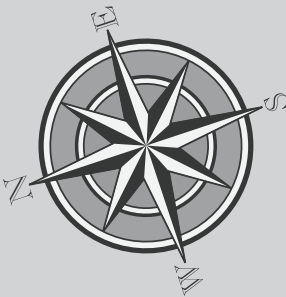
800am - 600pm, Monday-Saturday

800am - 200pm, Sunday

Cafe Breakfast: 800am - 1030am

Cafe Lunch: 1130am - 200pm

Cafe Pizza: 1130am - 200pm



To Fort Fisher turnaround at mile 22

Prime sea turtle nesting sites along East Beach



Frying Pan Shoals

BALD HEAD ISLAND CONSERVANCY (Race HQ, Mile 4/12/32 CP, and Finish Line)

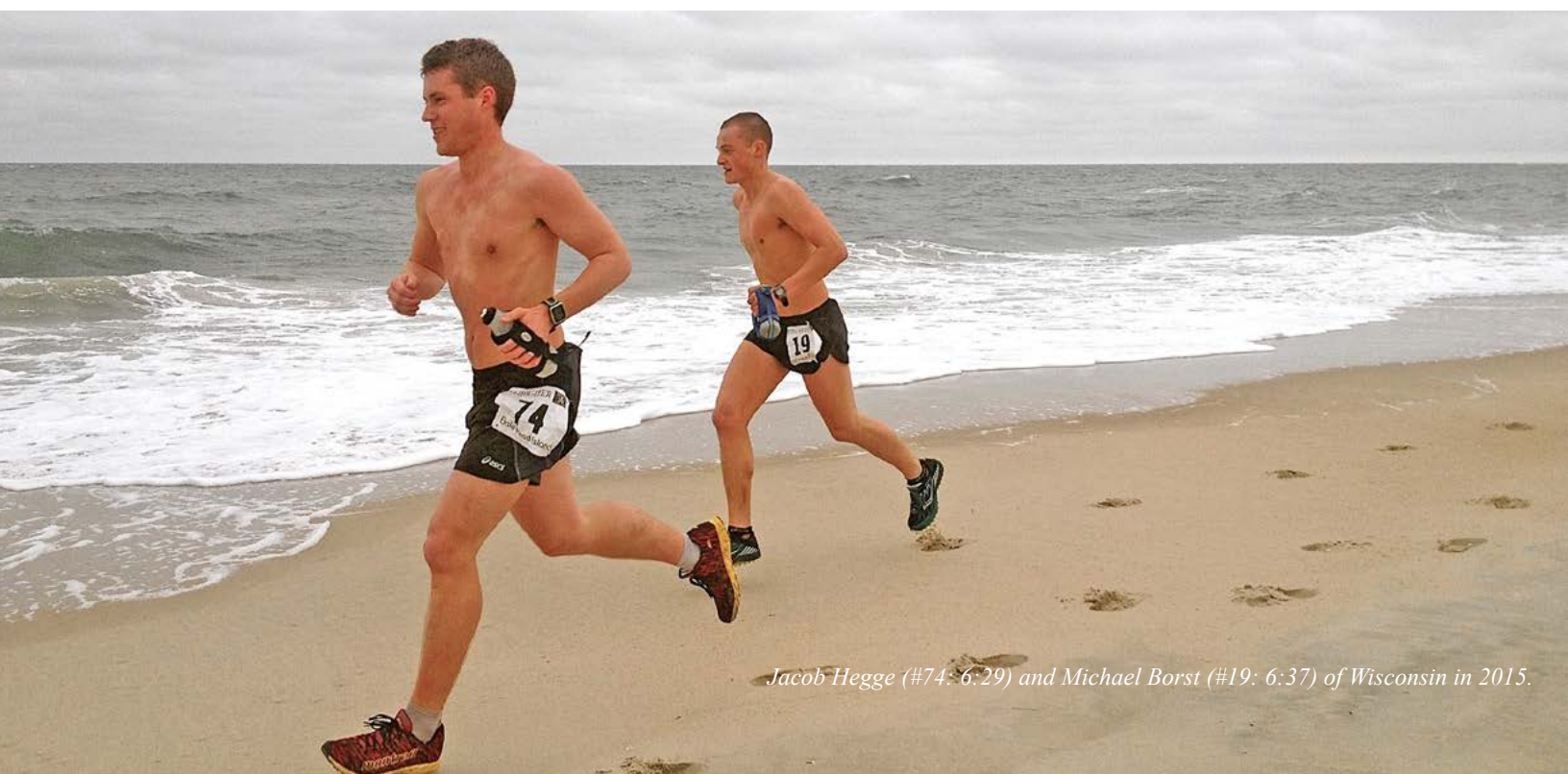
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BADWATER CAPE FEAR ROUTE LANDMARKS

<i>Distance (mi.)</i>	<i>Landmarks</i>	<i>2nd Lap Distance</i>
0.0	Start at Old Baldy Lighthouse <i>Cross over creek bridge, then head east across island</i>	
3.2	CP1: Pass Race HQ at Bald Head Island Conservancy <i>Loop around east end of island via Station House Way</i>	
4.1	CP2: Pass Race HQ at Bald Head Island Conservancy Head west on South Bald Head Wynd	
6.1	Right / north on Stede Bonnet Wynd	
7.2	Left / west on North Bald Head Wynd	
7.6	Left / south on West Head Wynd	
8.6	Becomes South Bald Head Island Wynd (east)	
9.8	Left / north on Muscadine Wynd	
10.3	Right / east on North Bald Head Wynd / Federal Road	
10.8	Right / south onto North Carolina Coastal Reserve trail	
10.9	Stay left at Loop Trail sign	
11.0	Stay left onto Middle Trail	
11.6	Hard right onto East Trail	
12.15	Turn left at the end of trail onto road	
12.17	Turn right at stop sign	
12.21	CP3: U-turn at Race HQ at Bald Head Island Conservancy	(31.8) CP7
12.25	Head west, briefly, on South Bald Head Wynd	(31.84)
12.45	Turn left onto South Beach at Beach Access	(32.04)
12.55	Turn left / east onto South Beach	(32.14)
13.15	Turn left / north at Cape Fear onto East Beach	(32.74)
14.05	Pass final / northernmost BHI staircase / house	(33.64)
14.65	Bald Head State Natural Area sign in dunes	(34.24)
17.85	CP4: Enter Fort Fisher State Rec area beach fishing zone <i>NOTE: 4x4 vehicles possible (generally parked) and fishing lines on route</i>	(37.44) CP8
18.85	"Crossover 4" sign	(38.44)
19.8	"Crossover 3" sign	(39.39)
21.25	"No Vehicles Beyond This Point" sign	(40.84)
21.95	Turn left / west to Fort Fisher Ranger HQ wooden pathway	(41.54)
22.0	CP5: U-Turn at Fort Fisher Ranger HQ	(41.59) CP9
22.75	Enter Fort Fisher State Rec area beach fishing zone <i>NOTE: 4x4 vehicles possible (generally parked) and fishing lines</i>	(42.34)
24.25	"Crossover 3" sign	(43.84)
25.15	"Crossover 4" sign	(44.74)
26.18	CP6: End Fort Fisher State Rec area beach fishing zone	(45.77) CP10
30.0	Pass first / northernmost BHI staircase / house	(49.59)
30.4	Pass beach access, life preserver, 911 phone	(49.99)
30.9	Pass life preserver signpost at Cape Fear	(50.49)
31.55	Exit beach at Beach Access 35	(51.14)
31.65	Turn right onto South Bald Head Wynd	(51.24)
31.8	CP7: U-turn at Race HQ at Bald Head Island Conservancy <i>Repeat miles 12.21 to mile 31.8 as above, for a total of 51.4 miles (Second lap mileages are listed above in parentheses in the far right column.)</i>	(51.39) FINISH

COURSE RECORDS

First	Last	M/F	State	Year	Distance	Age	Age Grp	Record Time
Ryan	Lange	M	NJ	2017	51.4mi	19	10+	9:45:00
Michael	Borst	M	WI	2015	51.4mi	21	20+	6:29:00
Andrew	Glaze	M	CA	2017	51.4mi	39	30+	7:39:39
Eric	Hunziker	M	OH	2017	51.4mi	47	40+	6:53:26
Mark	Matyazic	M	CA	2016	51.4mi	51	50+	7:36:00
Keith	Straw	M	PA	2016	51.4mi	60	60+	8:21:00
Leigh	Jackson	F	NC	2017	51.4mi	29	20+	7:50:24
Micah	Morgan	F	AL	2017	51.4mi	34	30+	7:42:02
Suzanne	Tulsey	F	NC	2015	51.4mi	40	40+	7:56:00
Amy	Costa	F	FL	2017	51.4mi	52	50+	9:38:00
Pamela	Chapman-Markle	F	TX	2017	51.4mi	61	60+	10:14:02
Thad	Johnson	M	NC	2017	50km	17	10+	5:21:00
Keith	Hanson	M	SC	2016	50km	29	20+	5:07:00
Nathan	Wick	M	DC	2016	50km	30	30+	4:16:00
Mark	McGeough	M	NC	2015	50km	45	40+	4:38:00
Brett	Sobieraski	M	NY	2017	50km	53	50+	4:54:00
Roger	Lyons	M	OH	2016	50km	63	60+	6:07:00
Bob	Becker	M	FL	2016	50km	70	70+	6:58:00
Whitney	Conklin	F	NC	2017	50km	28	20+	6:16:00
Addie	Green	F	FL	2015	50km	35	30+	4:54:00
Suzanne	Tulsey	F	NC	2017	50km	42	40+	4:37:00
Pamela	Rickard	F	VA	2016	50km	53	50+	6:22:00



Jacob Hegge (#74: 6:29) and Michael Borst (#19: 6:37) of Wisconsin in 2015.

GENERAL RACE RULES

1. The clock, and the race, start at 745am for all entrants.
2. There are only two divisions: men's and women's, and two distances: 50km and 51mi.
3. The clock does not stop for any reason until the race course officially closes after 14 hours.
4. Wear your assigned race number on the front of the body, visible at all times.
5. All runners are strongly encouraged to carry a cell phone at all times.
6. All runners should keep in mind that the race route is largely remote and aid is provided at just three locations along the route; carrying water and food at all times is strongly encouraged.
7. All running while on pavement must always be single file, on the far left side of the road. Be careful of, and courteous towards, golf carts, shuttles, bicycles, and other vehicles and pedestrians.
8. Please make your presence known at the three checkpoints located along the route, each time you pass them.
9. Runners must progress under their own power without drafting, helping, pushing, supporting, or any other type of physical assistance. Racers may only be accompanied by fellow racers. (No pacers are allowed and no outside assistance of any nature may be received except at the Bald Head Island Conservancy checkpoint, except in an emergency)
10. Remember, at all times and in all situations, safety is the most important issue. This means safety for racers, volunteers, staff, and the general public. The roads and beaches are not closed for this event.
11. Please do not litter, mar, or pollute the landscape or environment.
12. Please must display courtesy, good taste, decorum, and sportsmanship at all times.
13. In all cases and circumstances, it is the intent, and spirit, of the rules which will govern their implementation and enforcement.
14. The range of possible penalties for breaking or disregarding rules include time penalties, disqualification, public shunning, loss of friends, humiliation, and/or being forced to swim back to Southport.

Time Limits

1. The time limit for the 50km race is nine hours.
2. The time limit for the 51mi race is fourteen hours, with a mandatory intermediate cut-off of eight hours at mile 32 at BHIC. 51mi racers who arrive at mile 32 in more than eight hours (and in less than nine hours), will be recategorized as 50km racers and ranked accordingly.
3. Racers may change distances during the event, switching from 50km to 51mi, or vice-versa, so long as time cut-offs and limits are respected.

Leaving the Course or Withdrawing

1. Short cutting is not allowed. There will be no allowance made for lost time or miles run in the wrong direction.
2. Do not "go missing." If you must withdraw from the race, please let us know.
3. All Emergency Evacuation costs for participants will be borne by that person or their heirs. The race organizers are in no way liable or responsible for emergency evacuation.

Legal and Bureaucratic Issues

1. All racers and must sign the Accident Waiver and Release of Liability / Release of Name and Likeness.
2. All racers must attend Racer Check-In.
3. 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.
4. 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 willingly acknowledge this fact, as well as all other race rules, by attending the race in any capacity.



About Cape Fear

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

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

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

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

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

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

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

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

Source: Wikipedia



The first lighthouse on Smith Island was the Bald Head Light, completed in 1795. It was on the banks of the river at the island's southwest point and was quickly threatened by erosion. It was pulled down in 1813 and a new lighthouse was commissioned to replace it. In 1817, Daniel S. Way built the new lighthouse, "Old Baldy," for \$15,915.45. Old Baldy was always intended to light the mouth of the Cape Fear River and was never intended to illuminate the Frying Pan Shoals off the Cape.

Old Baldy was built of soft red bricks, many of which were reused from the first lighthouse, then covered with a plaster mixture of sand and lime. The 110 foot tower is an octagon with walls five feet thick at the base. During its active life, the lighthouse was whitewashed on a regular basis. The lantern, or lantern room, made of iron, copper, and glass, came from the first lighthouse as well. It is offset to allow for more support and to accommodate the keeper, who had to clean and make repairs to the outside. The original fixed light was powered by 15 lamps. It was built as a parabolic reflector with hollow wick lamps, fueled by whale oil, and arranged on a metal rack.

Over the years, Old Baldy's light changed as a signal. In 1834, a new mechanism was installed to flash red with a 30-second delay. During the Civil War, the light was darkened, but was relit in 1879 with new Fresnel lenses, a revolutionary design that produced powerful parallel beams of light. In 1893, the light was changed to white and new lenses installed. In 1903, it became a "fourth order" fixed light. Old Baldy was deactivated in 1935, and for a brief

period served as a Coast Guard radio tower before being abandoned to the elements.

Old Baldy was listed on the National Register of Historic Places in 1975. In 1985 a group of dedicated individuals founded the Old Baldy Foundation, a public not-for-profit 501-c3 organization dedicated to the maintenance and preservation of Old Baldy Lighthouse. The Old Baldy Foundation is governed by an eleven member board of directors and managed by an executive director. The lighthouse and property on which Old Baldy stands and the current Smith Island Museum were deeded over to the Old Baldy Foundation by the Mitchell Family in 1987.

For years visitors to Old Baldy could climb literally "at their own risk". In 1991 the Old Baldy Foundation launched a campaign, "Steps to the Top", to repair the steps to the top of the lighthouse. Between 1991 and 1995 Old Baldy Foundation raised over \$125,000 for renovation efforts.

In 1997 plans were developed to recreate one of the three keepers' cottages that stood on the site. The Old Baldy Foundation undertook a loan to finance the building of this one and a half story building. It now holds a small gift shop, museum exhibits and office space for staff. In 2000, upon opening this museum and gift shop the Old Baldy Foundation started to charge admission to see the museum and climb Old Baldy. Those fees, and the proceeds from the gift shop, are set aside for maintenance and long term preservation work.

To learn more and to support Old Baldy, visit Oldbaldy.org



History of Bald Head Island

Reprinted from VillageBHI.org.

The Village's history is peppered with colorful people and connections. Through the years, the island has been a breeding ground for wild boar, a prime hangout for bootleggers, a supplier of materials for cedar pencils, a Civil War fort, a nesting ground for loggerhead turtles, and a produce farm and fruit orchard. Pirates, lighthouse keepers, Indians, river pilots, ruffians, soldiers, farmers, and entrepreneurs of all types have come and gone, and yet, the Village's essence is unchanged. This can only be because the island itself is a living thing, with its own integrity and spirit, its wild beauty more or less disregarding man's inclination to tinker.

In the 17th and 18th centuries, when pirates ruled the waters off the coast of North Carolina with greed and terror, the Village was a favorite refuge and base for the notorious buccaneers. In all, the waters surrounding Cape Fear were a hideaway for hundreds of pirates, the most famous of which were Edward Teach, better known as Blackbeard, and Stede Bonnet, the gentlemen pirate.

Bonnet, the so-called "Gentlemen Pirate" from Barbados, was an educated retired military officer who turned to piracy in 1717 as a second career in order to escape what one historian tactfully referred to as "the discomforts he found in a married state." During his short stint as a pirate, Bonnet terrorized the Carolina and Virginia coasts aboard his sailing sloop *Revenge* with 10 guns and 70 men. For a brief time, Bonnet even linked up with Blackbeard, a pirate who never carried the title "gentlemen." In 1718 Blackbeard was cornered and killed aboard his sloop, *Adventure*, by two warships sent by the governor of Virginia. Just three weeks later, Bonnet was captured at Bonnet's Creek in Southport by Colonel William Rhett of South Carolina and hanged near Charlestown. Their deaths marked a dramatic end to the Golden Age of Piracy in North Carolina.

Long before pirates ever discovered the Village's nooks and crannies, Native Americans hunted Bald Head Island and fished its surrounding waters in the spring and summer while maintaining permanent settlements on the mainland. The island was, in effect, a seasonal retreat for the Native Americans when supplies of corn or grain began running low.

Early river pilots were responsible for giving the Village its unique and descriptive name. Eager to offer their navigational services to

ships approaching the entrance to the Cape Fear River, they took up watch on a high dune headland on the southwest point on the island. According to local lore, the headland was worn bare of vegetation, making it stand out in contrast to the forest behind it. This "bald" headland served as a reference point for ships entering the river, and the name Bald Head Island has endured.

The year 1817 saw the construction of the island's most revered landmark and symbol, Old Baldy Lighthouse. Still the island's only "high rise," Old Baldy lighthouse was the second of three lighthouses built on Bald Head Island, and is the only one remaining. In 1903, the lighthouse was decommissioned when the Cape Fear Light was erected on the eastern end of the island, but it still serves as a prominent day marker for mariners. Due to restoration efforts by the Old Baldy Foundation and the generosity of hundreds of contributors, visitors to North Carolina's oldest lighthouse can climb up her 108 steps for a spectacular panoramic view of Bald Head Island.

The foundation of the Cape Fear Light can still be seen at the end of Federal Road across from three lightkeeper's cottages known as Captain Charlie's Station, after Captain Charles Norton Swan, a lighthouse keeper who lived with his family on Bald Head Island from 1903 until 1933. Captain Charlie's Station is listed in the

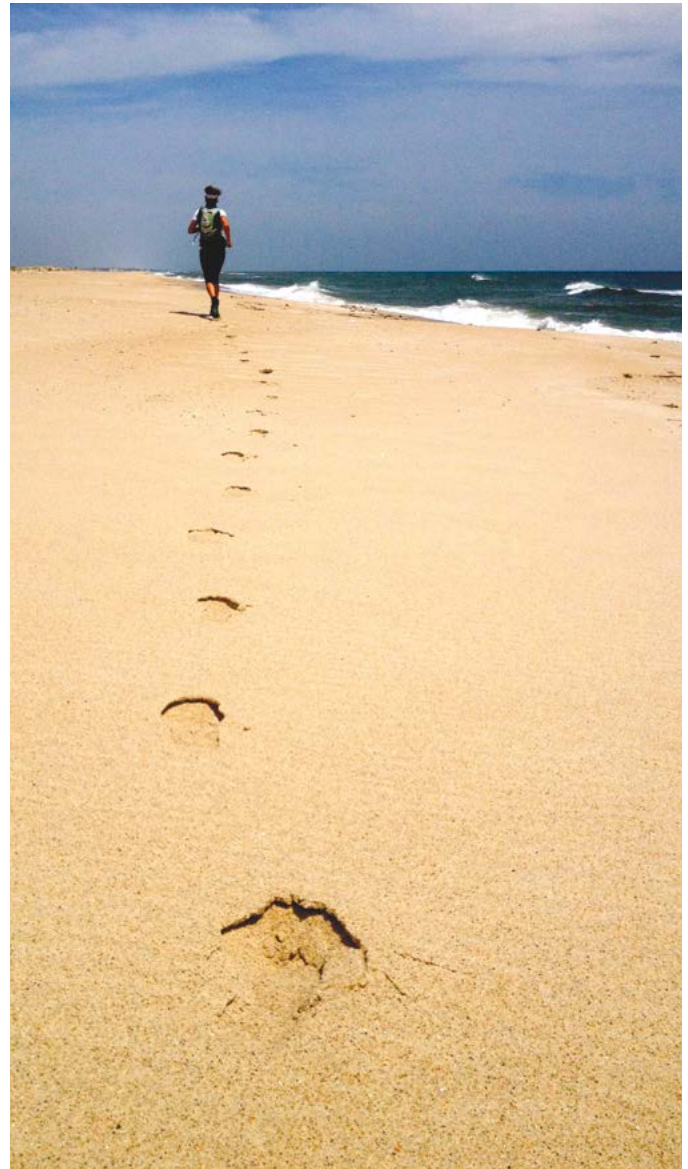
National Register of Historic Places, and still commands a sweeping view of the dunes and sea at the island's southeastern point.

In addition to lightkeepers, in the late 19th and early 20th centuries the island was home to members of the U.S. Lifesaving Service, the predecessor to the modern day Coast Guard. Several buildings on the southeastern shore of the island overlooking Frying Pan Shoals served as equipment storage and housing for the servicemen. The only remaining Lifesaving Station structure is a boathouse that was moved from the beachfront to back among the dunes where it is now a private residence.

Another symbol of the past presence of lightkeepers and lifesaving servicemen on the island is the Old Boat House on Bald Head Creek, built in 1903 to store supplies and boats. A dramatic change in the shape of the creek channel over the last ninety years makes it appear to have moved several hundred yards.

The most notable feature on the 1864 Blackford map (established by B.L. Blackford) was Fort Holmes, located on the Bald Head promontory at the southwest corner of the island. Most of what we know regarding the fort can be gathered from a detailed sketch of its layout prepared in 1865. In addition, several firsthand accounts prepared by officers at Fort Holmes are extant. The fort had been hurriedly erected in 1863 and 1864 as part of a defense system for the lower Cape Fear. The string of forts from Bald Head to Wilmington kept the river, the "lifeline of the Confederacy," open for blockade runners. Given the presence of two navigable entrances, that at Bald Head and a second above Smith Island at New Inlet, the river was ideal for such traffic.

The sketch of Fort Holmes prepared by Federal occupation forces in 1865 indicates that the earthen breastworks extended the width of the island from the lighthouse to the southwest tip at Bald Head. A road to the opposite end of the island ran through the upper part of the fort. The earthen works, it was noted, were reinforced with



palmetto and oak logs. Four batteries extended along the east side of the fort. The fifth and largest, Battery Holmes, with bombproof magazines, was at the island's southwesternmost point. A flagstaff was positioned on the Bald Head promontory. Quarters and storehouses were located in several spots inside the fort.

Despite subtle shifts in sand and sea, Bald Head Island remains much as it was centuries ago. It still serves as a natural sanctuary for educators and students interested in coastal ecology, a home for a special breed of permanent residents that share a kinship of spirit with the hardy, independent lightkeepers and servicemen of days long past, and a refuge for vacationers seeking privacy and rejuvenation in a beautiful, relaxed setting.





Barrier Island Conservation • Preservation • Education

The Bald Head Island Conservancy is a non-profit organization that was founded in 1983. The Conservancy's mission is barrier island conservation, preservation and education. It is located in a unique area within the Smith Island Complex which includes Bald Head, Middle, and Bluff Islands, all of which are bounded by the Cape Fear River and the Atlantic Ocean.

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.

As a subsidiary corporation and partner of the Conservancy, The Smith Island Land Trust complements these efforts by preserving significant properties in perpetuity, ensuring that land within the island complex will be forever protected in its natural state.

As a 501 (C-3) nonprofit membership organization, we are able to continue this work through the generosity and commitment of our

many members, island visitors and other supporters. Please know that your support of our work is greatly appreciated!

Explore the natural wonder of Bald Head Island...

The Smith Island Complex is comprised of Middle, Bluff, and Bald Head Island. Spanning ten miles of beach and dunes, 10,000 acres of salt marsh, 4,000 acres of barrier island 'upland,' and 193 acres of Bald Head Woods maritime forest preserve, Bald Head Island is an exceptional location to conduct research and educational activities.

Hailed as one of the last remaining barrier islands in North Carolina where one can walk uninterrupted through salt marsh, maritime forest, dunes and beach habitats, Bald Head Island is *the* place for your next class or research trip. The Bald Head Island Conservancy is here to facilitate your discovery of Cape Fear.

Barrier Island Study Center – a LEED Gold Certified building that contains a wet laboratory, dry laboratory, multimedia theater, and research library. Environmentally friendly features include Cape Fear river wood, recycled floor tiles, skylights, recycled lint insulation, energy efficient lighting, zone specific HVAC system, SIPS walls, 7,000 gallon rainwater cistern, and recycled metal for support structures. The multimedia theater seats 40 and facilitates presentations, DVDs, and interactive meetings. The dry laboratory seats 10 and it outfitted with a complete glassware set, buret, basic measurement tools, and gas hookup. The wet laboratory seats 40 and contains microscopes, dissection scopes, autoclave, fume hood, touch tank exhibit with live invertebrates, and two walls of 10 gallon saltwater research aquaria. The research library contains 6 study carols.

2017 SEA TURTLES

Bald Head Island, North Carolina

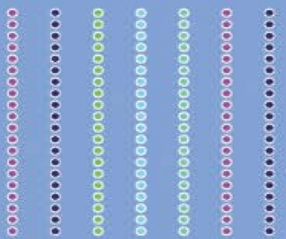
19

UNIQUE INDIVIDUAL MOMS

53% OF THOSE WERE NEW MOTHERS TO BHI

HIGHEST NESTER

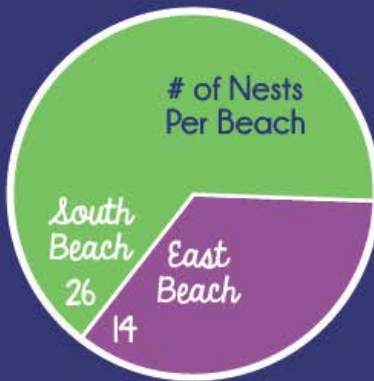
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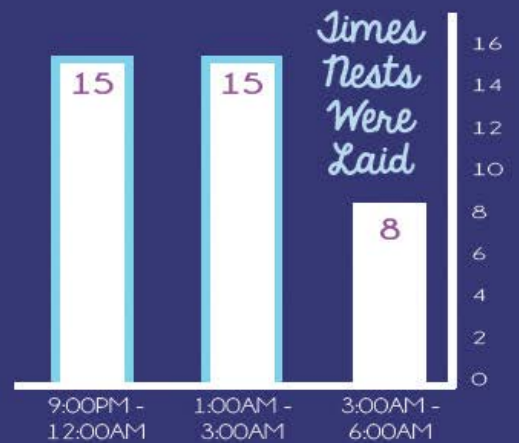
MOST EGGS IN ONE NEST

153

LAID BY A GREEN TURTLE



34 FALSE CRAWLS
40 NESTS



74%

HATCHING SUCCESS RATE

10% OF NESTS WERE RELOCATED
TOO CLOSE TO HIGH TIDE



TURTLES OBSERVED BY STAFF

57% RETURNING MOMS

38% NEW MOMS

5% UNOBSERVED

3,400



hatchlings
WENT TO SEA FROM BHI!



approximately 95%

OF NESTS WERE ADOPTED THROUGH ADOPT-A-PROGRAM

4

LEGACY SEA TURTLES NESTED
SCARLETT SUMNER JOSEPHINA LIVELY LESLIE

A photograph of a sea turtle resting on a sandy beach. The turtle is in the center of the frame, facing towards the right. The sand is light-colored and shows some tracks. In the background, the ocean waves are breaking, creating white foam. The sky is not visible, but the overall scene is bright and natural.

BHI Conservancy's Sea Turtle Protection Program

Efforts to protect the habitats and activities of sea turtles on Bald Head Island go back to 1980. Since its inception in 1983, the Bald Head Island Conservancy has coordinated and sponsored the Sea Turtle Protection Program, in cooperation with the North Carolina Wildlife Resources Commission and the National Marine Fisheries Service. As one of NMFS's "index beaches," Bald Head Island is nationally recognized for its sea turtle nesting activity, and for the Conservancy's efforts to protect this resource.

Each summer, the Conservancy funds and houses six interns to conduct field work for the Sea Turtle Protection Program, under the direction of our sea turtle biologist. The interns are typically undergraduates majoring in natural resource related fields. This internship opportunity is both unique and demanding. The interns not only conduct nightly patrols of the beach, but also experience the full range of job functions associated with running a small nonprofit organization.

The majority of an intern's summer is spent patrolling for nesting sea turtles from dusk until dawn on an all terrain vehicle. BHIC is the only NGO in North Carolina permitted to flipper tag nesting female sea turtles. Saturation tagging, tagging every possible female, provides a census of all nesting females. Very few other beaches conduct tagging studies as demanding. Data collected from nesting sea turtles includes GPS nest locations; flipper tag data; PIT tagging; straight and curved line carapace dimensions; and occasionally satellite tagging.

After the nesting female returns to the ocean, interns protect the nest from predation by a protective wire cage around the nest thus preventing raccoons, foxes, and dogs from disturbing the nest, while allowing the hatchlings to emerge unimpeded. Before the use of wire cages became standard practice on Bald Head, predation resulted in a nest mortality of approximately 50%. This has been greatly reduced in recent years.



Nests laid in a suboptimal location may be relocated to a safer location. Eggs may be in danger if they are laid below or close to the high tide line, in an area of high foot traffic, or of low sand quality. A nest can be relocated within the first six hours after it was laid, which is facilitated by our intensive beach patrolling.

As our interns return to school in mid-August, the sea turtle biologist assumes patrol duties to monitor nesting activity and emerging hatchlings. Since the incubation time for sea turtles in our locale is approximately sixty days, Bald Head hosts sea turtle hatching events from late July through mid-October.

After a nest has hatched, or if the nest is overdue, it will be excavated to determine nesting success. Success is determined by counting the number of eggs that successfully hatched vs. the total in the nest. This is evident by the number of empty eggs left in the nest along with the number of unhatched eggs. Frequently, viable hatchlings are rescued and released on the beach so they can make their way to the ocean.

Most of the sea turtles that visit our beaches are loggerheads (*Caretta caretta*), but we will occasionally see the Atlantic green sea turtle (*Chelonia mydas*).

Sea turtle nesting on Bald Head Island has experienced a general downward trend over the past 25 years but we are hopeful that through our protection efforts the number of nesting females will begin increasing in the years to come. Find out what you can do to help us continue this important research so that we ensure future generations will have the chance of witnessing these majestic, ancient creatures.



Bald Head Island Turtle Data

- Approx. 185,000 turtles have hatched on BHI beaches since 1980.
- 40 nests were laid on BHI in 2017, and 3,400 hatchlings went to sea.
- BHI has the highest hatching success rate in the state of NC thanks to our sea turtle monitoring program
- 2018 will be our 38th year of monitoring sea turtles on BHI.

Fort Fisher State Recreation Area, Kure Beach, NC



Reprinted from NCparks.gov

Prior to European settlement, the Cape Fear Native Americans, of the Siouan language group, lived in and around the lower Cape Fear peninsula; farming, fishing and hunting. Artifacts of the native culture, including pottery fragments, arrowheads and mounds of oyster shells, or midden piles, have been found in this area.

Early attempts at colonization in the area were unsuccessful, mainly due to conflicts with the Cape Fear Native Americans. Pirating, common in the area during colonial times, also contributed to the struggles of early settlers. About 1730, further upstream along the Cape Fear River from Fort Fisher, the port of Wilmington was settled. Wilmington became a bustling port, particularly important for its exports of naval stores - tar, pitch and turpentine products derived from the resin of the longleaf pine.

During the Civil War, Fort Fisher, built in 1861, served to protect the valuable port of Wilmington from Union forces. By late 1864, it was the last southern port open to trade. In this same year the first of two Union attacks on Fort Fisher took place. The fort held strong during the first battle and Union forces withdrew, but the Confederacy was not so lucky the second time.

In early 1865, a fleet of 56 ships bombarded the fort prior to a land assault by a force of more than 3,300 infantry. After a six-hour battle, Fort Fisher was captured and the Confederate supply line was broken. It was the largest land-sea battle fought in any war up to that time. The outcome contributed significantly to the outcome of the Civil War. Approximately three months after the fall of Fort Fisher, the Civil War came to an end.

In the late 19th century, a long rock jetty called “The Rocks” was built west of Fort Fisher to aid navigation by stopping shoaling in the Cape Fear River. Completed in 1881, The Rocks closed the former New Inlet, once used by Confederate blockade-runners to avoid the U.S. Navy, and created a lagoon, now called “The Basin”. Today, The Rocks and The Basin are part of the Zeke’s Island component of the North Carolina National Estuarine Research Reserve, and 1160-acre area of outstanding estuarine and ocean resources with extensive marshes and tidal flats.

The southern tip of New Hanover County became an island (now known as Pleasure Island) in 1929 when the U.S. Army Corps of Engineers dredged Snow’s Cut (named for Major William A. Snow, Chief Engineer for the Wilmington District). This cut is a canal that connects the Cape Fear River to Masonboro Sound and is now part of the Intracoastal Waterway.

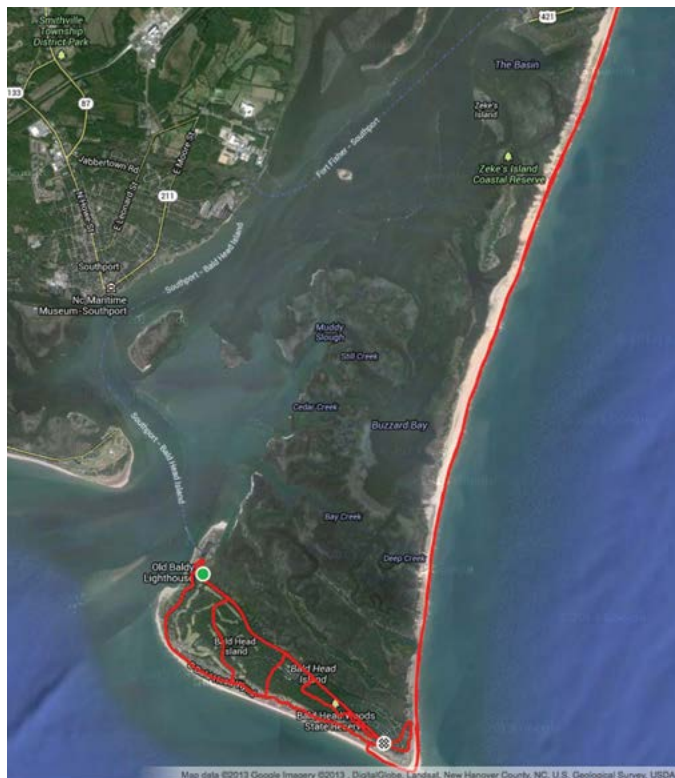
World War II caused huge economic and social changes in the Wilmington area as industrial development and shipyards boomed. Civilian workers and military personnel poured into the area during the war years, causing Wilmington's population to quadruple.

In late 1940, construction began on Camp Davis, located about 30 miles north of Wilmington. The base used five remote training sites along North Carolina's southern coast, and Fort Fisher became the primary firing range. The range stayed open until 1944, training many military personnel and aiding the war effort. A bunker still remains along the Basin Trail from the World War II base.

From 1955 to 1972, Robert E. Harrill, who became known as the Fort Fisher Hermit, lived in the World War II bunker. He became a celebrity and philosopher of sorts, becoming known to the thousands of visitors who came to Fort Fisher during those years. Harrill relied on nature for much of his food, eating oysters, clams and fish as well as what he would grow. Over time, as his popularity and reputation grew, he also benefited from donations left by his many visitors.

Fort Fisher State Recreation Area was established as a unit of the North Carolina State Park system in 1986 when 287 acres were transferred from the Historic Site to the Division of Parks and Recreation. Today, Fort Fisher offers beach access, educational programming and many other amenities to hundreds of thousands of park visitors annually.

For more information, visit NCParks.gov and Facebook.com/FPISP/



Located just down the road from the FFSRA Park Headquarters in Kure Beach, NC (the northernmost point of the Badwater Cape Fear race route) is the **North Carolina Aquarium at Fort Fisher** and it is absolutely worth a visit! Visitors journey along "The Waters of the Cape Fear" – from freshwater streams and swamps, to coastline habitats, reefs and the open ocean. It is an outstanding destination for visitors of all ages.

The North Carolina Aquarium at Fort Fisher is located on US 421 approximately 15 miles south of Wilmington, just beyond Kure Beach. From Southport, take the Southport - Fort Fisher Ferry. For ferry schedule, call 910-457-6942 or toll free at 1-800-BYFERRY.

Open 9 a.m. to 5 p.m. daily (closed Thanksgiving Day and Christmas Day).

For more information, visit www.ncaquariums.com



FFSRA Park HQ, and also the northernmost checkpoint of the BWCF Race Route!



Fishing is a popular activity within the northern end of the race route. Watch for fishing lines!



Friends of Pleasure Island State Parks (FPISP) is a nonprofit group that is responsible for raising money for the two North Carolina State Parks on Pleasure Island: Carolina Beach State Park and Fort Fisher State Recreation Area. FPISP was founded in 2015 and raises money through donations, events at both parks, and membership dues. Through the last few years of existence, FPISP has been able to buy much needed items for both State Parks that they aren't able to get from the state. Any donation made to FPISP goes right back to the parks! FPISP supported the 2017 Badwater Cape Fear with volunteers at the mid-beach checkpoint, and will do the same in 2018. Last year, Badwater purchased a custom-made FPISP pop-up canopy for us to use at all our special events, including Badwater Cape Fear! Learn more at www.facebook.com/FPISP

FRIENDS OF PLEASURE ISLAND STATE PARKS 2018 MEMBERSHIP APPLICATION

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Address: _____

\$10.00 FPISP Annual Membership x _____ = \$ _____

Method of Payment: Cash Check PayPal – Ref. No. _____
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Debit/Credit Card Information: Visa Mastercard Discover AE

Cardholder's Name: _____ Billing Zip Code: _____

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