

My Adventure at the World's Toughest Mudder

By Whitney Tilson, 11/17/16

(The latest version of this pdf is posted at: www.tilsonfunds.com/TilsonWTM.pdf)

This past weekend I did the World's Toughest Mudder, a 24-hour obstacle course endurance race on the shores and nearby hills of Lake Las Vegas. It was a memorable adventure and exceeded all of my expectations: it was incredibly fun, I didn't injure myself (though in the days afterward, I've never been so sore!), and I did far better than I expected, completing 75 miles and nearly 300 obstacles, which placed me in the top 5% of the 1,240 finishers – and I won the 50+ age category! Here I am at the finish:



It was especially fun because Susan was there as my “pit crew”, feeding me after every lap, bringing me dry/warm gear, giving me encouragement, etc. As with most things I achieve, I couldn’t have done it without her! Below are some of her amazing pictures, and I’ve posted three short video clips she took of me doing two obstacles and at the finish [here](#) (other participants posted these two videos of [all of the obstacles](#) and of [the entire race](#)).

Here’s a picture of us setting up camp on Saturday morning with my buddy (and former Navy SEAL and professional triathlete) Mark James:



Here's a picture of the Mudder Village, showing our tent at the far end:



Here's a picture of us at the start a couple of hours before the race:



Here we are a few minutes before the start:



The crowd pressed against the course moments before the start:



My Goals

I had three goals:

1) Have fun. This was a given: what could be more fun than having 24 hours to horse around in a gigantic playground with more than 1,000 like-minded, friendly people?! Seriously! Some of my fondest memories from my childhood are when I was playing with my buddies and we'd go swim, hike, crawl around in the mud, climb everything in sight, etc. – so now I get to do this as a (sort of) adult!

2) Not get injured. This was going to be a tough one, as I have little experience with (and did minimal training for) hiking/jogging a long distance. “So,” you might be thinking, “if something starts to hurt, stop!” I agree, logically speaking, it's nuts to continue on through pain, especially at my age. One race isn't worth a real injury. I plan to live at least another 50 years and want to be healthy, active and pain-free for the rest of my life!

That said, I'm really competitive and have a high pain threshold, so I might have kept on going even if some part of my body (most likely a knee or hamstring) was really hurting. Fortunately, this didn't happen.

3) Complete 50 miles (10 laps) for my 50th birthday (which was nine days earlier on Nov. 1st). This was also going to be tough, as I'm not a runner. I don't like it – I find it boring and unpleasant (if not painful) – so I don't go for a run very often (I mostly play basketball and tennis). And when I do, I'm slow: even on a flat road, with running shoes, doing only a few miles, I get uncomfortable if I try to go faster than an 8-minute mile, which any serious runner would laugh at. Prior to this, the only long-distance run I'd done in my entire life was the NYC Marathon last year (click [here](#) for details), and when I crossed the finish line, I was so spent that I don't think I could have run another 100 yards – and that was after only four hours of running!

So you can see why I wasn't sure whether I'd be able to do nearly double that distance, especially with the added difficulty of going up and down hills, over unstable terrain, much of it at night, being wet all the time – oh, and did I forget to mention 20 obstacles every lap (see below for my pics and comments about each one; also, one of the participants posted [this video](#) of all of them).

Given that completing 50 miles was highly questionable, if you'd asked me whether I could do 75, I would have laughed and given you 100-to-1 odds against it. And had you asked if I could do 75 miles not only without injury, but no blisters or chafing, only a few minor scrapes and bruises, and no stomach trouble after the first two laps, I would have given you 1,000-to-1 odds.

But I did, stunningly enough: I ended up finishing 58th overall (behind 50 guys and 7 women) among the 1,240 individual competitors (1,041 men and 199 women), and in my age group (50+), I was the only one to complete 75 miles (of 62 men and six women). In fact, even in the next-youngest age category (the 100 male and 9 female finishers age 45-49), only one person did 75. (The race results are posted [here](#).)

I'm really pleased that I did so well – and, frankly, totally shocked, as this race attracted hard-core obstacle course racers from all over the world. I'm not a religious person, but what happened last weekend was truly a miracle.

Race Description and Unique Challenges

In total, I completed three back-to-back-to-back marathons (according to my GPS watch, an unofficial total of ~78 miles due to penalties and pit stops; [here](#) is the report of my Garmin watch before the battery died after 10 laps) over the course of 25 hours and 12 minutes (I know, it's billed as a 24-hour race, but as long as you start a lap before noon on Sunday, you have until 1:30pm to finish it), with 20 obstacles each lap, some of which I found quite easy and quick, but others were really tiring.

I and almost all of the other racers were going quite slowly – I was actually walking (ok, speed hiking) all of the uphill (1/3 of the course). Where I made up time, however, was in two areas: a) I jogged the flats and downhill (albeit at a slow ~10-minute-mile pace) and; b) nailed all but one of the 20 obstacles on all 15 laps, so I didn't have to do many penalties (maybe a total of 10), which typically involved walking/jogging extra distance, often with a sandbag (racers who did every penalty had to do a total of two extra miles – 40% more distance – every lap!). (Although I never did the penalty, I did get ~15 severe electric shocks – like sticking your finger in a socket – over the course of the race at one obstacle called Operation – ouch!)

My Race Plan – and What Really Happened

My plan to achieve 50 miles was to run 30 miles (6 laps) before midnight, sleep until 4am, and then complete the remaining 20 miles (4 laps) by noon. What really happened reminds me of the famous saying, “No battle plan survives contact with the enemy”!

The first hour was a sprint in which everyone ran the course with no obstacles until a horn sounded at 1pm and all of them opened simultaneously – at points it got very dusty as you can see in the lower left picture (these four pictures were taken by Brad Kerr, father of one of the racers – thank you!):



I wanted to take advantage of not having to stop for obstacles (and staying dry) and also didn't want to be behind too many other racers once the obstacles opened, as the lines could be long, so I pushed myself moderately hard and covered a respectable 6.2 miles, bypassing the first 25 obstacles (20 on the first lap and the first 5 on the second lap). (I was really chagrined, however, to barely miss passing Operation (by maybe 50 feet), so I started with two nasty electric shocks.)

I wasn't feeling very comfortable on the first two laps – my Achilles tendons were burning and I felt early cramping in my upper legs – but I stretched a bit, and the pain went away. As my body got accustomed to what I was putting it through, I cranked out five laps averaging a bit over 80 minutes (not counting pit stops) so, much to my surprise, I completed 30 miles long before midnight (at 8:38pm to be precise) and was still feeling good so I decided to keep going.

I ate a lot right before I went out on my next (7th) lap and my stomach felt lousy the entire time, so when I finished 35 miles at 10:26pm, I told Susan she could go back to the hotel because I would just do one more lap and go to sleep. Then she could come back in the morning and help me with the last two laps to hit 50 miles.

Since I only had one more lap to go that night, I ate light at that pit stop and, to my surprise, that lap (which ended just after midnight) was my best in many hours – my stomach had settled down, my body felt strong, and I was running with a nice guy I was enjoying chatting with (Pieter Joubert, a South African now living in Minnesota; see pic below), so I said to myself, “What the heck, let's do another lap and see how I feel.” And basically that's what happened the rest of the race. I was feeling good and having fun, so why stop?



Plus, as I passed 40 miles, I was already starting to think about the coveted 75-mile silver bib (Tough Mudder has awards for competitors who finish 25 miles (a patch), 50 miles (a brown bib; 639 people achieved this, 52% of the finishers), 75 miles (a silver bib; only 62 (5%) achieved this) and 100 miles (an orange jacket; an unprecedented 7 guys this year)).

I did the math and figured out that if I could maintain a pace of roughly 100 minutes per lap (I'd been averaging 85 for the previous six laps) and keep my pit stops to around 10 minutes, I could (just barely) complete 75 miles. So even though it was still 12-13 hours away, I thought to myself, "Why not give it a shot? I'll just keep on truckin' until I hit the proverbial wall and/or my body breaks down."

But neither of these things happened – to the very end, I wasn't in any pain (though my legs were increasingly fatigued) and everything was completely steady: my heartrate, breathing, body temperature, pace (my last five laps were 101, 96, 99, 99 and 99 minutes) and, perhaps most importantly, my mind. It was very Zen-like – during the long night, when I knew I had 50 miles in the bag and was thinking about stopping and going to sleep in my tent, there was an incredible full moon, not a cloud in the sky, and I was just in a zone, running alone most of the time (though I said hi to most people I passed and did a couple of laps each with two guys going at my pace (thank you Pieter and also Eric Jenkins!; it's a really nice community of people as crazy as I am!).

Here's a picture of Eric Jenkins (on the right) and me at the finish (I don't know who the guy in the middle is):



And here's a pic with Sean Corvelle, the Master of Ceremonies at most TM races, a great guy who gives motivational speeches beforehand, etc.



Q&A

Why do you do races like this?

I've always liked big challenges; they keep me motivated to get/stay in good shape; I really enjoy them – not the running, but the obstacles; and they're very social. I often do them with friends and family (my 76-year-old mom, 75-year-old dad, wife, three teenage daughters and many cousins have all done races with me), plus I've made many new friends. It's a great group of people and there's something about shared suffering that bonds people!

How does this race differ from other endurance races?

I've never done any other endurance race, but from what I've read of them, this race was different because we had to contend with:

- The obstacles (see photos and description of each below). There were a bunch of new ones and I found all of them fun and challenging, but after 200+, they take a lot out of you! Note that they tended to be very quick (if you completed them and avoided the penalty). How quick? I ran the first lap (a sprint of the course, skipping the obstacles) in 48 minutes and the second in 64 – the only difference was that I only skipped five obstacles on the second lap before they all opened at 1pm, meaning I did 14 obstacles on that lap. Thus, using my powers of higher math, each obstacle (including waiting in a couple of short lines and doing a quick penalty walk at Twinkle Toes) took just over one minute.
- Wild temperature swings, both within each lap and between laps. After every lap, racers can go back to their pit (tent area) to rest, eat, and change into dry and warmer/cooler gear, but that wastes time (my tent was at least 250 yards from the start/finish area) and it can be very tricky figuring out what to wear for a given lap. Last year, 300+ people had to stop soon after the sun went down because they got caught on the course when the temperature quickly dropped into the 40s and they became hypothermic. Fortunately, this year it was unseasonably warm: a blazing hot 80 degrees at the beginning and ending hours of the race, so a lot of guys went out wearing nothing but shorts and (the required) racing bib, but after a couple of dips in the cold lake, they were shivering. And then, after the second lap for most people, the sun was about to set and each of us had to decide what warmer gear to put on – guess wrong, and you might freeze...or overheat...or both (in fact, both were possible on the same leg, as the air temperature remained fairly warm (a low of only 55 in the middle of the night), yet the lake water was always cold).
- Speaking of being wet, that was constant because four obstacles on every lap (five once The Cliff opened at midnight) required you to completely submerge yourself (plus on three other obstacles, if you failed to complete them you fell into water, so some people were getting wet *eight times every lap*). This had a number of implications that made this race much more challenging than a typical endurance race:
 - a) It makes it very difficult to regulate your body temperature. In the first and last miles, we were submerged three times in lake water (which never warmed up, unlike the two pits/pools of water elsewhere on the course), so it was easy to get chilled at the start and end of every lap. But for the three miles in the middle of the course, when we were hiking up and down the hills, our physical exertion heated us up, yet there was only one water obstacle, so if you wore a wetsuit to stay warm during the first and last miles, you were

likely overheating in the middle of the course. (See the Q&A below for how I was able to solve this problem.)

- b) During the night you need to wear thick neoprene (3mm scuba diving) gloves to keep your fingers warm, which makes the many climbing/gripping obstacles extra difficult.
- c) Every time you go into the water, hike/jog through sand/dirt, and crawl through mud, pebbles can get in your shoes, which forces you to run through the discomfort and hope it goes away, or take the time to stop and shake them out.
- d) Your waterlogged feet swell, making your shoes too tight or requiring you to change into a larger pair (which thought I did only once, at the long pit stop from 3-4am, going from a size 10 to a 10.5 pair of identical shoes – except I didn't have my glasses and only realized when I got home that I'd switched to another pair of size 10s – LOL!).
- e) Trying to run a race while wearing a wetsuit (I put on my thin 3mm one at maybe 9pm and changed into my thick 5mm one at 3am) can cause chafing; was constricting, making it harder to climb, jump, etc.; and added a lot of extra bulk and weight, which got really tiring as I hiked/jogged mile after mile. Ditto for my constantly wet shoes and socks. Here's a picture of me in my warmest gear when I tried it on at home before the race (thankfully, I never needed the goggles during the race):



- The course map says there was 817 feet of elevation gain (and loss) per lap, but my Garmin GPS watch says it was 1,000 feet – either way, that’s a lot of hiking up and down over 15 laps (by the end, the down was harder than the up because my quads were spent).
- The terrain was very loose and unstable – maybe half of the course was on various packed dirt roads, but the rest was sand and gravel with lots of rocks, which made it very difficult to jog at any pace, especially at night, as the risk of rolling your ankle was high (I fortunately only rolled an ankle once, I think on mile 38; it was quite painful for a few minutes and I thought it might affect me going forward, but I’ve had countless ankle rolls playing basketball over the years, so the pain soon faded and it didn’t bother me any further).

How does this compare to an Ironman?

I don’t know, as I’ve never done one (not even a half or an Olympic-distance one – nor do I intend to). It also depends on how many laps you run at the WTM. But my buddy Mark James, who (long ago) ran the Kona (Hawaii) Ironman 10 years in a row when he was a professional triathlete, told me that the 60 miles he did at the race last weekend was massively harder than any of the Ironmans because: a) it’s twice as long (timewise); and b) you can’t get into a rhythm like you can at an Ironman (biking for six hours straight, for example). (I also later learned that he sprained his arm halfway through the race when he fell and put his arm out to brace his fall!)

What conditioning/experience is needed?

None is required – and I saw a few seriously out-of-shape/overweight people out there. They have my total respect, as this is really hard even if you’re in great shape.

But if you want to do well – say, complete 50 miles, as slightly more than half of last weekend’s participants did – then you need: a) a *very* high level of fitness (this is 24 hours of pretty sustained effort, so as one benchmark, you should be able to run a marathon in under five hours; ideally four); b) a high degree of athleticism (in order of importance: balance/coordination, lower body strength, upper-body strength, and flexibility); and c) fearlessness.

How did you train for this?

Obviously the best way to train for a long-distance trail race is to do a lot of long-distance trail running. However, I did very little – I just don’t have the time or interest, and worry about getting chronic injuries that all aged runners seem to have, so instead I did hour-long (but typically very intense) workouts pretty much every day (and in the weeks before the race, twice a day).

In a typical week, I play hard pick-up basketball a few times, a couple of hours of tennis once or twice, do a ridiculously hard hour-long workout with a trainer once or twice (often wearing a 20-lb. weight vest), and ride my bike a few miles a day to get to and from meetings – and that’s pretty much it.

Then, maybe one weekend a month, I do some sort of race/challenge: a Tough Mudder or Spartan race (typically two laps) if there’s one in the area (I’m not one of those folks who travels all over the country to do these races), the Bear Mountain Half Marathon in May, I climbed Mt. Blanc in July and the Matterhorn in August, etc. Thus, I was reasonably mentally and physically prepared, but this race took it to a whole new level.

While my running training was laughably inadequate (though to repeat what I noted above, I do think there’s something to be said for not burning out your legs and getting plagued with injuries, especially at

my age, by putting too many miles on your legs), I did work hard on building my grip and upper-body strength, which I think is the second most important area, as 2/3 of the obstacles demanded this. They were all somewhat different – climbing a cargo net, doing monkey bars, using pegs to pull yourself up a wall, etc. – but they all boiled down to being able to grip something and pull your body up.

There's a simple test for this: how many consecutive pull-ups can you do? For a race like this, the answer should be at least 10. A year and a half ago, I peaked at 26, but overdid it and partially tore my right elbow tendon, so I had to rest it for more than a year, but I trained hard and got back up to 20. That was key for me, as I only incurred 10 time-and-energy-consuming penalties during the entire race (mostly on Funky Monkey – see description below).

(For those of you who live in NYC and have an interest in a personal trainer, I highly recommend the two I use (once a week each): Richard Louis of FitSpace NYC (rplouisnyc@gmail.com) and Carlos Munoz at Definitions (munozcelo@aol.com). If you want to save money, a friend recently told me about [Tone House](#), which is known for having the toughest group workouts in NYC; I did it twice earlier this month and agree with this assessment!)

In light of your “laughably inadequate” running training, why didn’t your body break down?

- 1) I got lucky;
- 2) I jogged slowly during the race and walked all of the uphill;
- 3) My workouts with my trainers are super intense – pretty much everything to failure – which I think has really toughened up my joints, muscles, ligaments and tendons (and my mind!); and
- 4) I've become a big fan this year of shiatsu massage (I go to a place in NYC with a cult following called Salon de Tokyo). In your mind, you may be thinking of an elegant spa with candles and mood music in which you receive a relaxing backrub from a hot person of the opposite sex – but what I get at Salon de Tokyo is the opposite: a little Chinese women (ask for Mimi), holding onto a bar in the ceiling, stands on my back and legs and applies every ounce of pressure onto one-inch areas. It's so painful! But I can hear and feel my tight joints and muscles loosening up.

What was the hardest part?

The hardest thing for me was to just keep on going for 25+ hours. Thankfully, I love obstacles – they keep me entertained. Had this been a 24-hour ultramarathon, I would have gone crazy from boredom after a few hours and stopped.

How did you manage doing half of the race without a pit crew?

Because I was a rookie at this race, I was assigned the worst tent spot at the far end of the pit camp down by the lake (on the far right in this photo), at least 300 yards from the start/finish area (on the far left):



If I'd had to go all the way to my tent and back after each lap during the second half of the race, I'd never have made 75 miles, so I did two things:

1) I filled my [wagon](#) with the food and gear I thought I'd need and left it in the corner of an empty tent spot close to the start/finish area; and

2) I twice visited the “orphan tent” (for the many racers with a pit crew). I owe a huge debt of gratitude to the kind folks there who took care of me (even though I hadn't registered with them) when I needed some hot soup (on the first stop) and a salt tablet and a peanut butter and jelly sandwich (on the second stop). Thank you!

What were the keys to success in this race, based on your personal experience and observation of others?

1) Being in shape, both running/endurance and upper-body strength.

2) Staying warm – but not overheating (see comments below).

3) Drinking enough water and ingesting enough calories (~400/hour?) to keep your body going. This is hard because when you're exercising you often don't feel like eating – but if you wait until you feel hungry, it's too late: you can't recover and you're gonna bonk. Thus, it's critical to force-feed yourself at every pit stop, however crappy it makes your stomach feel. (You can train for this, though I didn't.)

4) Controlling your pace so you never get winded or overheated.

5) Pushing with your (much stronger) legs rather than pulling with your arms on numerous obstacles, which preserves arm/grip strength (any rock climber will tell you how important this is). There's not much you can do other than be as fast as you can on pure grip/upper-body tests like Stage 5 Clinger, Pyramid Scheme, Funky Monkey, Double Rainbow and Kong. But you can do Augustus Gloop, Giant Wedgie, The Grappler, Abeseil, Backstabber, Ladder to Hell and The Gamble using 90% legs, with arms mainly for balance.

6) Being assertive in asking for assistance. I recall two instances when women at Humpchuck and Backstabber were quite hesitant in asking for assistance; had I not offered to help, they might have struggled for quite some time. I think they felt like they didn't want to bother the more fit, faster racers, who might resent being slowed down. Nothing could be further from the truth. We're all part of one big team and family, so every single person out there, even the elite racers going for max distance and prize money, is happy to help another Mudder. But don't assume that we know you want/need help – some people take pride in completing obstacles without assistance – so you need to ask!

7) Communicate clearly about what assistance you need. For example, I needed help every time on Everest 2.0, so when I was ready to run, I made eye contact with the people at the top, made sure they were ready for me, yelled “Two hands!”, and then held up both hands in the position I'd have them. Then, once they'd grabbed me and pulled my hands up to where I had a grip on the top, I said, “Let go” because I could pull myself up (i.e., I didn't need them to grab one of my legs).

8) Knowing when to give up on an obstacle you were never going to complete (to save energy and preserve grip strength) – yet also doing every obstacle possible (to avoid time- and energy-sapping penalties). Examples abounded: a) why take a penalty on Everest – there were always people at the top to pull you up; b) on Operation, assuming you don't have medical issues, just prepare yourself to get shocked and do it!; c) once The Cliff opened, it was a gift, as it saved a long run and/or swim, so I

strongly suggest overcoming the fear of jumping and doing it.

9) If you're not sure if you have enough time to make a particular milestone (25, 50 or 75 miles), it's okay to ask to cut a line. In general, cutting is frowned upon for obvious reasons, but on the last 2-3 laps, when I knew I didn't have much time to spare to hit 75 miles (I ended up finishing only 18 minutes before the 1:30pm course closure), on maybe 4-6 obstacles where there were lines, I went right to the front and said, "Hi, I'm really tight on hitting 75 miles. Do you mind if I go ahead of you?" And in each case, the answer was something along the lines of, "Sure, go for it, good luck!" Every Mudder is always willing to help out a fellow Mudder!

How did you maintain your body temperature and not get too hot or too cold?

Everyone seemed to have pretty much the same gear: a light top and shorts/tights for the hot weather at the start, some sort of transition gear (maybe a thin "[shorty](#)" wetsuit) as the sun went down, and a thin (3mm) full-body wetsuit and a heavy (5mm) one ([this](#) was the one I bought) for the night – plus associated hoods and gloves of varying types/thicknesses.

But there was a big difference in how people used their gear. After last year, in which the temperature dropped faster and further (into the mid-40s), leading hundreds of racers getting hypothermia out on the course on only their second lap (the race started two hours later at 2pm), the conventional wisdom this year was to change into at least a shorty (if not a thin full-body wetsuit) before the sun went down.

Doing so this year was a mistake, however, as the warm conditions just didn't warrant it, so I stayed much lighter than most other racers until quite late, donning only a thin 1.5mm top after a couple of laps (you can see me wearing it in the picture of Pieter and me, above) and not putting on my thin wetsuit until nine hours into the race.

But, in fairness, I had a *huge* advantage that, to my knowledge, no other racer had: I had the [Quiksilver Mens Ps+Qs Heated Vest](#). This is a thin, sleeveless neoprene vest worn by cold-water surfers under their wetsuits. It has a heat pad covering the entire lower back, with a small (Snickers bar-sized) battery in a pocket on the hip with two settings: high and low.

This vest was an absolute lifesaver for me. As I noted above, the first mile of the course involved being fully submerged in lake water twice so, especially at night, it was easy to get really cold – so I turned the heater onto high. Then, as I started into the hills, I turned it to low, and when I really started to warm up, turned it off for the rest of the lap. Then I turned it on again at each pit stop so I didn't get chilled as I ate and rested. Because I only had it on maybe 15 minutes each lap, the battery lasted for the entire period I was wearing the vest (about half the race). (At around 3am, when I finally changed into my warmest wetsuit, I took off the Quiksilver vest and put on the new one developed by TM veteran Jason Rulo, which has six Hot Hands around the entire waist, which kept me even warmer (click [here](#) and [here](#) for more info about this).)

Any tips on nutrition during the race?

I brought 5x as much food as I could possibly eat because I had no idea what to expect and what I might be craving. You don't just want to consume energy drinks and gel – that's fine for short races, but won't work for long ones.

My main go-to "real food" was a rotisserie chicken that I consumed in pieces over the first half of the race. After each leg, I also ate a Snickers bar or bag of peanut M&Ms. I washed this down with three drinks:

- a) Diet Coke (I like the taste, find it refreshing, and it has caffeine; I probably should have been drinking regular Coke (to add the sugar energy), but I stupidly didn't have any!);
- b) Ensure Enlive ("all-in-one advanced nutrition shake" – a ton of protein and calories); and
- c) Tailwind (like Gatorade).

I had an entire box of Gu, gummy shots, and energy jelly beans and didn't touch them. Go figure. It worked for me...

What would you have done differently/what will do you differently next year?

- 1) Not much – pray that I get as lucky as I was this year.
- 2) I gave more help than I received on the obstacles during the race, but feel like I could have done more. But then I likely wouldn't have hit 75 miles – that's a dilemma that I don't face at regular TM races (which are untimed).
- 3) I'd make sure I had two people in my pit crew – one person halfway out on the course who I could give instructions to, who could then call them back to the other person in the pit.
- 4) I'd fly in earlier (we didn't arrive until Friday night) and stay through the brunch on Monday (we took the redeye back on Sunday night), so we wouldn't have been so rushed at both ends and could have been more social.

How did you feel afterwards?

Over the four days since the race ended, my upper body has been quite sore and my legs have never been more sore – really painful to sit down and stand up. I've been taking four Advil (800mg of ibuprofen) every four hours since the race ended (I only recall taking it twice during the race) to manage the pain and inflammation and I've needed Ambien to sleep. Today (Thursday) is the first day in which the pain has really subsided so I should be off the Advil and Ambien shortly.

Is there actually any danger?

Well, it depends on how you define danger. There are plenty of opportunities on many of the obstacles to slip and fall, get banged up, maybe even break a leg or arm, but there were no major injuries at this race – depending on how you define "major" I suppose. One guy posted this on FB (he ripped open his arm on the very first obstacle – and still did 55 miles!):

I want to send a special thanks to Team 4 Eyes. When the horn blew after the sprint lap I was at Stage 5 Clinger and did a muscle up to get up and over but apparently ripped open my elbow. Wondering where the blood splatter on the obstacle was from, I quickly realized it was from my arm. I crawled down in total shock to see my arm opened up and thought immediately, "Well that's it, I'm done." All the training and travel to get to those point was done on the first obstacle. Team 4 Eyes came over and quickly snapped me out of it. They took my buff from my neck and compressed it tightly around my arm and ran with me over to a medic. If it wasn't for them telling me I was fine I'm not sure how the rest of the race would have been. Unfortunately because a medic can't assist while on course, I had to run and complete the remaining 4 miles of obstacles. 7 stitches and 25 minutes in the medical tent later I was back out on the course and met up with those 3 guys from that team around Twinkle Toes. The camaraderie that I experienced throughout the 24 hours was like nothing I have ever seen. Coolest thing I have ever done in my life!

Another guy fell on Kong going across a strapline in the middle of the night, dropping ~15 feet – which happened countless times, except he had the misfortune of falling right in between two big airbags (you can see it happen at 2:52:55 on [this video](#)). He could have been seriously injured, but after being down for about a minute, he continued and also completed 55 miles.

And there's plenty of opportunity to mess yourself up jumping 35' off The Cliff. If you land slightly wrong, you can break your tailbone (on one jump, I was leaning back a tiny bit and bruised it, and the female winner a couple of years ago, Amelia Boone, actually broke it – but kept on racing and won!).

But if you define danger as the risk of death, you were probably more likely to die driving to/from the airport (15 miles away) than you were on the course. That said, at a regular Tough Mudder race in 2013, a guy drowned years ago when someone else jumped on him, knocked him out, and nobody noticed until it was too late. And just a month ago at a Tough Mudder in New Jersey, I saw a guy being rushed off the course on a stretcher on the back of a cart and heard the next day that he'd died of a heart attack (he looked to be very obese – it's not a good idea to do any highly strenuous physical activity if you're really out of shape).

Did you win your age category by a hair – was it a photo finish?

No. No other person age 50+ did 75 miles. The #2 guy did 70 miles (and could have easily beaten my time had he run one more lap, as he was 2 hours, 18 minutes ahead of me after 70 miles, but he stopped – I don't know why). The #3 guy did 65 miles, and three guys did 60 miles, so there was a lot of dispersion at the top. (The #1 woman age 50+ did 55 miles.) (7 of the 38 teams also beat me – there was a \$100,000 prize for any team that hit 100 miles, so I think this attracted some top competitors.)

Given that you just turned 50 two weeks ago, didn't that give you an advantage over others in the 50+ age category?

Hell yeah! I need to hurry up and do more of these races before I lose my advantage! ;-)

Seriously, I would have finished #2 among the 100 male and 9 female finishers aged 45-49 and #8 among 138 men and 26 women aged 40-44, so I did well even among those 5-10 years younger.

What advice would you give to Tough Mudder for future WTMs?

1) People love getting recognition: patches, bibs, awards, etc. I think having a patch for 25 miles and a bib at 50 miles (which 52% of finishers achieved) is just right, but having the next bib at 75 miles (which only 5% achieved) is too much. I saw a lot of folks get 50 miles and then mentally or literally stop, even though they could have kept going for another lap or two, because they knew 75 was out of reach. Why not have a 60-mile bib? Also, why not have awards by age categories (selfishly speaking!)?

2) I think some of the obstacles/penalties need to be made more difficult. I know a lot of folks struggled with many of the obstacles, especially in the second half of the race, and thus will surely disagree with me, but this is the world championship, not a regular TM race. My general feeling is that a 50-year-old like me should have been failing more obstacles than Funky Monkey 1/3 of the time. Specifically, I'd suggest:

- Humpchuck: make the wall 1-foot higher.
- Stage 5 Clinger: this was a good, tough obstacle – but then, after only two laps, they put up ladders and nets, making it much easier. I'd suggest not putting up the ladder and nets until, say, 10pm, and then remove them at 6am (like Funky Monkey).

- Operation: as I took the shock ~15 times, I didn't think it was fair that the penalty was so easy. In general, I think penalties should be much harsher for obstacles people *choose* to skip (vs. those they simply don't have the strength for). Thus, rather than putting Arctic Enema (a brutal obstacle because it chills you to the bone) as a penalty for The Gambler, I'd put it here.
- The Grappler: for the entire second half of the race, the folks running this obstacle allowed racers to run up and grab the rope and start climbing as long as someone was still on it. Don't. Make every person throw the rope (and if they can't hook it by their third try, it's off to the penalty).
- Double Rainbow: this looked so intimidating – yet ended up being much too easy. There's a simple fix: move the second bar two feet further away, thereby requiring a release and then a catch.
- Kiss of Mud: a great obstacle, but should have been 50-100% longer.
- Twinkle Toes: the beam should be a tiny bit skinnier and five feet longer.
- Kong: should have been five feet longer.
- The Cliff: I never did the penalty, but heard it wasn't so bad. If someone is going to skip this bad boy, then there should be a high price.

3) Add another water station on the course. No matter how much water/Cellucor I drank at the first station, I was parched by the top of the hill a mile and a half later.

4) There was a lot of pee (mine included!) in the water at Block Ness Monster and Turducken, which didn't bother me but is sort of unsanitary. Maybe pour chlorine into the water at those obstacles regularly?

5) Why not set up a tent and strike a deal with a local place to provide a bunch of masseuses to give quick 5-10 minute massages to racers for \$10 or \$20? I think racers would really appreciate it and (in response to folks who think it would be too much over-the-top pampering) it might help reduce injuries.

6) Put a few Port-a-Potties near the start/finish area for use just by racers – the closest ones were much too far away.

How much does it cost?

Registration was \$550, but that's just the start. If you don't have the gear, you can easily drop \$1,000 (I spent quite a bit more, but I was over the top for sure), plus flights and hotel – not just for you, but your pit crew as well. It ain't cheap (though it should be cheaper in future years, as I won't have to buy any gear – I have enough for a decade I think)!

What does Susan think of this?

Not much. But she's been endlessly loving and patient with me for nearly 26 years of my foolish escapades – and I haven't killed myself yet! And she knows from long experience that if she raised doubts/concerns, it would just give me more motivation! And she takes comfort in my large life insurance policy... ;-)

What ridiculous thing am I going to do next?

I have no plans until next spring/summer when I hope to summit Mt. Blanc again, but this time ski down (likely in June), and climb the Eiger (but not the North Face!) in July or August. The bulls in Pamplona are also beckoning...

Augustus Gloop

This is a new obstacle that involves jumping in a neck-deep pool of water, wading under a fence (leaving 6-8 inches of breathing space), ducking your head into a tube, and climbing up it (using hand-/foot-holds on either side) while a firehose poured a ton of lakewater on your head. This obstacle would be a nightmare for anyone who has a fear of water/drowning or is claustrophobic.



Humpchuck

This involved wading/swimming across a short (maybe 100-foot) segment of the lake and climbing up a short, slick wall (with three horizontal planks) at the other end. If you had decent upper body strength, you could get up the wall by yourself; otherwise, other racers had to help.



Statue of Liberty

On the map, this appears as the first obstacle, but it didn't open until midnight (along with The Cliff), replacing Humpchuck (in other words, the first and last obstacles on the course were different in the second half of the race). Like Humpchuck, you had a swim a short distance in the lake, but instead of a wall at the end, you had to hold a lit torch (if you dropped it or the flame went out for any reason, you had to do it again). Being in the water at night was chilling, but otherwise it was an easy obstacle – and very cool visually, as you can see in these pics:



Stage 5 Clinger

This was another new obstacle that really challenged one's upper body strength. You walked under the monkey bars to the wall, climbed up a couple of easy steps, turned around and used the monkey bars (or side rails) to work your way back to the front, then grabbed the front edge and turned yourself around again, and then (the hard part) you needed to pull yourself up onto the "roof" (the key was putting your feet on the diagonal side supports). They made this easier after a couple of laps by putting up rope ladders and cargo nets – [here](#) is a video of it then.



Giant Wedgie

This is the huge A-frame cargo net that we ran under right after the start. It was simple – just climb up the net, over the top, and down – but it was long and tiring (and if you're afraid of heights, look out!). Susan got many nice pics of it – and me doing it:



Here I am going up and down it:



Everest

This is an iconic Tough Mudder obstacle, in which you run up a curved wall, grab the top, pull yourself over, and climb down. There was an interesting twist here: the left third of the wall (labeled Everest 1.0) was quite a bit shorter and had a plank to grip at the top, so it was much easier to do solo – I'd guess at least half of the racers could do it without assistance. The rest of the wall (labeled Everest 2.0) was higher and didn't have as good of a grip, so very few folks could do it solo (myself included). Thus, racers had three choices: skip it entirely and do a penalty walk that included going in the lake (like Statue of Liberty without the torch); do Everest 1.0 and do a shorter penalty walk with only a bit of water; or do Everest 2.0 without penalty.

Even though I'm not able to do Everest 2.0 solo (even when my legs are fresh), I opted for this every time because there were always fellow Mudders at the top who would grab my hands and pull me up (except for lap 15 when I had to take the penalty). Then, one of the people who helped me could leave and continue racing and I'd stay and help the Mudders behind me. (Racers are allowed to help each other on the course, but no spectators/pit crew are allowed to provide any assistance (water, food, a push up a wall, etc.) whatsoever – only in the pit area after each lap.)

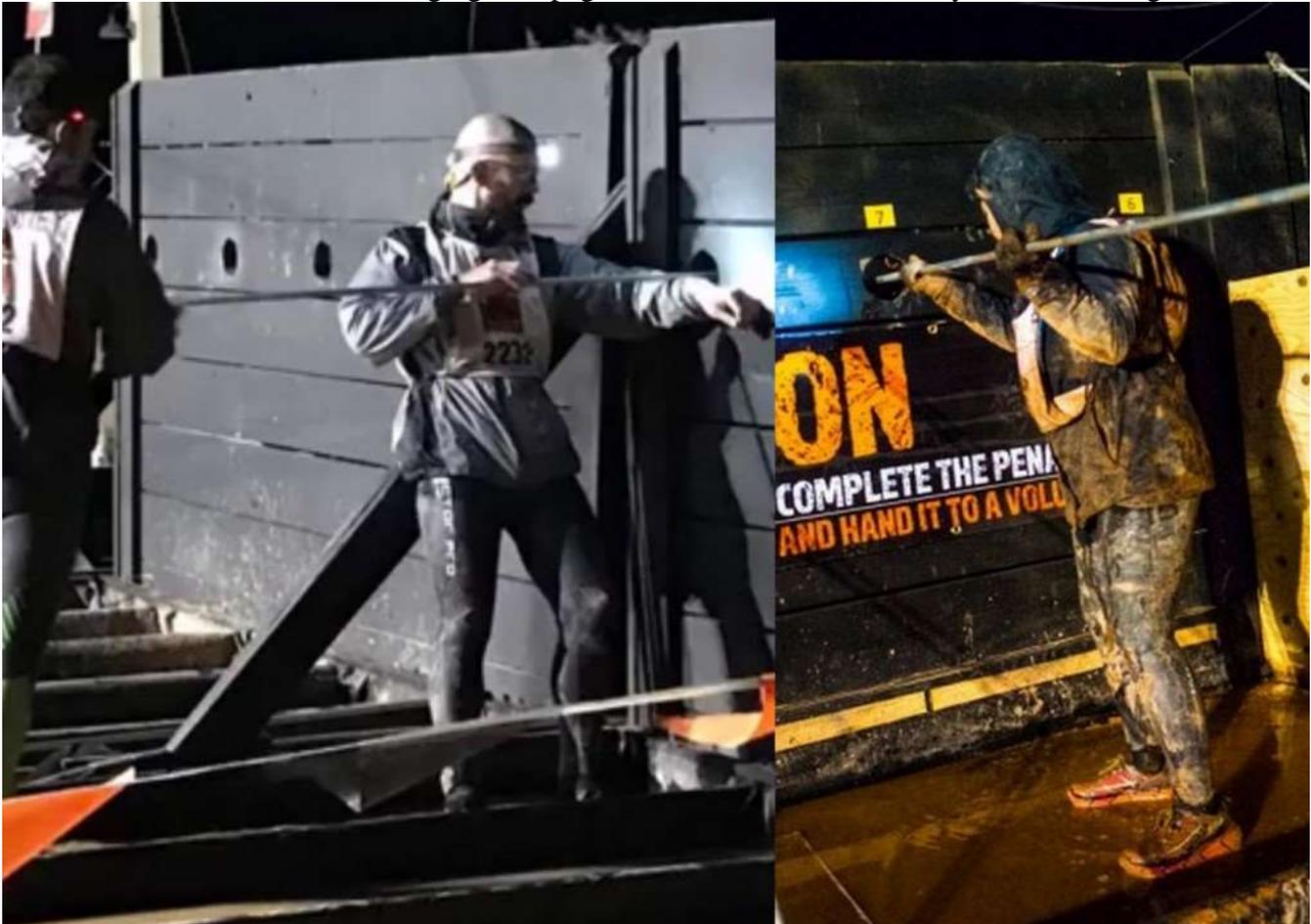
This picture shows how racers help each other:



(Funny story: my 76-year-old mother did a TM in New Hampshire with me in August. Unfortunately, she is the world's slowest runner so when we came to Everest 2.0, she couldn't get within a country mile of our outstretched hands. She had given up and was walking around it when a woman at the top suggested that we form a human pyramid at the base so my mom could climb up on top of us high enough to reach the people grabbing down from the top. As you can see from this video, it worked: <https://youtu.be/EgNnqvO2zWA> (4:31)! Everyone was cheering her and giving her high-fives!)

Operation

This was a new one that really messed with a lot of people (to some extent, myself included)! You stand in a couple inches of water, pick up a 10-foot metal pole with a hook at the end, poke it through a 4-inch hole, hook a rubber wristband hanging on a peg on a wall about six feet away, and then bring it back.



Simple, right? Except there's one catch: if your pole touches the side of the 4-inch hole (and maybe the peg? I was never sure), you get a heck of an electric shock – like putting your finger in an electric socket! While it wasn't strong enough to cause me to drop the pole, it hurt like hell and caused me (and everyone else getting shocked) to yell loudly in pain (it must have been truly comical for spectators – LOL!).

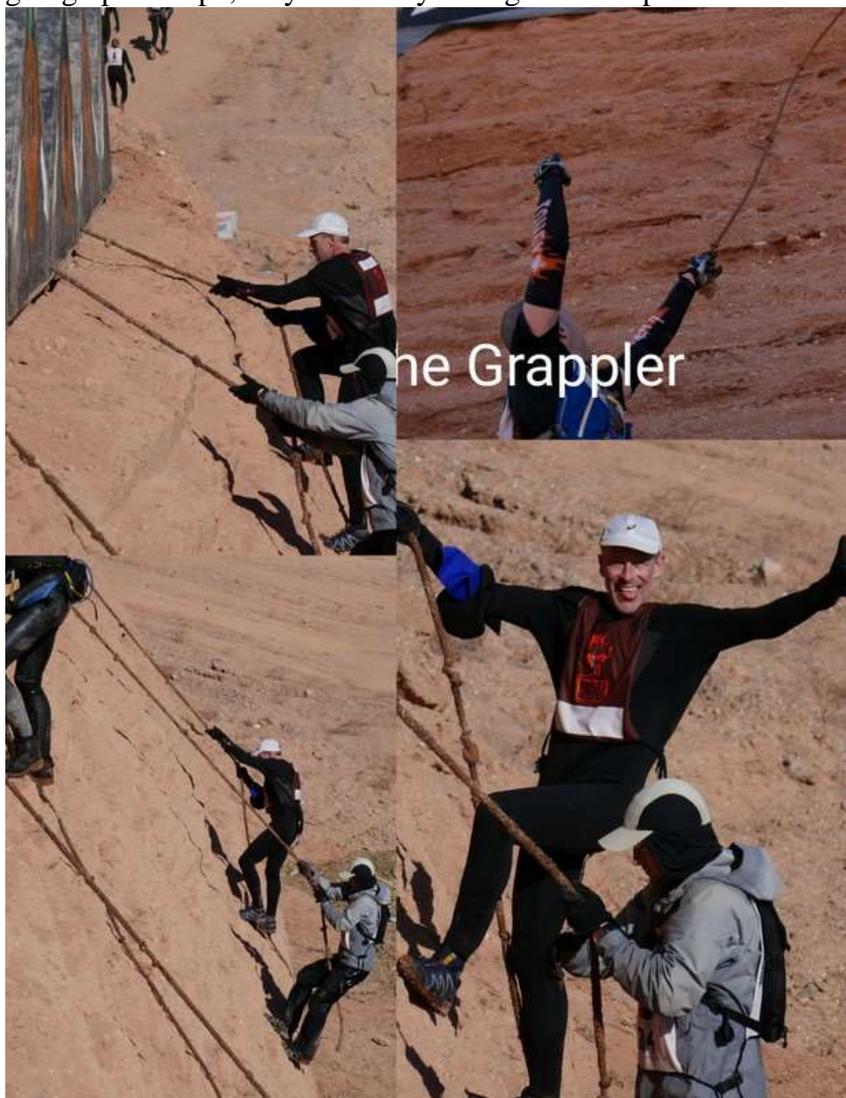
Making things worse, sometimes I got shocked even when I did it perfectly – apparently, if the person next to you got a shock, you would too because you were both standing in the same water. Now *that's* frustrating!

Of the 15 times I completed this obstacle, I got through without a shock five times, got shocked once five times, and got shocked *twice* five times – 15 shocks in total – ARRRRRH! You can see why many competitors didn't even try it – they just picked up a sandbag and did a short penalty walk. But I'm glad I did it for three reasons:

- 1) I like the feeling of overcoming a mental challenge – knowing I was going to get jolted, but still persevering;
- 2) In the middle and late stages of the race, I was often feeling really lethargic – and that jolt sure woke me up!; and
- 3) Given that I completed 15 laps with only 18 minutes to spare, if I'd done this (or any other penalty) on every lap, I wouldn't have made it.

The Grappler

This is a 50-foot cliff that you climb by grabbing onto the rope, which has lots of helpful knots. It was pretty straightforward the first couple of laps until they took the ropes away and left them coiled at the base. We then had to throw one end (which had a billiard-sized ball attached) up the cliff and hook it on the platform at the top, as you can see the guy doing in the top picture below. This was very difficult and they only gave you three attempts, after which you had to do a tough penalty walk. I was able to hook it on my 2nd or 3rd attempts for the next few laps – and then they made it much easier: if someone was going up the rope, they allowed you to grab the rope and climb it.



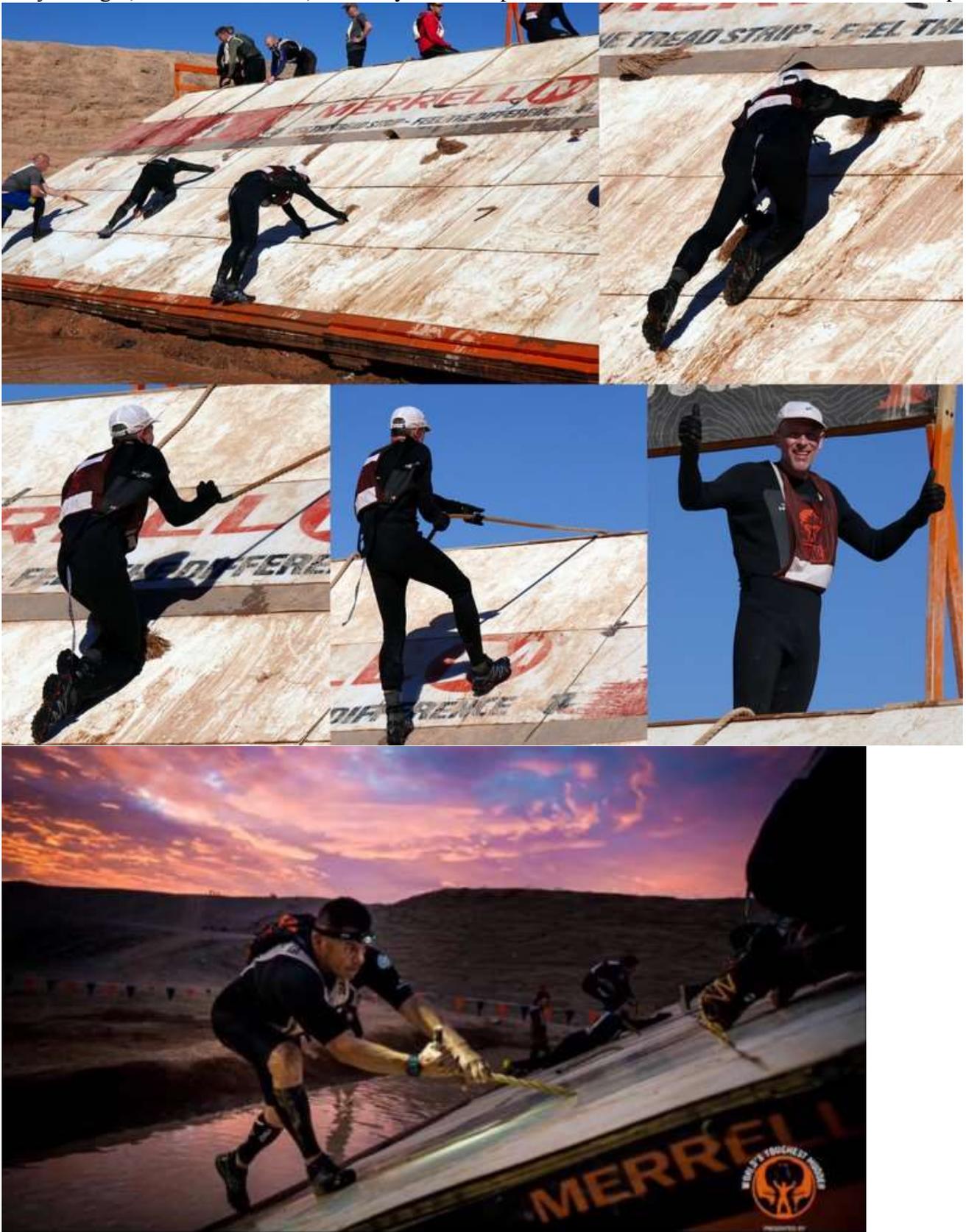
Abseil

This is the exact opposite of The Grappler (and much easier): after a few minutes of walking along the top of the cliff, you rappelled down. Piece a cake (as long as you're not afraid of heights)!



Pyramid Scheme

This is a slick, sloping wall with two rope-stub handholds and a top rope. If you're tall and have upper-body strength, it wasn't too hard, but many needed a push from the bottom and/or a hand from the top.



Funky Monkey

This obstacle was my daddy – it's the only one I failed repeatedly (much to my frustration – if you heard loud cursing, that was me!). It was a new twist on a classic TM obstacle. First (as in prior iterations of this obstacle) you had to go up a set of maybe a dozen monkey bars (see lower left picture of me doing so at another TM race). But then it got tricky: you had to reach to a horizontal wheel and spin around on it and grab a big vertical wheel (which I'm doing in the top picture), and then go down two more smaller vertical wheels to the landing platform (lower right picture).



I completed it two of the first three laps, but then failed the 4th time because my grip and upper-body strength was fading. Fortunately, however, all night long they put a plank out so that you could skip the monkey bars and start on the top wheel, which made it quick enough that I was able to do it again. But then once the sun rose, they took the planks away for the last few laps and I never completed it again – I just went straight to the penalty walk (thankfully some clever Mudders had dumped most of the sand out of many of the bags, so that made the five-minute walk easier):



The Block Ness Monster

This one requires a bunch of people working well as a team. As you can see from the series of pics below, everyone jumps into neck-deep water (this was the only water obstacle in the middle three miles of the course, so it felt really good most laps) and pushes on the rotating, triangular-shaped thingie (I don't know what to call it). On each rotation, 1-2 people hold onto the top, are pulled over, and then grab the top and help keep it rotating so the others can get over. Then repeat this once more and you're done – great fun!



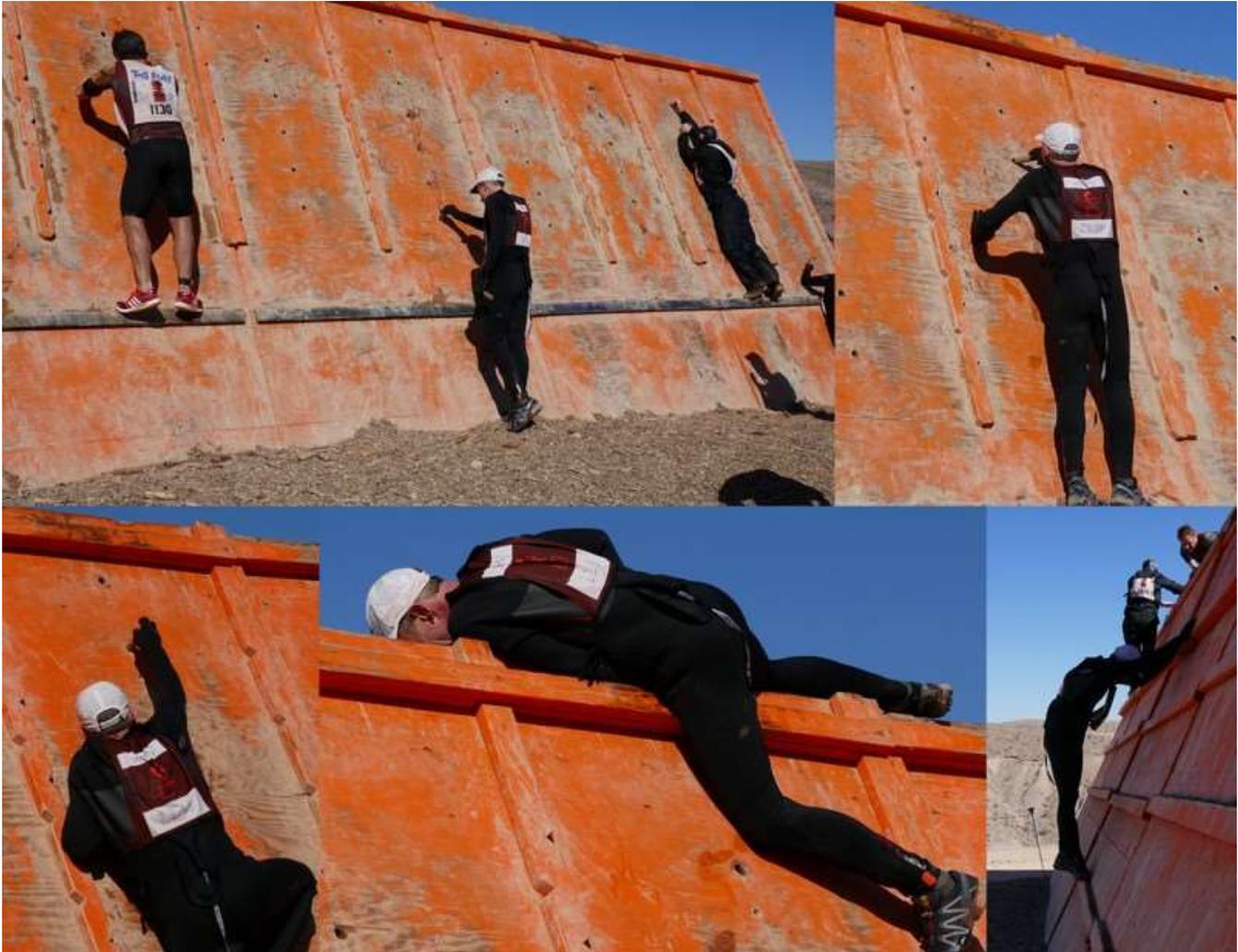
Double Rainbow

This was a new obstacle – a variation on the classic King of the Swingers. The best way to see it is Susan’s short video clip here: <https://youtu.be/2QxAalZY6Tc>. It started the same, with a jump, grab the handle of the bar, and swing down and up. But then, instead of stretching to ring the bell and dropping into the water, you grabbed another handle/bar and swung over to an airbag, thereby staying dry. If you had a lot of coordination and upper-body strength, you could quickly transfer one hand and then the other from the first handle to the second (as the guy is doing in the lower right picture below) or even release both hands from the first handle and grab the second, but I preferred the more conservative approach: grab the second handle by one hand (as I’m doing in the top picture), come to a complete stop as your body swings forward, then back, and then when it swings forward again, grab the second handle with your other hand and use two hands to get safely to the airbag (as I’m doing in the lower left picture). This required a lot of upper-body strength and, after the first few laps, a lot of people did a lot of swimming (plus a penalty walk). Fortunately, my technique worked for me until the very end – I nailed this one every time.



Backstabber

This is a peg wall – use a peg to steady yourself as you take a big step up and stand on the narrow black lower plank, and then use two pegs plus jamming your feet in the notches on either side to get up and over. This was a required obstacle (meaning you couldn't take a penalty walk), so there were a lot of folks helping out a lot of other folks...



Kiss of Mud 2.0

This involved crawling under barbed wire through mud (and, at times, some muddy water) for maybe 50 feet. I long ago discovered that there's a hard way to do this – crawling – and an easy way – rolling. (You can see me doing so in Susan's short video clip here: <https://youtu.be/2QxAalZY6Tc>.) Yes, the latter can make you a little dizzy, but relative to crawling it's so much easier and faster and you don't get scraped up. I don't know why most people haven't figured this out – try it, you'll like it!



Ladder to Hell

This wasn't particularly hard – it's just that was at the highest point of the course, after a long uphill, so it *felt* hard!



Twinkle Toes

The long uphill to Ladder to Hell is followed by an equally long downhill to Twinkle Toes, a classic obstacle that TM brought back for this race, which requires you to balance while walking 20 feet (with a little pyramid in the middle) across a 3-inch wide plank, with water below. The first time I was too slow and fell, but then figured it out and nailed it the rest of the time until they closed it about halfway through the race (I'm not sure why).



Turducken

This requires you to pull yourself with a rope down a tube, drop into neck-deep water, crawl up and over a dirt wall (using a rope cargo net), go back into a second pool of water, duck your head for an instant under a log, and climb out using another net. It wasn't hard and it was usually a nice cool-down, as it was the first water obstacle in three miles since Block Ness Monster. Here are a couple of pictures of it from other TM races (yes, that's Mark James and Maxine Colvey on the left at TM Philadelphia this spring; both of them completed 60 miles at the WTM):



The Gamble

A new variation on the standard wall obstacles – this was a long wall with six different ways to get over it, some easy and some quite hard. Which wall you had to tackle was determined by the roll of a die on a table in front of the obstacle. You weren't allowed to re-roll, so if you rolled a number that corresponded with a section of the wall that was too difficult, you could do a penalty ice dip in Arctic Enema (a very bad idea, as it'll freeze up and cramp your muscles).



Kong

This was a fun new one. It started on a platform quite high up (another thrilling obstacle for those afraid of heights!) and you had to use five gymnastics rings to get other side – this was just pure upper-body strength. I had no problems with it the first two times, but barely made it across the third time – I had to use two hands on each ring – so I was feeling dread as I approached it a fourth time. But I was pleasantly surprised to see that they'd taken away the rings and put in two straight bars hanging down from chains, plus had added a slackline, so it was quite easy, requiring only balance, not upper-body strength. HOWEVER, this assumes that you were tall enough to stand on the slackline and be able to reach the bar – if not, it was much more difficult – and one guy had a very scary fall. Dropping 12 feet into the airbag was no big deal – it happened countless times – except he had the misfortune of falling right in between two big airbags (you can see it happen at 2:52:55 on [this video](#)). He could have been seriously injured, but after being down for about a minute, he continued and completed 55 miles.

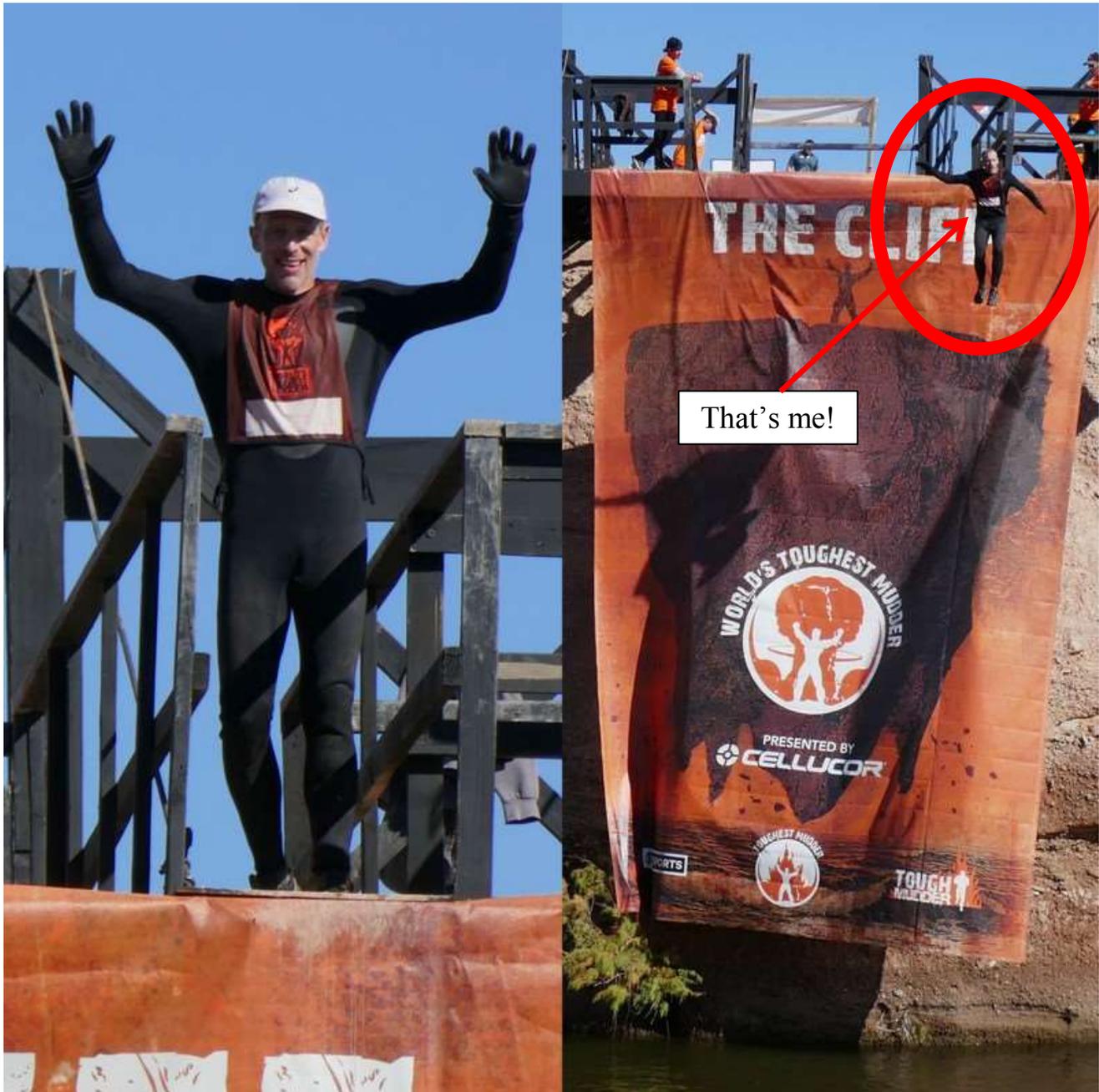


The Cliff

This is the iconic obstacle at the World's Toughest Mudder, and to build the suspense, they don't open it until midnight. It's very simple: step off a 35-foot platform, plunge feet-first into the lake, swim 100 feet to the other side and climb out using a rope cargo net.

If you're afraid of heights and/or water, this is your ultimate nightmare – 35 feet is REALLY HIGH! And there's plenty of opportunity to get hurt because if you land slightly wrong, you can break your tailbone (on one jump, I was leaning back a tiny bit and bruised it, and the female winner a couple of years ago, Amelia Boone, actually broke it – but kept on racing and won!).

If you wanted, you could skip it, but this required you to climb down to the shore and do a much longer swim, so it cost an extra five minutes at least I heard. I found it to be a thrill and enjoyed the half-dozen times I did it.



Here's a picture I liked of someone else jumping:



After climbing out of the water, it was a short jog back to the finish/start area (the third short video clip [here](#) shows me finishing my 15th and final lap):



Appendix

Here is my lap report:



World's Toughest Mudder

Athlete

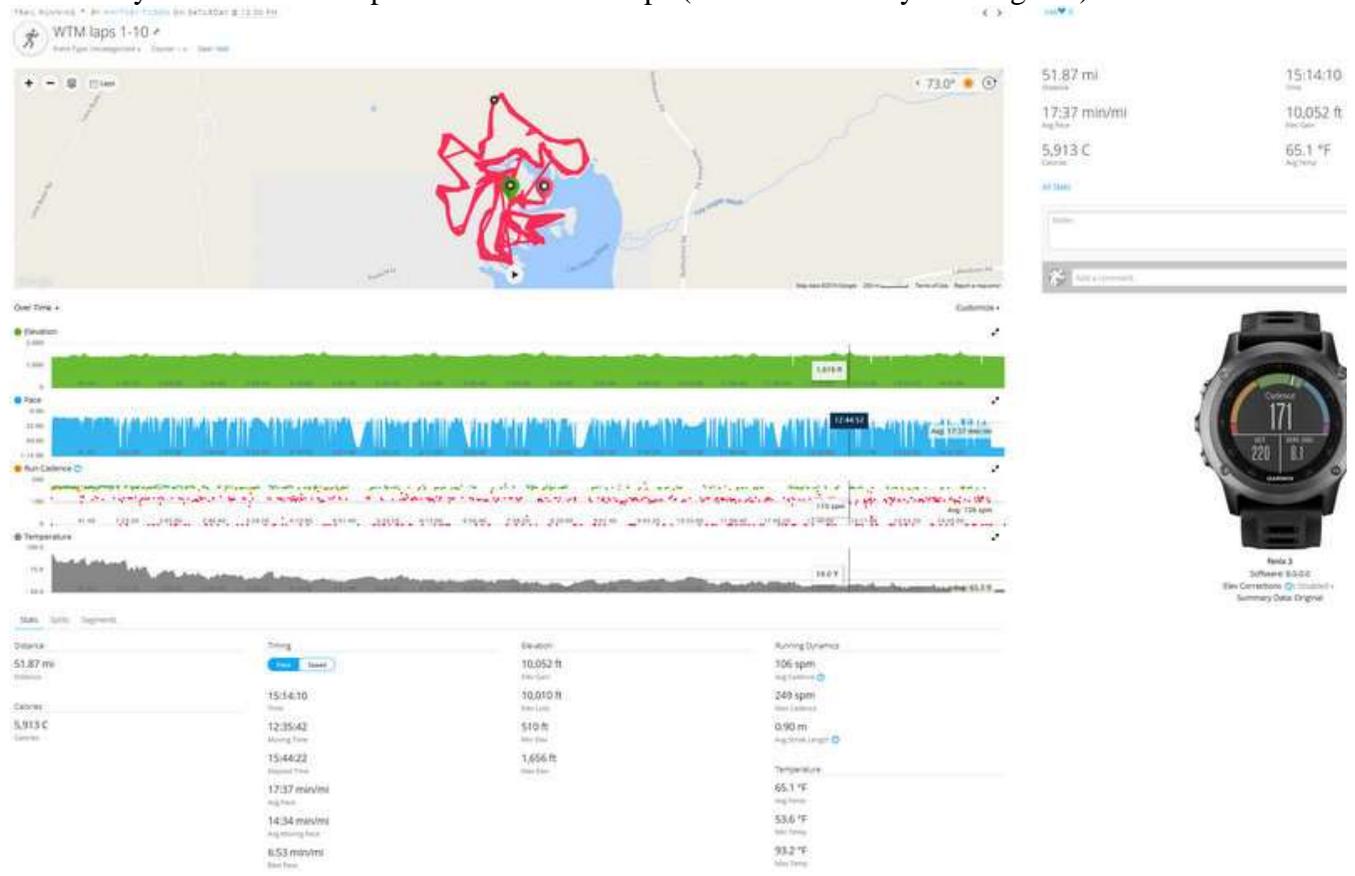
Whitney Tilson
Bib: 2238

City, State: NEW YORK NY US
Division: M 50-54

Division Place: 1
Overall Place: 58

LOCATION	TIME	PACE
# of Laps	15	
Total Miles	75	
Lap 1	48:12	9:39/mile
Lap 2	1:04:27	12:54/mile
Lap 3	1:23:34	16:43/mile
Lap 4	1:12:45	14:33/mile
Lap 5	1:26:09	17:14/mile
Lap 6	1:33:31	18:43/mile
Lap 7	1:28:26	17:42/mile
Lap 8	1:25:09	17:02/mile
Lap 9	1:26:20	17:16/mile
Lap 10	1:35:20	19:04/mile
Lap 11	1:41:18	20:16/mile
Lap 12	1:36:28	19:18/mile
Lap 13	1:39:24	19:53/mile
Lap 14	1:38:44	19:45/mile
Lap 15	1:39:02	19:49/mile

Here is my Garmin watch report for the first 10 laps (before the battery died – grrrr!):



Here are my mile splits from my watch (again, just the first 10 laps):

Splits	Time	Cumulative Time	Moving Time	Distance	Elev Gain	Elev Loss	Avg Pace	Avg Moving Pace	Best Pace	Avg Run Cadence	Max Run Cadence	Avg Stride Length	Avg Temperature	Calories
1	8:42.8	8:42.8	8:42	1.00	89	66	8:45	8:42	8:53	166	178	1.12	87.8	127
2	9:04.7	17:50	9:03	1.00	82	56	9:05	9:03	8:04	170	175	1.05	84.6	130
3	9:47.6	27:37	9:40	1.00	138	141	9:48	9:40	7:26	162	174	1.08	85.4	126
4	10:08	37:45	10:07	1.00	180	184	10:08	10:07	7:02	154	236	1.05	85.2	120
5	10:47	48:32	10:28	1.00	98	105	10:47	10:28	7:34	153	180	0.98	85.8	125
6	9:05.4	57:37	9:02	1.00	89	82	9:05	9:02	7:01	169	184	1.04	83.9	127
7	13:43	1:11:20	13:27	1.00	115	89	13:43	13:27	6:55	127	178	1.05	84.5	120
8	13:30	1:24:50	13:19	1.00	128	157	13:30	13:19	7:40	130	179	0.97	77.7	116
9	14:04	1:38:54	13:36	1.00	203	187	14:04	13:36	8:00	125	174	0.93	73.6	119
10	12:40	1:51:34	12:12	1.00	128	131	12:40	12:12	8:21	145	188	0.89	72.3	123
11	14:00	2:05:34	13:21	1.00	89	66	14:00	13:21	7:47	125	176	0.94	71.2	125
12	15:00	2:20:33	13:30	1.00	151	154	15:00	13:30	7:58	124	178	0.93	71.3	118
13	13:54	2:34:27	11:18	0.71	164	95	13:52	11:45	7:44	95	201	0.94	67.9	77
14	19:14	2:53:42	13:45	1.00	184	164	19:14	13:45	7:51	90	224	0.97	70.4	114
15	16:09	3:09:51	12:31	1.00	137	246	16:09	12:31	7:35	105	181	0.97	68.0	117
16	19:11	3:29:02	13:11	1.00	98	108	19:11	13:11	7:53	95	178	1.00	69.2	121
17	14:06	3:43:08	11:39	1.00	144	128	14:06	11:39	7:12	124	241	0.94	69.3	119
18	14:24	3:57:32	14:09	1.00	128	98	14:24	14:09	7:49	130	178	0.88	67.7	119
19	16:59	4:14:31	13:52	1.00	131	167	16:59	13:52	8:03	106	176	0.94	64.5	118
20	14:18	4:28:49	14:00	1.00	217	213	14:17	14:00	8:54	125	208	0.89	65.2	117
21	13:01	4:41:50	12:20	1.00	135	131	13:01	12:20	7:53	138	235	0.92	63.1	117
22	21:20	5:03:09	8:47	0.32	10	30	0	27:14	8:51	40	176	0.91	66.2	34
23	16:34	5:19:44	12:02	1.00	144	106	16:34	12:02	7:55	111	242	0.87	66.4	118
24	18:02	5:37:46	17:21	1.00	105	115	18:02	17:21	7:56	107	226	0.92	67.6	115
25	16:43	5:54:29	15:01	1.00	171	128	16:43	15:01	8:56	113	174	0.90	65.4	106
26	15:56	6:10:24	15:09	1.00	207	217	15:56	15:09	8:19	118	227	0.86	64.0	109
27	16:37	6:27:00	13:56	1.00	151	203	16:37	13:56	8:04	113	208	0.88	63.5	112
28	19:17	6:46:17	14:01	1.00	56	52	19:17	14:01	7:50	100	183	0.90	63.7	124
29	21:45	7:08:02	17:14	1.00	121	138	21:45	17:14	9:29	96	242	0.84	63.5	102
30	19:59	7:28:01	17:05	1.00	144	89	19:59	17:05	7:12	98	184	0.89	64.4	106
31	19:30	7:47:32	17:01	1.00	171	167	19:30	17:01	7:53	97	180	0.86	61.7	111
32	16:42	8:04:14	16:04	1.00	174	240	16:42	16:04	8:09	117	229	0.88	60.0	111
33	23:36	8:27:50	16:29	1.00	361	423	23:37	16:29	8:30	86	248	0.85	60.0	112
34	6:11.0	8:34:01	0	0.02	3	3	0	-	38:19	20	121	0.31	63.9	1
35	16:36	8:52:37	16:43	1.00	151	131	16:36	16:43	8:02	107	229	0.81	62.2	115
36	20:24	9:13:01	17:53	1.00	128	128	20:25	17:53	9:04	100	182	0.82	63.4	108
37	18:21	9:31:23	15:32	1.00	210	246	18:22	15:32	9:27	104	186	0.85	63.3	103
38	17:54	9:49:17	17:18	1.00	256	253	17:54	17:18	9:15	111	176	0.84	64.9	107
39	14:48	10:04:05	13:59	1.00	121	135	14:48	13:59	8:49	127	178	0.84	63.2	113
40	28:22	10:32:26	18:16	1.00	82	82	28:21	18:16	8:00	73	209	0.84	65.3	113
41	18:48	10:51:15	14:50	1.00	187	151	18:49	14:50	7:21	99	209	0.85	60.7	111
42	16:38	11:07:53	16:05	1.00	249	246	16:38	16:05	9:20	119	175	0.83	59.4	113
43	17:12	11:25:05	15:53	1.00	190	213	17:12	15:53	9:02	111	178	0.85	61.6	111
44	27:13	11:52:18	18:48	1.00	476	482	27:12	18:48	8:21	73	173	0.79	61.8	104
45	18:13	12:10:33	14:04	1.00	128	112	18:16	14:04	8:35	105	249	0.87	58.2	118
46	16:48	12:27:18	15:28	1.00	213	128	16:45	15:28	8:23	111	178	0.86	59.0	112
47	19:31	12:46:48	18:18	1.00	285	121	19:30	18:18	9:16	109	201	0.77	58.2	101
48	16:59	13:03:47	15:14	1.00	118	299	16:59	15:14	8:36	114	240	0.82	58.8	115
49	23:11	13:26:58	16:03	1.00	1,194	1,201	23:11	16:03	9:11	74	234	0.90	58.3	94
50	19:48	13:46:46	16:03	1.00	161	154	19:48	16:03	10:03	104	226	0.80	56.8	109
51	21:14	14:08:01	17:58	1.00	253	154	21:15	17:58	9:59	97	173	0.81	57.4	100
52	19:24	14:27:25	16:27	1.00	187	217	19:24	16:27	9:41	104	201	0.79	56.0	113
53	16:29	14:43:54	14:50	1.00	167	246	16:29	14:50	9:57	117	237	0.82	57.2	117
54	30:16	15:14:10	14:38	0.81	430	653	37:28	18:06	10:09	52	173	0.97	56.6	78
Summary	15:18:50	15:14:10	12:35:42	51.87	90,952	18,896	17:37	14:34	8:53	106	240	0.86	63.1	3,913

My Adventure at the 2017 World's Toughest Mudder

By Whitney Tilson, 11/17

(The latest version of this pdf is posted at: www.tilsonfunds.com/TilsonWTM17.pdf)

(In addition to the pictures below, I also posted a 23:45 video I took with my GoPro of 15 of the 21 obstacles on my final lap, plus the start and finish areas: <https://youtu.be/d5x0NWEyr9Y>. Enjoy!)

I did the World's Toughest Mudder, a 24-hour obstacle course endurance race on the shores and nearby hills of Lake Las Vegas two weeks ago for the second time. Once again, it was a memorable adventure: it was incredibly fun (though incredibly hard!) and I completed 55 miles and nearly 200 obstacles in 22 hours and 15 minutes, good for 168th place overall (top 11%) and 5th in the 50+ age group.

It was a harder course and it got colder overnight, which sapped me physically and mentally, so I didn't do nearly as well as last year when I did 75 miles and ~275 obstacles, winning (and setting the all-time record) for the 50+ age group (see: www.tilsonfunds.com/TilsonWTM.pdf).

Here's a picture of me with my friends before the race (from left to right): Tom Millerick, Tim Donovan, Rob Majors (my pit crew), me, Bruce Majors (Rob's brother, who ran the race), Kenny Majors (another brother, who was the pit crew for Bruce), and Mark James:



Here's Mark and me in our hotel room the night before (we also shared a tent during the race):



Mark and me in the lobby of the Westin on Saturday morning with Sean Corvelle (left) and Clinton Jackson, who do an incredible job MC'ing the race, giving all of us encouragement and inspiration:



Our tent was pretty close to the start/finish line, unlike last year:



That's our tent on the right, with the start/finish line about 100 yards ahead:



Here's a pic I took last year of the entire Mudder Village. This year, with 29% more registrants (1,655 vs. 1,280), the tent village was even larger, with a new section off to the left:



Me in the starting area just before noon:



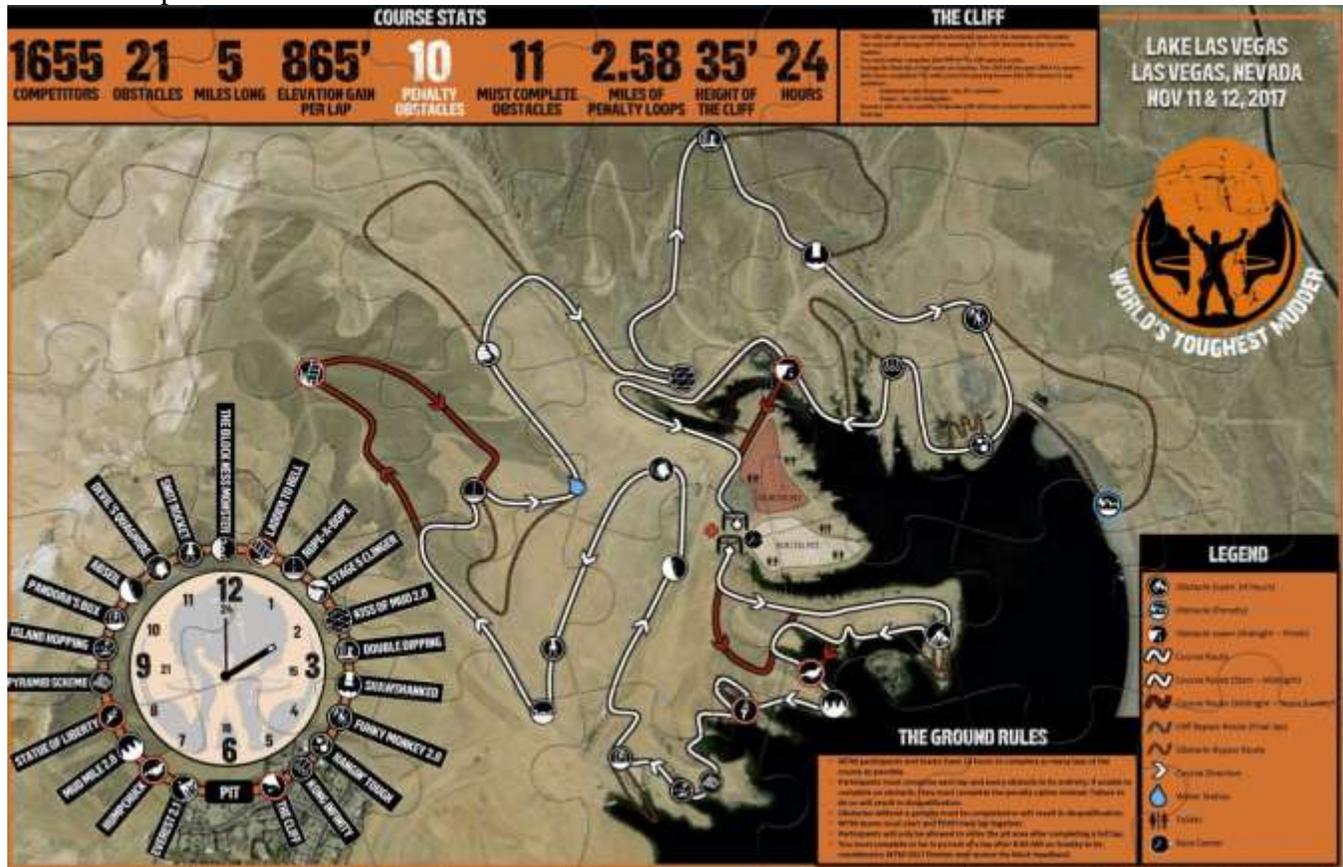
Here's the starting line at ~11:30 (they released us at noon):



Here's a pic from last year, showing how crowded it gets right before the start:



Here's a map of the five-mile course:



My Goals

I had three goals:

1) Have fun. This was a given: what could be more fun than having 24 hours to horse around in a gigantic playground with more than 1,500 like-minded, friendly people?! Seriously! Some of my fondest memories from my childhood are when I was playing with my buddies and we'd go swim, hike, crawl around in the mud, climb everything in sight, etc. – so now I get to do this as a (sort of) adult!

2) Not get injured. This was going to be a tough one, as I have little experience with (and did minimal training for) hiking/jogging a long distance. “So,” you might be thinking, “if something starts to hurt, stop!” I agree, logically speaking, it's nuts to continue on through pain, especially at my age. One race isn't worth a real injury. I plan to live at least another 50 years and want to be healthy, active and pain-free for the rest of my life! That said, I'm really competitive and have a high pain threshold, so I might have kept on going even if some part of my body (most likely a knee or hamstring) was really hurting. Fortunately, this didn't happen – I didn't even have a blister (though I was sore all over)!

3) Complete 75 miles (15 laps). Though I did this at the WTM last year, that was a miracle. In truth, I'm not a runner; I don't like it – I find it boring and unpleasant (if not painful) – so I don't run very often (I mostly play basketball and tennis). And when I do, I'm slow: even on a flat road, with running shoes, doing only a few miles, I get uncomfortable if I try to go faster than an 8-minute mile, which any serious runner would laugh at. So I knew that matching last year's distance was going to be a stretch (and it was, as I didn't even come close).

Race Description Part One: A Solid First Half

The race started at noon on Saturday in perfect conditions: not a cloud in the sky and a nice 72 degrees. 1,655 of us surged over the line, eager to bank some miles during the first hour in which all of the obstacles are closed, to spread out the racers and reduce the wait times at the obstacles. At 1:00, I'd finished the first five-mile lap and was a half mile into lap 2 (a few yards before Everest), expecting a horn to go off and all obstacles to open simultaneously (which is what had happened last year), but instead they opened the obstacles on a rolling basis over the first 2.5-3 hours, so we kept racing at high speed. Here are some pictures from the first laps (many of the pictures below were taken by Brad Kerr, father of one of the racers – thank you!):







I finished my third lap (15 miles) by 3:15pm, was feeling great, and felt like 75, maybe even 80 miles, was possible – and then the toughest obstacles opened. And, wow, were they tough – quite a bit tougher than last year and, worse yet, the penalties for failing an obstacle were BRUTAL – much longer than in last year’s race (on average, I’d say they took 10-15 minutes to complete vs. 3-5 minutes last year)! (10 of the 21 obstacles had penalties – typically a walk in the desert, sometimes with a dip in the lake as well; the other 11 had to be completed or you’d be disqualified.)

“Well,” I figured, “At least it’s going to be warm all night, so that’ll help.” (The forecast was for a low of 56 degrees, which is quite warm for this time of year.) Boy, was I wrong! As soon as the sun went down around 5pm, the temperature quickly dropped and a ~10 mph wind picked up, dropping the wind chill to I’d estimate 40 degrees at the low in the middle of the night, and I started to get cold (especially since we were all getting completely drenched a half dozen times each lap).

Race Description Part Two: It All Falls Apart

After the sun went down, I wanted to stay light so I changed into my shorty (short sleeve, short leg) wetsuit, rather than my thick, heavy, full-body one, which was a big mistake as it got colder than I expected, mainly due to the wind chill.

By the time I finished my 7th lap (35 miles) just before midnight, a number of factors combined to break my spirit: a) I was really chilled, which sucked the energy in my arms (it’s critical to maintain a strong grip throughout the race to complete the toughest obstacles) and my legs, which reduced me to a walking speed, even on the flats and downhill (which never happened last year); b) I failed a few obstacles (and I take pride in NEVER failing obstacles – that really crushed me mentally); c) I knew I had no shot at another silver (75-mile) bib; and d) I found out that my buddy (and fellow 50+ year old geezer), Mark James, was more than two laps ahead of me, so I knew I had no chance of winning my age group (yes, I’m a competitive guy – and it sure was fun lording over Mark for the past year that a NYC desk jockey smoked a Navy SEAL – LOL!).

So I gave up. After I finished the 7th lap, I went back to my tent and planned to sleep for six hours, wake up at 6am, do three more laps to get my brown (50-mile) bib. But then fate kicked in: because I hadn’t slept at all during the race last year, I didn’t plan to this year either – and didn’t have room in my luggage anyway – so I didn’t have a sleeping bag to warm up in. Instead, I was curled up on the floor of my tent, under a thin blanket, still in my wetsuit, shivering – I was truly a pathetic sight! After 20 minutes, I realized I wasn’t going to warm up much less be able to sleep, so my only option was to go back on the course – at least there my movement would keep me from getting any colder.

So I got up and, as I was getting ready, Tim Donovan came by and we set out together, walking the entire time...

And you know what? Things got better. I was still chilled and miserable, but because I wasn’t trying to run, I wasn’t in any pain, nor was I out of breath. And somehow my grip strength rallied and I started nailing even the toughest obstacles, which was a real boost both mentally (my ego was somewhat restored; I saw a number of pros taking penalties) and physically (avoiding those awful penalty walks).

So I just walked all night, first with Tim and then alone, cranking out very consistent laps: my last four were 2:16, 2:16, 2:14 and 2:19 (for perspective, my last three laps at last year’s race, when I was pushing for the silver (75-mile) bib, were 1:39 each).

Here are some pictures of me during the night:





When the sun came up, I expected it to warm up and thought I might be able to change back into my shorts, but it was cloudy so it stayed cool. By the time I finished my 11th lap at 10:15am, I'd had enough. I felt OK and had plenty of time (there's a 90-minute grace period until 1:30pm to finish your last lap), so I could have easily walked a 12th lap, which would have given me 60 miles, but I didn't see the point (I didn't care if I went from top 10% to top 7% and from 5th to 3rd in the 50+ age group) and didn't want to risk injury and further soreness – as it was, I felt like 10 trucks ran over me!

I'm not proud of the fact that I walked the second half of the race and very nearly gave up, but at least I persevered – and I'm really happy that I took only eight penalties in 11 laps (once on Rope-a-Dope, twice on Funky Monkey, twice on Hangin' Tough and 3x on Kong; every miss was so excruciatingly close – a few times, I literally touched the platform when I lost my grip and fell back!).

I really enjoyed doing so many laps with my friends, Tim Donovan and Tom Millerick, and a HUGE shout-out to Rob Majors for driving in from Salt Lake City and staying up the entire time and being my pit crew!

Also, a big hat tip to Mark James, who went out really fast and ended up completing an amazing 70 miles (top 3% overall, winning the 50-54 age group), despite spraining his ankle in the middle of the night and having his hands swell up like balloons, as you can see in this picture:



Here's me with Sean Corvelle, Mark James, and Rob Majors after the race:



My favorite moments of the race were at the end, when:

a) Long-time hard-core Mudder Chris Betcher proposed to another long-time hard-core Mudder, Melissa “Sharkbait” Duggan, right after they both crossed the finish line together to complete 50 miles. She said yes! (You can watch the two-minute video of it [here](#).)



And b) See one of the two wheelchair racers finish (one man and one woman):



Appendix A: Q&A

Why do you do races like this?

I've always liked big challenges; they keep me motivated to get/stay in good shape; I really enjoy them – not the running, but the obstacles; and they're very social. I often do them with friends and family (my 76-year-old mom, 75-year-old dad, wife, three teenage daughters and many cousins have all done races with me), plus I've made many new friends. It's a great group of people and there's something about shared suffering that bonds people!

How does this race differ from other endurance races?

I've never done any other endurance race, but from what I've read of them, this race was different because we had to contend with:

- The obstacles (see photos and description of each below). There were a bunch of new ones and I found all of them fun and challenging, but after 100 of them, they take a lot out of you! Note that they tended to be very quick (if you completed them and avoided the penalty). How quick? I ran the first lap (a sprint of the course, skipping the obstacles) in 56 minutes and the 4th and 5th laps in 94 minutes – the main difference being that the obstacles were open.
- Wild temperature swings, both within each lap and between laps. After every lap, racers can go back to their pit (tent area) to rest, eat, use the Port-a-Potties, and change into dry and warmer/cooler gear, but that wastes time and it can be very tricky figuring out what to wear for a given lap. Guess wrong, and you might freeze...or overheat...or both (in fact, both were possible on the same leg).
- Speaking of being wet, that was constant because five obstacles on every lap (six once The Cliff opened at midnight) required you to completely submerge yourself (plus on six other obstacles, you either got partly submerged or, if you failed the obstacle, you fell into water, so some people were getting wet *a dozen times every lap*). This had a number of implications that made this race much more challenging than a typical endurance race:
 - a) It makes it very difficult to regulate your body temperature. In between water obstacles, you could get hot in your full wetsuit, but mostly we were cold from 6pm onward. (See the Q&A below for how I was able to partially address this problem.)
 - b) During the night you need to wear thick neoprene (3mm scuba diving) gloves to keep your fingers warm, which makes the many climbing/gripping obstacles extra difficult.
 - c) Every time you go into the water, hike/jog through sand/dirt, and crawl through mud, pebbles can get in your shoes, which forces you to run through the discomfort and hope it goes away, or take the time to stop and shake them out.
 - d) Your waterlogged feet can swell, making your shoes too tight or requiring you to change into a larger pair.
 - e) Trying to run a race while wearing a wetsuit can cause chafing; was constricting, making it harder to climb, jump, etc.; and added a lot of extra bulk and weight, which got really tiring as I hiked/jogged mile after mile. Ditto for my constantly wet shoes and socks.
- The course map says there was 865 feet of elevation gain (and loss) per lap, which is a lot of hiking up and down.

- The terrain was very loose and unstable – maybe half of the course was on various packed dirt roads, but the rest was sand and gravel with lots of rocks, which made it very difficult to jog at any pace, especially at night, as the risk of rolling your ankle was high.

How does this compare to an Ironman?

I don't know, as I've never done one (not even a half or an Olympic-distance one – nor do I intend to). It also depends on how many laps you run at the WTM. Mark James, who (long ago) ran the Kona (Hawaii) Ironman 10 years in a row when he was a professional triathlete, told me that the 60 miles he did at the WTM last year was massively harder than any of the Ironmans because: a) it's twice as long (timewise); and b) you can't get into a rhythm like you can at an Ironman (biking for six hours straight, for example).

What conditioning/experience is needed?

None is required – and I saw a few seriously out-of-shape/overweight people out there. They have my total respect, as this is really hard even if you're in great shape.

But if you want to do well – say, complete 50 miles, as 45% of the finishers did (654 of 1,468) – then you need: a) a *very* high level of fitness (this is 24 hours of pretty sustained effort, so as one benchmark, you should be able to run a marathon in under five hours; ideally four); b) a high degree of athleticism (in order of importance: balance/coordination, lower body strength, upper-body strength, and flexibility); and c) fearlessness.

How did you train for this?

Obviously the best way to train for a long-distance trail race is to do a lot of long-distance trail running. However, I did very little – I just don't have the time or interest, and worry about getting chronic injuries that all older runners seem to have, so instead I did hour-long (but typically very intense) workouts pretty much every day (and in the weeks before the race, twice a day).

In a typical week, I play hard pick-up basketball a few times, a couple of hours of tennis once or twice, do a ridiculously hard hour-long workout with a trainer once or twice (often wearing a 20-lb. weight vest), and ride my bike a few miles a day to get to and from meetings – and that's pretty much it.

Then, maybe one weekend a month, I do some sort of race/challenge: a Tough Mudder or Spartan race (typically two laps) if there's one in the area (I'm not one of those folks who travels all over the country to do these races), a trail race, I climbed three big mountains in the Alps (Eiger, Jungfrau, Monch) in August, etc. Thus, I was reasonably mentally and physically prepared, but this race took it to a whole new level.

While my running training was laughably inadequate (though to repeat what I noted above, I do think there's something to be said for not burning out your legs and getting plagued with injuries, especially at my age, by putting too many miles on your legs), I did work hard on building my grip and upper-body strength, which I think is the second most important area, as 2/3 of the obstacles demanded this. They were all somewhat different – climbing a wall or cargo net, doing rings and monkey bars, etc. – but they all boiled down to being able to grip something and pull your body up.

There's a simple test for this: how many consecutive pull-ups can you do? For a race like this, the answer should be at least 10. My max is 30, which was key to my race, as I only incurred eight time-and-energy-consuming penalties during the entire race.

(For those of you who live in NYC and have an interest in a personal trainer, I highly recommend the two I use (once a week each): Richard Louis of FitSpace NYC (rplouisnyc@gmail.com) and Carlos Munoz at Definitions (munozcelo@aol.com). I also do regular group workouts at [Tone House](#), [Ripped Fitness](#), and [East End Row](#).)

In light of your “laughably inadequate” running training, why didn’t your body break down?

- 1) I got lucky;
- 2) I walked all of the uphill and, in the early part of the race, didn’t try to run too fast;
- 3) My workouts with my trainers are super intense – pretty much everything to failure – which I think has really toughened up my joints, muscles, ligaments and tendons (and my mind!); and
- 4) I’ve become a big fan over the past two years of shiatsu massage (I go to a place in NYC with a cult following called Salon de Tokyo). A little Chinese woman (ask for Mimi), holding onto a bar in the ceiling, stands on my back and legs and applies every ounce of pressure onto one-inch areas. It’s so painful! But I can hear and feel my tight joints and muscles loosening up.

What was the hardest part?

The hardest thing for me was to just keep on going for nearly 24 hours, especially after I got cold. Thankfully, I love obstacles – they keep me entertained. Had this been a 24-hour ultramarathon, I would have gone crazy from boredom after a few hours and stopped.

What are the keys to success in this race, based on your personal experience and observation of others?

- 1) Being in shape, both running/endurance and upper-body strength.
- 2) Staying warm – but not overheating (see comments below).
- 3) Drinking enough water and ingesting enough calories (~400/hour?) to keep your body going. This is hard because when you’re exercising you often don’t feel like eating – but if you wait until you feel hungry, it’s too late: you can’t recover and you’re gonna bonk. Thus, it’s critical to force-feed yourself at every pit stop, however crappy it makes your stomach feel. (You can train for this, though I didn’t.)
- 4) Controlling your pace so you never get winded or overheated.
- 5) Using your (much stronger) legs rather than your arms on numerous obstacles, which preserves arm/grip strength (any rock climber will tell you how important this is). There’s not much you can do other than be as fast as you can on pure grip/upper-body tests like Stage 5 Clinger, Funky Monkey, Rope-A-Dope, Hangin’ Tough, and Kong Infinity. But you can do Snot Rocket, Abseil, Double Dipping, and Ladder to Hell using 90% legs, with arms mainly for balance.
- 6) Being assertive in asking for assistance. The #1 woman, Rea Kolbl, who finished 4th overall with 90 miles, said she regularly asked for – and got – help on obstacles like Everest (as did I) (her excellent write-up of her race is posted [here](#)). I think some slower racers felt like they didn’t want to bother the faster racers, who might resent being slowed down, but nothing could be further from the truth. We’re all part of one big team and family, so every single person out there, even the elite racers going for max distance and prize money, is happy to help another Mudder. But don’t assume that others know you want/need help – some people take pride in completing obstacles without assistance – so you need to ask!

7) Communicate clearly about what assistance you need. For example, I needed help every time on Everest (either 2.0 or 2.1), so when I was ready to run, I made eye contact with the people at the top, made sure they were ready for me, yelled “Two hands!”, and then held up both hands in the position I’d have them. Then, once they’d grabbed me and pulled my hands up to where I had a grip on the top, I said, “Let go” because I could pull myself up (i.e., I didn’t need them to grab one of my legs).

8) Knowing when to give up on an obstacle you were never going to complete (to save energy and preserve grip strength) – yet also doing every obstacle possible (to avoid time- and energy-sapping penalties). Examples abounded: a) why take a penalty on Everest – there were always people at the top to pull you up; and b) once The Cliff opened, it was a gift, as it saved a long run and/or swim, so I strongly suggest overcoming the fear of jumping and doing it.

9) If you’re not sure if you have enough time to make a particular milestone (25, 50 or 75 miles), it’s okay to ask to cut a line. In general, cutting is frowned upon for obvious reasons, but if you’re tight on time, just ask “Do you mind if I go ahead of you?” Every Mudder is always willing to help out a fellow Mudder!

How did you maintain your body temperature and not get too hot or too cold?

Everyone seemed to have pretty much the same gear for the hot weather at the start: a light top and shorts/tights. Then, most had some sort of transition gear (maybe a thin [“shorty” wetsuit](#)) as the sun went down, and a thin (3mm) full-body wetsuit and a heavy (5mm) one ([this](#) was the one I bought) for the night – plus associated hoods and gloves of varying types/thicknesses.

During last year’s race, it stayed reasonably warm until far into the night, so I was able to run light. This year, I tried to do this again and paid the price, even though I had a *huge* advantage that, to my knowledge, no other racer had: I had the [Quiksilver Mens Ps+Qs Heated Vest](#) (it’s been discontinued; I don’t know where to buy one now). This is a thin, sleeveless neoprene vest worn by cold-water surfers under their wetsuits. It has a heat pad covering the entire lower back, with a small (Snickers bar-sized) battery in a pocket on the hip with two settings: high and low.

This vest was an absolute lifesaver for me. As mentioned above, my shorty wasn’t warm enough once the sun went down so the only thing that kept me from getting frozen (as opposed to merely chilled) was turning the heater onto high. Then, in between water obstacles, especially as I was climbing into the hills, I turned it to low or off. In this way, I was able to preserve the battery for the entire night. (I also recommend the Neptune Thermoregulation System, developed by TM veteran Jason Rulo, which has six Hot Hands around the entire waist – click [here](#) and [here](#) for more info about this.)

Any tips on nutrition during the race?

I brought 5x as much food as I could possibly eat because I had no idea what to expect and what I might be craving. You don’t just want to consume energy drinks and gel – that’s fine for short races, but won’t work for long ones.

My main go-to “real food” was a rotisserie chicken that I consumed in pieces over the first half of the race. After each leg, I also ate a Snickers bar or bag of peanut M&Ms. I washed this down with three drinks:

- a) Coke (I like the taste, find it refreshing, and it has caffeine); and
- b) Ensure Enlive (“all-in-one advanced nutrition shake” – a ton of protein and calories).

I had an entire box of Gu, gummy shots, and energy jelly beans and didn't touch them. Go figure. It worked for me...

What would you have done differently/what will do you differently next year?

1) Get into warm gear faster. Also, Rob Majors (my pit crew) lent me his Goretex windbreaker, which I wore over my wetsuit and it made a big difference. I should have also brought and worn my windproof pants.

2) I gave more help than I received on the obstacles during the race, but feel like I could have done more.

3) I'd make sure I had two people in my pit crew – one person halfway out on the course who I could give instructions to, who could then call them back to the other person in the pit.

How did you feel afterwards?

Every part of body was quite sore for 3-4 days afterward, but I recovered fairly quickly. I took four Advil (800mg of ibuprofen) every four hours once the race ended until the following Wednesday to manage the pain and inflammation, and I needed Ambien to sleep the first few nights afterward.

Is there actually any danger?

Well, it depends on how you define danger. There are plenty of opportunities on many of the obstacles to slip and fall, get banged up, maybe even break a leg or arm, but there were no major injuries at this race – depending on how you define “major” I suppose.

One of the lead women slipped on Funky Monkey, fell into the side of the pool, and knocked herself out, ending her race. And there's plenty of opportunity to mess yourself up jumping 35' off The Cliff. If you land slightly wrong, you can break your tailbone (on one jump last year, I was leaning back a tiny bit and bruised it, and the female winner a few years ago, Amelia Boone, actually broke it – but kept on racing and won!).

But if you define danger as the risk of death, you were probably more likely to die driving to/from the airport (15 miles away) than you were on the course. That said, at a regular Tough Mudder race in 2013, a guy drowned years ago when someone else jumped on him, knocked him out, and nobody noticed until it was too late. And a year ago at a Tough Mudder in New Jersey, I saw a big guy being rushed off the course on a stretcher on the back of a cart and heard the next day that he'd died of a heart attack.

What advice would you give to Tough Mudder for future WTMs?

1) People love getting recognition: patches, bibs, awards, etc. I think having a patch for 25 miles and a bib at 50 miles (which 45% of finishers achieved) is just right, but having the next bib at 75 miles (which only 2.7% achieved) is too much. I saw a lot of folks get 50 miles and then mentally or literally stop, even though they could have kept going for another lap or two, because they knew 75 was out of reach. Why not have a 60-mile bib? Also, why not have awards by age categories (selfishly speaking!)?

2) Put a few Port-a-Potties near the start/finish area for use just by racers – the closest ones were much too far away.

3) Kill Pandora's Box, which was totally lame? It wasn't dark and the wires were so high that you could pull yourself through in less than 30 seconds with almost no risk of a shock. I'd be surprised if even 5%

of the people going through it got zapped - and the couple of people I talked to who did hit a wire said they barely felt it.

The contrast with Operation last year was stark. Now THAT was an obstacle worthy of the World's Toughest Mudder (see pic below)! (Especially given that I think TM's best known/most iconic challenge is Electroshock Therapy.)

Operation required good technique, steady hands & nerves, and a bit of luck - and if you took a jolt, you FELT IT and couldn't help but shout/yell/scream! (Of the 14 times I did it last year, I only got through without a jolt 5 times; 5 times I took 1 jolt; and 4 times took TWO jolts!)

It was a bit of a physical challenge, but mostly a mental one - in some ways, like the Cliff, which isn't primarily a test of strength or skill but rather a mental one that forces many folks to face their deepest fears: of heights, darkness and water. That's one of the things that makes Tough Mudder races so special and unique: forcing participants to face - AND OVERCOME - their fears.

Imagine if The Cliff was lowered from 35' to 8'. Sure, a few people might be a little nervous, but mainly it would just be lame!

I think Pandora's Box cheated us all.

PS - Please don't read this as a general criticism - this was a GREAT race overall and I loved all of the other new obstacles!

4) I think there should be modifications on the course so that people (like me) who want an extra-tough challenge (and perhaps even qualify for awards and/or prize money) can have it, but others aren't hurt and/or demoralized, which I saw a lot of. But rather than making it men vs women, instead have it be elites vs. amateurs (I'll leave it to others to determine whether one has to qualify to run the elite course or can simply self-declare, just as, for example, anyone can do if they want to run the Tougher wave).

Here are a few ideas for how some of the obstacles at the WTM might have been modified for elite vs. amateur competitors:

- Everest: for elites, it's a must-complete; no penalty if they do 2.1; if they do 2.0, then they must do the long penalty; for amateurs, they can do either 2.1 or 2.0 for no penalty; skipping it would result in the brief sand-bag penalty
- Humpchuck: put a 2x4 step in the middle of the wall on one side, which can only be used by amateurs
- Pyramid Scheme: put ropes down from the top on the amateur half of the wall
- Snot Rocket: no barrels to duck under or water coming down on the heads of amateurs
- Rope-a-Dope: put some knots in the vertical rope for amateurs (and maybe shorten the penalty for them as well)
- Stage 5 Clinger: amateurs wouldn't have to switch to the metal handholds at midnight, and maybe put in a larger foothold for them
- Double Dipping: on the amateur half of the second wall, nail a 2x4 step halfway up the wall
- Funky Monkey: for amateurs, maybe just have monkey bars up and down (no wheels); also, shorten the penalty; lastly, maybe do what they did at WTM 2016: during the night, put a plank out so amateurs could skip the monkey bars and go straight to the wheels
- Hangin' Tough: straight rings (not up-and-down ones) and no bungee for amateurs

- Kong Infinity: I'm not sure how to make this easier, but maybe have a shorter penalty for amateurs
- The Cliff: have a platform 20 feet up for amateurs

I'm sure many old-timers/purists will cringe at these suggestions, saying it would make the course too easy, to which I say: a) this doesn't apply to you: just sign up for the elite division and do the hard course; b) I think the amateur course would still be pretty hard; and c) it would be easy to experiment with this next season, maybe modifying only a few obstacles and starting with regular TM races whereby the Tougher and Toughest heats would have the elite-level challenges.

How much does it cost?

Registration prices vary, but average ~\$550, but that's just the start. If you don't have the gear, you can easily drop \$1,000 on this (I spent quite a bit more last year, but I was over the top for sure – and didn't have to buy anything but food this year), plus flights and hotel – not just for you, but your pit crew as well. It ain't cheap! (Note that the 2018 WTM will be in Atlanta Nov. 10-11.)

What does Susan think of this?

Not much. But she's been endlessly loving and patient with me for more than 27 years of my foolish escapades – and I haven't killed myself yet! And she knows from long experience that if she raised doubts/concerns, it would just give me more motivation! And she takes comfort in my large life insurance policy... ;-)

Appendix B: Mark James's Write-up of the Race

I loved Mark's write-up of the race:

I'm still in bed with my forlorn Husky Sisu at my feet who desperately wants a walk but I can barely move without something stinging or hurting. I'm tired but also too wired still from the event and reading FB WTM posts to sleep. This is what I remember in no particular order from WTM2017. It's extremely long so feel free to just scroll past it look at a picture or just go to the next post.

Here goes:

1. The registration line for Contenders (which started before 0700) was longer than the one at the Metallica concert I went to last summer Open division had it way easier.
2. The mad rush to get a good pit spot was just that!
3. When setting up your tent leave something heavy inside it or it will blow away like mine did. Thank you Tank for rescuing it.
4. Ice melts in the sun. In your car. When it's not in an ice chest.
5. Waiting for a room for 3+ hours at the Westin is a great place to meet people. Especially by the entrance door. I officially meet Eric Emerson Botsford E-Roc and Coach for the 10th time and they kind of know who I am. Or that I do Tough Mudders. Or something.
6. Having to wait those 3+ hours for a room can get you a free breakfast if you play your cards right.
7. Still waiting for a room I spot Allison Tai the pool with her kids. She seems like a really cool mom.
8. Henderson Walmart has everything. I got the best deal on Halloween stuff and gift wrapping.
9. At least seven people recognize me from the Amazon video and actually say hi to me. Another 3000 walk by me like I'm a regular Mudder which is how it should be.
10. Not having my usual glass or two of wine before the race was very hard for me. Maybe I should go to meetings.
11. I think I slept. But I'm not sure.
12. Not having a cup or two of coffee in the morning before the race was very hard for me. Maybe I should go to meetings.
13. I spot E-Roc having breakfast with Jaime at the Westin. We do a solid hand shake. We are now bros. He so cool.
14. 0700-1100 on race day goes really fast.
15. The sound system was quirky in that it played music fine but whenever the race announcer talked it cut out intermittently.
16. Sean Corvelle does not need a Mic.
17. Jim Campbell is always the first guy up that Start line hill.
18. The buffs they gave us were worth a \$500 entrance fee.
19. Hey where did the Wedgie go?
20. Gotta love the "No obstacle" lap. Ironic since all of us loathe doing marathons and are self-described obstacle course racers.
21. Hey there's Tex Ritter sporting the Irish colors.
22. It got really hot fast but I couldn't strip down anymore from my race bib, hat, shorts and shoes without socks. Maybe next year I'll just paint my outfit on.
23. A swim after Mile 4? Ah there is a God! I spot E-Roc and Jaimie on the river bank drinking wine and chilling. I choke on water. They laugh. It's great. He's married and I'm not gay. Damn. I Wait I'm married too! What is in this water?
24. I finally catch up to Joe Perry. He's kinda to spot!

25. One lap done and I'm in the zone. Joe pits and I don't. No need to at this point.
26. Another lap done and I am the zone. Who needs to Pit anyway?
27. Another lap and I can't remember if I've done an obstacle yet!
28. Never mind the silver Bib I'm going for the orange blazer.
29. Ryan Atkins passes me and I tell him I'm still 20 miles in Holy Grail points ahead of him.
30. I'm liken Dope a Rope.
31. I spot Jennifer Nelson the Tough Mudder Amazon film producer and offered to do a brief interview about how I'm just crushing it.
32. 5 laps in 5 hours maybe I should eat something.
33. Tyler Nash passes me like I'm moving backwards.
34. About to skip Pandora's box again I run into Charles Tank Lukancich who tells me it's really easy so I take his advice and follow him in the dark box fearing for my life. That ended up being my sanctuary zone the rest of the event.
35. I'm still without a wetsuit but the Suns going down so next Pit I'll put on a Shorty and put on my headlamp.
36. First fail on the funky monkey. How long can this penalty be?
37. OMG
38. Fail the Kong with the dumb ANW bungees but nail the rotating Kong which I really like.
39. Reward is another swim. Hmm!
40. Can't wait for the cliff.
41. Now it is certifiably dark.
42. I do the mental math five laps down and only have to go for 75. I figure I can go two hours per lap and still get this done.
43. Ryan passes me again. Again I remind him where he is in the HG standings like an idiot.
44. I spot E-Roc and Jaime and the crew working hard pulling uphill going up to Double Dipping. We are like besties.
45. I spot David Tyson Perry and his crew on the other side of DD. Coach is fired up.
46. Everything is great.
47. Everything is not great I just sprained my ankle so bad that I heard a couple popping sounds. Two Mudders behind me stop to assist and ask me if I need medical attention.
48. I make it back to my tent and frantically search with the help of my buddy Whitney Tilson and our last minute shared pit crew guy Rob Majors for an ankle brace I have stuffed somewhere in all the crap I brought.
49. Definitely a game changer.
50. Breathe. Improvise. Adapt. Overcome.
51. 10 minutes of pit time- my longest yet I slam two chocolate Ensures, a Gatorade and two bananas and head back out with a noticeable limp.
52. Take my first Everest penalty. It's a run swim run. That used to be my favorite sport now it's becoming my least favorite.
53. The showerheads at snot rocket are off. Quick sprint to beat them coming back on again.
54. Too late just as I enter the tube they flash on and the water seems colder than any Arctic enema I can remember for a long time.
55. I start struggling on obstacles I did easily before and fail Dope a Rope as I can't lift the weighted rope up with my swollen foot to climb the rope.
56. Dope a Rope has a very long penalty I just found out.
57. I not only fail Funky Monkey again I also feel both Kong's.
58. Time to switch to a full wet suit I'm starting to get really cold.

59. 45 miles in I'm wondering how much further I can go. I put on the wetsuit and head out one more time before grabbing a cup of noodles from the wonderful Orphan tent.

60. Cliff is open and I wonder if I can make the jump and not rip my foot completely off. I pass Darth Vader and am reminded what real perseverance and putting out is and tell myself to shut the fuck up.

61. There's a certain I don't know what when you step up to the edge of the cliff. Best bet is just to jump and not even think about it.

62. Lap times have definitely slowed down a lot. I do the mental math which translates to loser math in retrospect.

63. Ryan passes me again. I notice he has the word "Nobody" written on the back of his bib. We are now tied for the Holy Grail lead. Ironically all the lead gets you is bragging rights there is no money purse everyone who finishes a Tougher, Toughest and WTM gets whatever is in store for us.

54. My usual great happy go lucky spirit that I'm sometimes known for is waning and I try and find solace in anything. From that 3 to 6am or so window when it's the coldest when you're the tireddest it's very easy to come up with excuses and reasons not to be out there anymore. I think of my family who aren't here with me because of my mother in law - their grandma dying of cancer in her last days perhaps. I think of my grandparents who inspired me and supported me throughout the years who are no longer with me and others who have motivated me.

55. 60 miles in I've tied my mileage from last year. But it feels so much longer. There six hours left on the clock and I wonder if I can make it to 70 let alone 75. It seems like so much time but not when you're in the desert like this. Not when you're failing practically every penalty obstacle there is and a 5 Mile loop becomes closer to 8.

71. Lap 13 was a blur but I think Ryan passed me. I know Deanna Blegg passed me and I was impressed.

72. Going into lap 14 I came upon the realization that there's no way I could do to four laps under four hours.

73. Sue Harvey Brown gives me words of encouragement at Everest which I start doing again.

74. It's light out but the clouds cover the sun and there is only cold.

75. My watch stopped working.

76. I'm glad my watch stopped working.

75. I run into a Motley crew comprised of Amelia Boone, Stefanie Bishop, Matty Gregg and others who invite me to join them. It's the bestest.

76. We walk and amble along and tackle obstacles together like Blockness and Balls To The Wall and Berlin Wall making sure everyone gets up and over.

77. We make sure Ben Asian Sensation Chan doesn't take the penalty again at Stage 5 by getting him to the top of the obstacle.

78. James Brown catches us and suddenly I fully understand every word of his beautiful thick Brit accent.

79. I'm having the fun time I started with and came here for.

80. I've lost the Grail lead.

81. I don't care.

82. I didn't get the silver bib.

83. I don't care.

84. E-Roc is a younger version of myself but has better hair, better tats and friendlier smile.

85. The Cliff bypass swamp is second only to the Kiss of Mud far as cruelty to animals.

86. At the Cliff cargo net I almost forget I haven't crossed the finish line and schmooze along the shore catching up with new and old friends showing off my battered very swollen hands.

87. Superman and his whole crew scoot by and I amble behind them to the finish line. They are the true heroes.

88. I wasn't very good at packing up stuff I was so fried. In fact this year was a complete role reversal of last year when I packed up all of Whitney's gear. This year he reciprocated just fine.
89. Back at the hotel I shower, try to sleep for hours and then drive frantically to get Whitney to his red eye flight back to New York with only 30 minutes to spare.
90. Don't eat a thing and wake up rabidness at 4:30. Have to wait till 0600 to order room service.
91. Go on Facebook and realize I'm not the only one awake at this hour. Mark Jones has already written several chapters and gone for a 20 mile morning run.
92. I pick up my holy grail award that we've all been curious about all year long. Despite it being "only" a mug apparently you can get a free beer if you want to lug it around to all the Tough Mudders next year. I'll probably take advantage of that.
93. I get to sit with famous people like Joe Perry, MJ, Melissa Dugan, Chris Betcher and JahLisa James.
94. I get a pseudo-honorable mention for the Holy Grail points which actually meant a lot to me.
95. Will Dean always makes fun of his own British accent. He still brilliant!
96. I drink two beers from my Holy Grail mug, chill for a couple of hours till they kick me out of the hotel room and drive back to San Diego.
97. Did you really think I was going to go to 100?

Thanks to everyone besides my sister and my mother for reading this. I really enjoyed the Tough Mudder season this year and meeting so many of you. I love being part of this TM family.

Everest

This is an iconic Tough Mudder obstacle, in which you run up a curved wall, grab the top, pull yourself over, and climb down. This year there was an interesting twist: the wall was split into two parts: the left two-thirds of the wall (labeled Everest 2.0) was the old Everest – still challenging but some racers (not me!) could do it without assistance. The rest of the wall (labeled Everest 2.1) was 2-3 feet higher but had a good grip right at the top so was only slightly harder. Thus, racers had three choices: skip it entirely and do a penalty walk that included going in the lake; do Everest 2.0 and do a short one-minute penalty walk with a sandbag; or do Everest 2.1 without penalty.

The “penalty” was so short that I was agnostic whether I did 20.0 or 2.1 – it just depended on how long the line was and whether there were fellow Mudders at the top to grab my hands and pull me up. (Racers are allowed to help each other on the course, but no spectators/pit crew are allowed to provide any assistance (water, food, a push up a wall, etc.) whatsoever – only in the pit area after each lap.)

Here’s a screenshot from my video (which is why the resolution is so poor – true of many pics below):



This picture (I found on the internet, from a regular TM race) shows the lengths to which racers will go to help each other (usually there are 1-2 people at the top and racers just run up, grab hands and get pulled up):



(Funny story: my 76-year-old mother did a TM in New Hampshire with me in August 2016. Unfortunately, she is the world's slowest runner so when we came to Everest 2.0, she couldn't get within a country mile of our outstretched hands. She had given up and was walking around it when a woman at the top suggested that we form a human pyramid at the base so my mom could climb up on top of us high enough to reach the people grabbing down from the top. As you can see from this video, it worked: <https://youtu.be/EgNnqvO2zWA> (4:31)! Everyone was cheering her and giving her high-fives!)

Humpchuck

This opened at midnight and involved wading/swimming across a short (maybe 100-foot) segment of the lake and climbing up an 8-foot slick wall at the other end:



Unlike last year, when there were two boards at the top (see pic below), this year there was just the board at the bottom, so even tall people needed a boost from the bottom or a hand from the top:



Mud Mile 2.0

I don't have any pictures of it, but here's a picture of a similar obstacle at TM Tristate in October:



Statue of Liberty

Like Humpchuck, this opened at midnight and involved a short swim, but instead of a wall at the end, you had to hold a lit torch (if you dropped it or the flame went out for any reason, you had to do it again). Being in the water at night was chilling, but otherwise it was an easy obstacle – and very cool visually, as you can see in this pic:



Pyramid Scheme

This is a slick, sloping wall that they made tougher this year by removing the top rope. So, if you're tall and have upper-body strength, you could grab the short rope in the middle of the wall and pull yourself halfway up, but then needed a hand from the top. Here are pics of me doing this last year:



Island Hopping

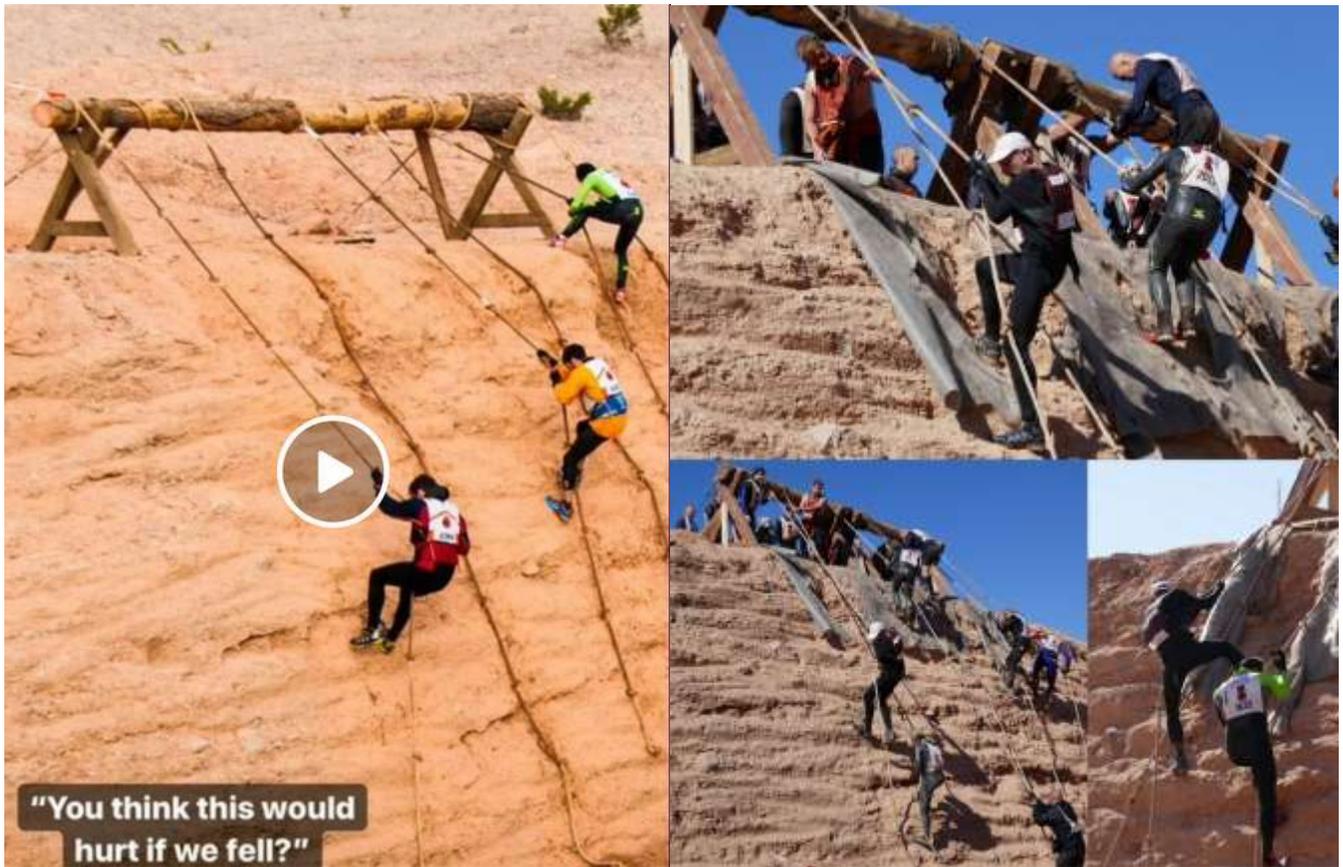
This is totally misnamed – it was just a very short waist-deep wade through a corner of the lake, which took ~10 seconds.

Pandora's Box

This was a new electric shock obstacle in which racers had to crawl through a dark box with electric wires and chains hanging down, but it ended up being totally lame. It wasn't dark and the wires were so high that you could pull yourself through in less than 30 seconds with almost no risk of a shock. I'd be surprised if even 5% of the people going through it got zapped - and the couple of people I talked to who did hit a wire said they barely felt it.

Abseil

This was a simple, quick rappel down. Piece a cake (as long as you're not afraid of heights)! Here's one pic from this year and a collage of pics of me doing it last year:



Devil's Quagmire

This involved crawling under a cargo net, dropping into neck-deep water, then crawling out using a rope net, with a cargo net on top of you. Here's a picture of it:



Snot Rocket (formerly known as Augustus Gloop)

This involves jumping in a neck-deep pool of water, wading across, ducking your head under some barrels and coming up in a tube, and climbing up it (using hand-/foot-holds on either side) while a firehose poured a ton of water on your head. This obstacle is a nightmare for anyone who has a fear of water/drowning or is claustrophobic – and was hard on everyone this year because the water coming out of the hose was FREEZING!



The Block Ness Monster

This one requires a bunch of people working well as a team. Everyone jumps into neck-deep water and pushes on the rotating, triangular-shaped thingie (I don't know what to call it). On each rotation, 1-2 people hold onto the top, are pulled over, and then grab the top and help keep it rotating so the others can get over. Then repeat this once more and you're done – great fun! Here's a pic from this year and a collage of pics from last year:



Ladder to Hell

This opened at midnight. It wasn't particularly hard – it's just that was at the highest point of the course, after a long uphill, so it *felt* hard!



Rope-A-Dope

This was an outstanding, super challenging new obstacle that involved jumping from the side of the pool, grabbing the rope, arresting your fall before you hit the water, then climbing the rope, reaching a hand, arm and foot over to the 45-degree-angled down-rope, and then sliding down. I nailed this every time except the one time I was wearing scuba gloves, which had no grip, which was good because the penalty was really long. Here's my pic followed by one someone posted in which he Photoshopped himself falling head-first, which is what he did!





Reach Around/Stage 5 Clinger

Reach Around wasn't too hard as you could use your feet on the inverted ladder to climb up, as you can see in this picture:



At midnight, however, they shut down Reach Around (the first two platforms in the picture above) and instead you had to do Stage 5 Clinger (the back three platforms), in which there was no inverted ladder. Instead, you walked under the monkey bars to the wall, climbed up a couple of easy steps, turned around and used the monkey bars (maybe with a foot on the side rail) to work your way back to the front, then grabbed the front edge and turned yourself around again, and then (the hard part) you needed to pull yourself up onto the "roof" (the key was putting your foot on the little block of wood nailed to the side support). If you didn't have the grip or upper-body strength to do this, you could ask for help and kneel on someone's shoulders as they walked under the monkey bars, and then stand on their shoulders to get over the top. This was key, as the penalty was brutally long.

Kiss of Mud 2.0

This involved crawling under barbed wire through mud (and, at times, some muddy water) for maybe 50 feet. I long ago discovered that there's a hard way to do this – crawling – and an easy way – rolling. (You can see me doing so in Susan's short video clip from a year ago: <https://youtu.be/2QxAalZY6Tc>.) Yes, the latter can make you a little dizzy, but relative to crawling it's so much earlier and faster and you don't get scraped up. I don't know why most people haven't figured this out – try it, you'll like it!



Double Dipping

This consisted of climbing over two walls – made extra hard by the fact that this was at the top of a long, tough hill. Again, you didn't want to fail this, as the penalty was very long.



Shawshanked (a variant of the old Turducken)

This required you to wade through water, turn yourself around and pull yourself with a rope up a tube, drop backwards into a pool of, and then crawl out using a rope cargo net. It wasn't particularly hard but got you wet and tired as you approached the brutally tough obstacles at the end of the course. Here's the first part:



And here's an old pic of Mark James and Maxine Colvey about to drop (from TM Philly 2016) and me climbing out in the middle of the night:



Funky Monkey 2.0

This obstacle has always been my nemesis. You go up a set of maybe a dozen monkey bars (see lower left picture of me doing so at another TM race), then have to reach to a horizontal wheel and spin around on it and grab a big vertical wheel (which I'm doing in the top picture), swing down to a smaller vertical wheel (top and lower right pictures, from last year's WTM) and, finally, to a bar before getting to the landing platform.



When I'm fresh and my grip strength is strong, I have no problem, but when I get tired, my grip strength often gives out right near the end. The key I discovered this year is to go up the money bars backwards, with only one hand on each bar, which gets me to the top quicker so I can finish before my grip gives out. Here are pics from this year's race:



Hangin' Tough

(14:30) This was a new obstacle that was particularly challenging early on when the middle (of 5) rings was instead a bungee cord with a knot at the end. When you grabbed it, it stretched, which surprised me and I fell off the first time. The next time, when I knew what to expect, I nailed it (especially once I figured out that the best way to go across was sideways). One guy sprained his finger on it, so they substituted a ring maybe a third of the way through the course, as you can see here:



Kong Infinity

This was an awesome new obstacle that involved grabbing rings to make a barrel rotate to go up a ramp and then transition to monkey bars to the platform. It was wildly difficult and almost nobody was getting this at the end (especially since our grips and upper bodies were burned by Funky Monkey and Hangin' Tough).





The Cliff

This is the iconic obstacle at the World's Toughest Mudder, and to build the suspense, they don't open it until midnight. It's very simple: step off a 35-foot platform, plunge feet-first into the lake, swim 100 feet to the other side and climb out using a rope cargo net.

If you're afraid of heights and/or water, this is your ultimate nightmare – 35 feet is really high! And there's plenty of opportunity to get hurt because if you land slightly wrong, you can break your tailbone (on one jump last year, I was leaning back a tiny bit and bruised it, and the female winner a couple of years ago, Amelia Boone, actually broke it – but kept on racing and won!).

If you wanted, you could skip it, but this required you to climb down to the shore and do a much longer swim, so it cost an extra five minutes at least I heard. I found it to be a thrill and enjoyed the half-dozen times I did it.

Here are pics of me doing it last year:



Here's what I saw right before I jumped this year:



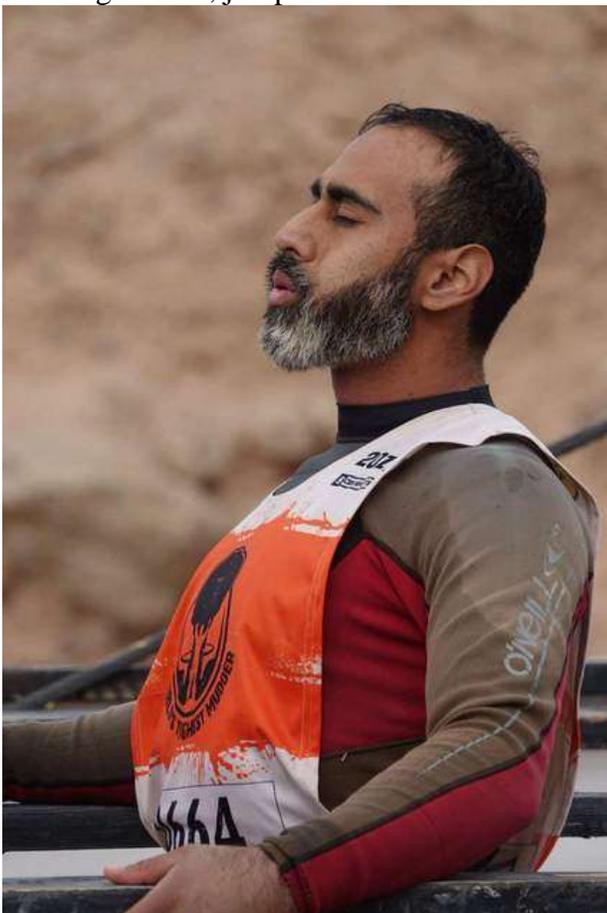
And here's what I saw from the water – the next guy jumping:



Here's a cool picture of the male sprint lap winner (who gets a green bib) jumping:



I liked this pic of a guy breathing deeply to overcome his fear – but he overcame it and, with the crowd cheering him on, jumped!



After climbing out of the water, it was a short jog back to the finish/start area:

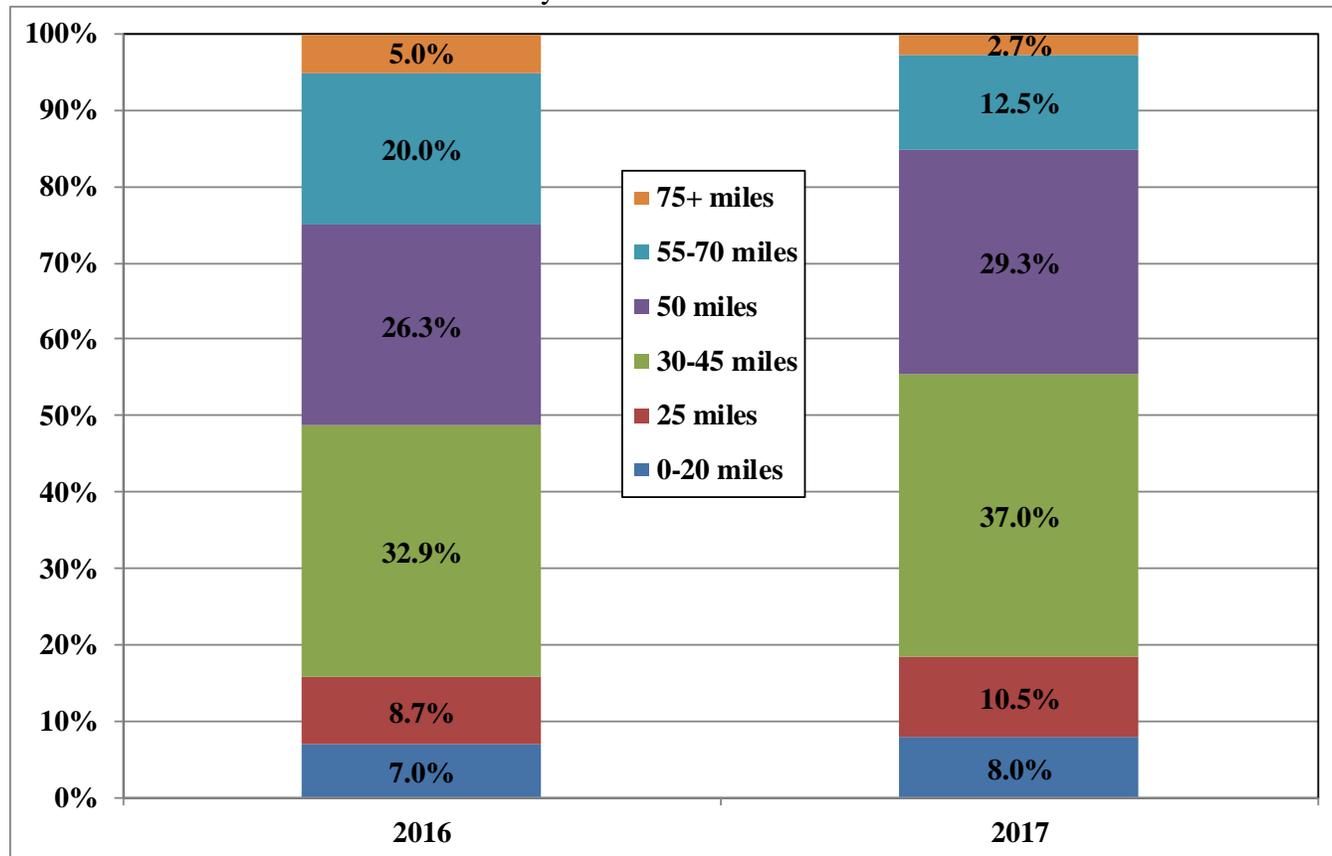


Appendix D: A Comparison of 2016 vs. 2017

After so many people got big mileage in 2016, Tough Mudder promised to make the course tougher – and (combined with the cold) it was!

Specifically, this year, only 40 people got 75 or more miles (2.7% of the 1,467 finishers), barely half of the 5.0% who earned silver bibs last year. And only 44.5% got at least 50 miles this year vs. 51.3% last year.

This chart shows the breakdown for each year:



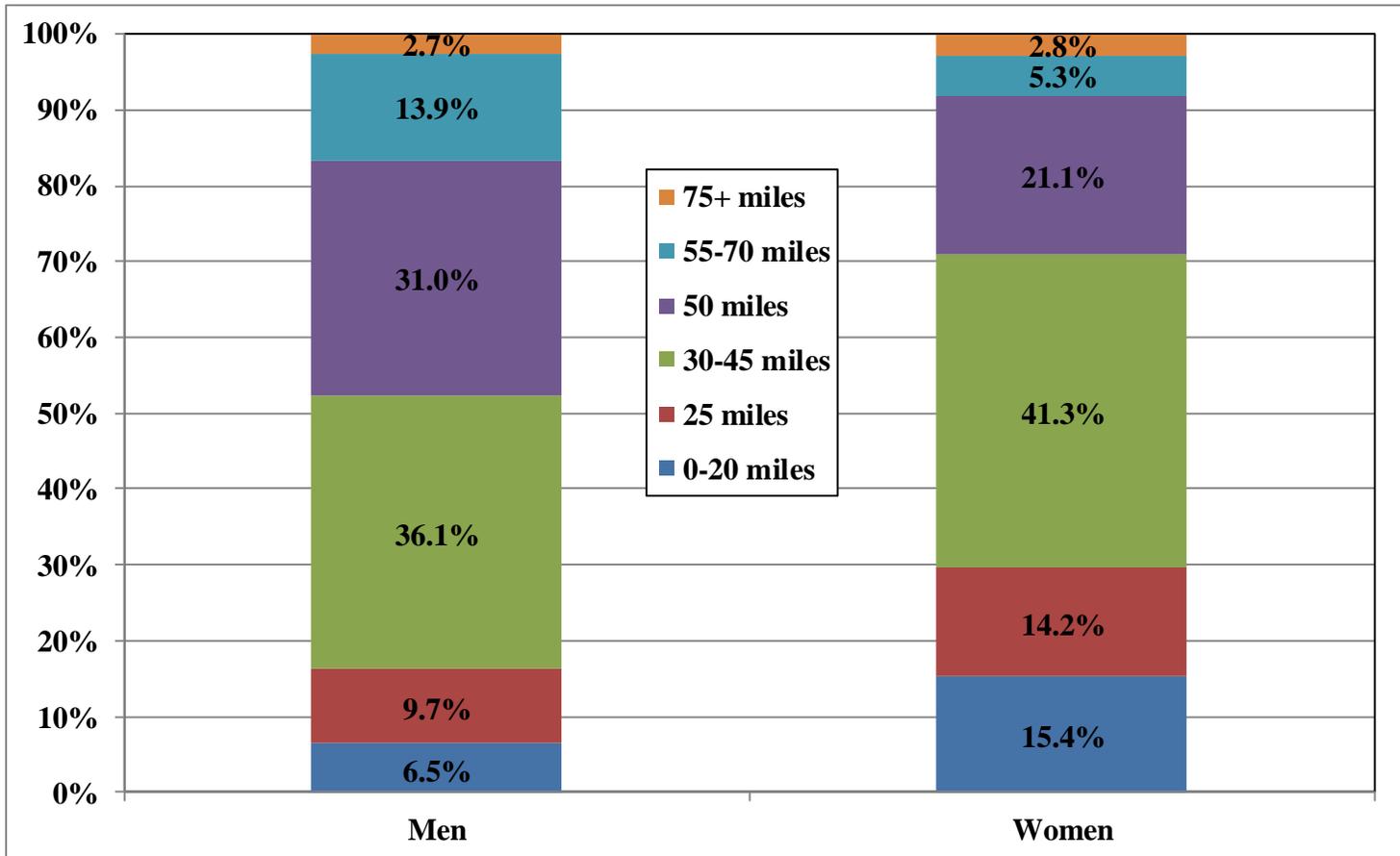
The decline reflects, I think, a number of factors (other than we'll all just getting older – LOL!): a tougher course (more vertical, especially after midnight), harder obstacles (Rope-a-Dope and the back-to-back-to-back three at the end, Funky Monkey, Hangin' Tough and Kong Infinity were especially tough), MUCH longer penalties (especially when they at least tripled the penalty for Kong midrace) and, most importantly, the cold, which I think was the biggest difference from last year.

I think many of us (myself included) were lulled into complacency by the wonderful forecast, which showed the temperature only dropping to a low of 56 degrees. But I think it went lower than that, plus most of the course had a ~10 mph wind for most of the night, which is bad enough when you're dry (making the effective temperature 40), but even worse when you're wet. Being cold for an extended period destroys you, both physically and, worse yet, mentally.

Appendix E: A Comparison of Men vs. Women

The 17% of finishers who were women (247 of 1,468) have my total respect: this was a really tough race with many obstacles that required enormous upper-body strength.

Remarkably, a higher percentage of women finishers (7 or 2.8%) got 75 miles than men (2.7%), though 47.7% of men got at least 50 miles vs. 29.1% of women, as this chart shows:



Appendix F: My Lap Reports

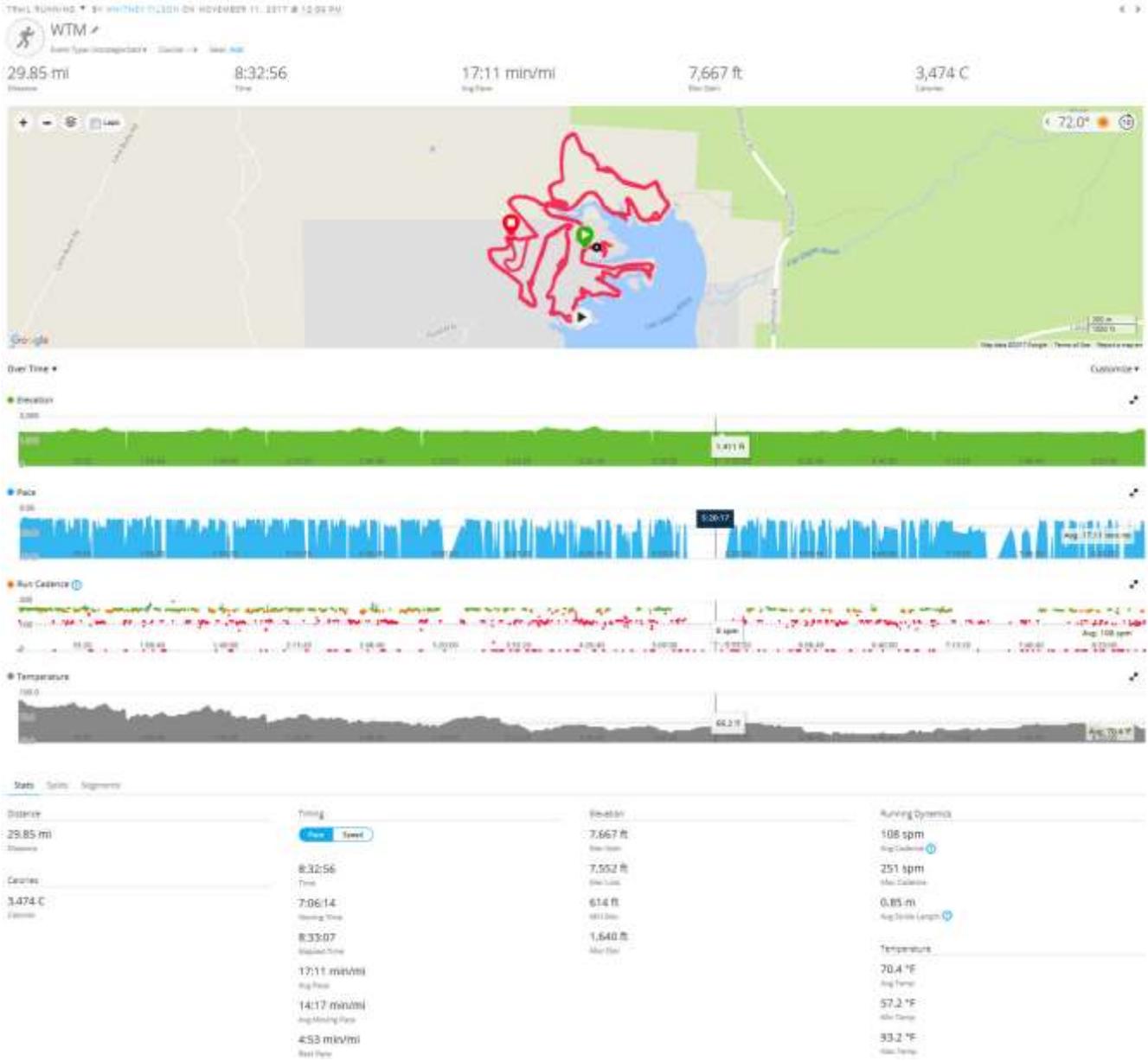
Here is my lap report:

The screenshot shows the 'WORLD'S TOUGHEST MUDDER' website with a navigation bar and a search bar. Below the navigation bar, there is a table of lap reports for Whitney Tilson. The table has columns for 'Mile', 'Time', 'Lap', and 'Total Time'. The total time is highlighted in red as '22:15:00 @ 55Mi'. The table shows 11 laps with times ranging from 9:00 to 20:37.

And here's my analysis of it:

athlete	in age		in	bib	time at last mi		total	mil			
Whitney Tilson	3	51	143 M	651	22:15:00 @ 55Mi		#####	55			Cum mins
<u>Mile 1</u>	<u>Mile 2</u>	<u>Mile 3</u>	<u>Mile 4</u>	<u>Mile 5</u>	<u>Start time</u>	<u>Finish time</u>	<u>Pit time</u>	<u>LAP TIMES</u>	<u>Mins/lap</u>	<u>on course</u>	
9:00	10:46	11:35	13:33	10:46	LAP: 1	12:00	56:18:00	0	55:41:00	56	56
12:48	11:53	13:07	14:48	11:05	LAP: 2	12:56	2:00:23	1	1:03:42	64	119
12:13	14:28	14:36	16:28	11:39	LAP: 3	2:01	3:11:28	11	1:09:25	69	188
12:18	18:51	18:55	21:14	22:52	LAP: 4	3:22	4:56:36	34	1:34:12	94	282
18:19	20:39	20:56	20:46	14:00	LAP: 5	5:30	7:05:14	35	1:34:43	95	377
21:18	19:30	21:21	31:08:00	18:49	LAP: 6	7:40	9:31:40	26	1:52:08	112	489
16:15	21:06	18:31	31:58:00	21:26	LAP: 7	9:58	11:46:34	62	1:49:18	109	598
6:19:00	25:17:00	42:56:00	26:06:00	15:09	LAP: 8	12:48:00	15:03:14	10	2:15:48	136	734
5:45:00	25:08:00	35:29:00	27:35:00	22:32	LAP: 9	3:13:00	17:29:40	11	2:16:30	136	870
6:53:00	27:22:00	33:44:00	25:40:00	20:37	LAP: 10	5:40:00	19:54:23	2	2:14:18	134	1004
--:--	--:--	--:--	#####	LAP: 11	7:56:00	22:15:00	2:19:00	139	1143		
Total pit time (minutes): 3 hours, 12 min.											
Total hours on the course: 19 hours, 3 min.											
Total hours: 22 hours, 15 min.											

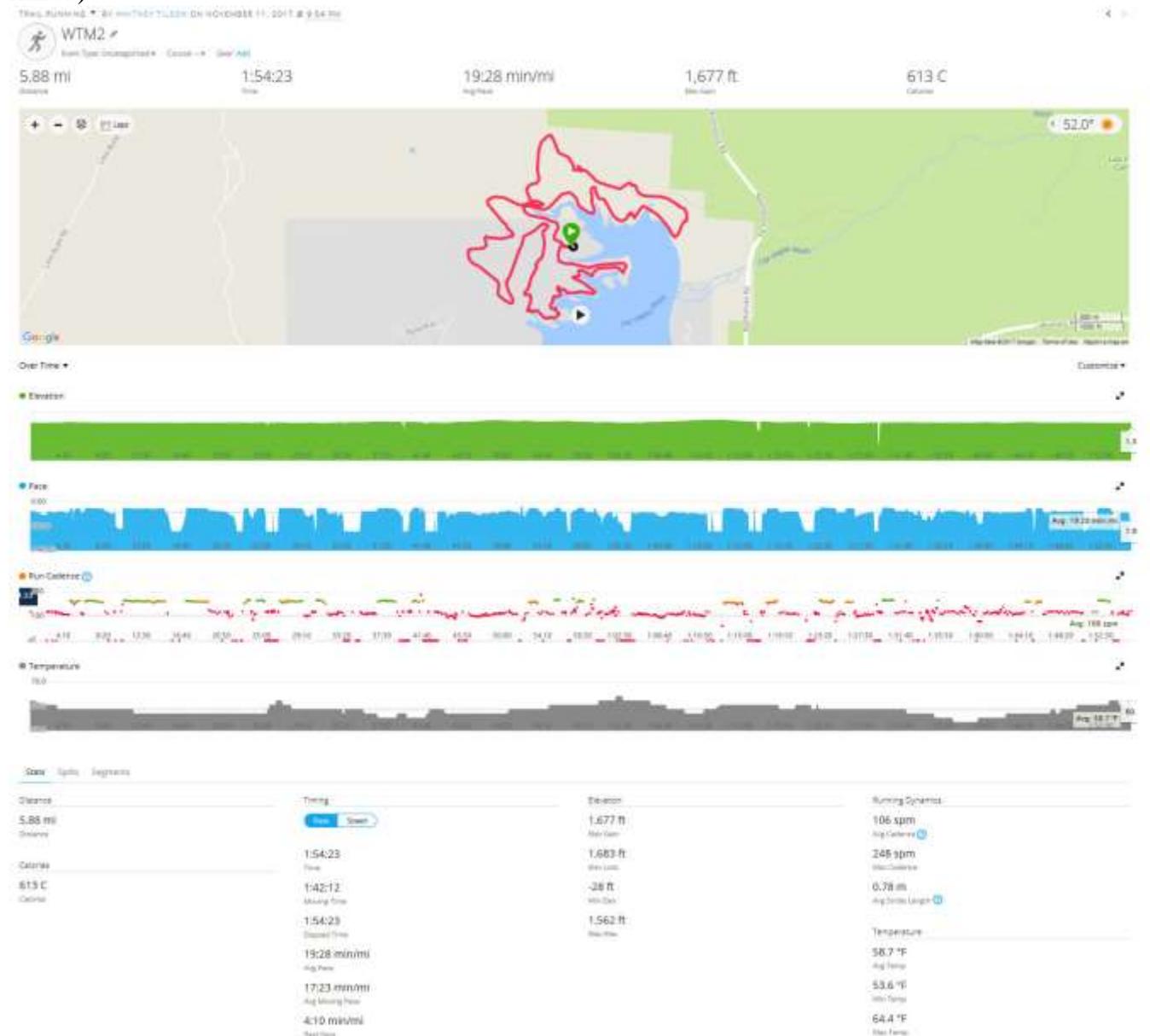
Here is my Garmin watch report for the first 5+ laps (don't ask me why it stopped):



Here are my mile splits from my watch (again, just the first 5+ laps & 30 miles):

Splits #	Time	Cumulative Time	Moving Time	Distance	Dev Gain	Dev Loss	Avg Pace	Avg Moving Pace	Best Pace	Avg Run Cadence	Max Run Cadence	Avg Stride Length	Avg Temperature	Cadence
1	8:34.4	8:34.4	8:54	1.00	48	82	8:34	8:54	7:55	158	174	1.06	88.9	126
2	10:28	19:02	10:24	1.00	65	43	10:28	10:24	9:02	158	171	0.96	86.3	130
3	12:24	31:26	12:24	1.00	104	194	12:24	12:24	8:36	144	163	0.90	87.7	123
4	13:57	45:23	12:47	1.00	203	289	13:57	12:47	9:06	136	170	0.90	86.0	119
5	11:03	56:26	10:57	1.00	809	708	11:03	10:57	9:54	150	175	0.97	88.7	120
6	12:48	1:09:14	11:27	1.00	82	82	12:48	11:27	4:53	127	185	0.99	78.3	124
7	11:40	1:21:06	11:37	1.00	88	88	11:40	11:37	9:22	156	200	0.86	79.5	127
8	14:10	1:35:16	13:27	1.00	190	190	14:10	13:27	8:49	133	212	0.85	84.0	118
9	13:41	1:48:57	12:16	1.00	702	702	13:41	12:16	8:09	131	233	0.90	76.3	113
10	11:34	2:00:31	11:30	1.00	358	377	11:34	11:30	9:54	151	242	0.92	74.0	121
11	13:33	2:14:04	11:30	1.00	56	89	13:33	11:30	8:43	138	180	0.89	76.3	125
12	13:31	2:27:35	13:30	1.00	118	75	13:31	13:30	9:18	138	239	0.86	74.7	123
13	15:54	2:43:29	14:23	1.00	223	217	15:54	14:23	10:05	123	236	0.86	71.8	115
14	15:58	2:59:27	13:24	1.00	305	308	15:58	13:24	9:37	117	182	0.86	71.1	110
15	11:38	3:11:05	11:35	1.00	731	771	11:38	11:35	9:24	150	171	0.92	88.2	114
16	23:15	3:34:20	14:43	1.00	82	79	23:15	14:43	8:36	91	175	0.85	73.4	123
17	18:23	3:52:43	14:22	1.00	154	188	18:23	14:22	9:04	118	251	0.84	72.4	119
18	18:50	4:11:33	18:14	1.00	209	228	18:50	18:14	8:17	99	171	0.86	64.2	104
19	19:20	4:30:53	17:54	1.00	298	240	19:20	17:54	9:37	104	174	0.90	67.3	109
20	24:45	4:55:38	15:47	1.00	584	679	24:45	15:47	9:09	77	229	0.85	63.3	104
21	28:57	5:24:35	18:17	1.00	82	115	28:57	18:17	8:20	84	247	0.98	65.1	114
22	17:55	5:42:30	18:37	1.00	82	89	17:55	18:37	8:42	105	245	0.85	66.1	119
23	18:22	6:00:52	18:39	1.00	161	148	18:22	18:39	10:12	106	218	0.83	64.6	115
24	18:25	6:19:17	18:27	1.00	212	217	18:25	18:27	8:46	102	177	0.86	59.7	111
25	18:58	6:38:15	17:58	1.00	223	157	18:58	17:58	9:53	112	182	0.79	59.2	103
26	17:28	6:55:43	14:27	1.00	341	323	17:28	14:27	8:37	102	232	0.90	60.3	114
27	34:08	7:30:51	18:15	1.00	220	79	34:08	18:15	8:07	80	176	0.79	63.8	107
28	36:40	7:57:31	18:35	1.00	66	72	36:40	18:35	9:29	73	171	0.90	67.7	118
29	13:46	8:11:17	14:22	0.94	145	128	13:46	13:20	9:39	113	169	0.83	68.7	106
30	18:35	8:32:56	15:58	0.91	223	141	18:35	17:30	9:08	88	177	0.87	65.8	100
Summary	8:32:56	8:32:56	7:06:14	29.85	7,607	7,552	17:11	14:17	4:53	108	251	0.85	76.4	3,474

Lastly, here is my watch report from lap 6 (I did the penalty on Funky Monkey, which you can see on the far right on the map, which is why the five-mile lap was actually 5.88 miles):



My Adventure at the 2018 World's Toughest Mudder

By Whitney Tilson, 11/18

(This pdf is posted at: <http://www.tilsonfunds.com/TilsonWTM18.pdf>; my friend Ryan Meade's 13-minute video of all of the obstacles is posted at: <https://youtu.be/FKNS47HW8KI>)

For the second time in the three years I've competed, I won the 50+ age group at the World's Toughest Mudder, a 24-hour obstacle course endurance race, completing 12 laps of the five-mile course (60 miles) and ~250 obstacles, good for 52nd place overall (top 4%) among the 1,207 individuals who started the race. It took place on a horse farm outside of Atlanta for the first time, after the last four years in the desert outside Las Vegas. All in all, an epic adventure that pushed me to my limits – with a very satisfying outcome!



(Many of the pictures here were taken by Brad Kerr, father of one of the racers – thank you!)

Two years ago, I completed 75 miles, still the all-time age group record (see: www.tilsonfunds.com/TilsonWTM.pdf), but there was no chance of matching that this year because I'm two years older and not in as good a shape, my hamstring was still sore from a minor pull six days earlier, plus the cold temperatures were brutal. It was already quite cool (~50 degrees) and windy at noon on Saturday (Nov. 10) when the race started and it became downright frigid when the sun went down, with temperatures quickly dropping below freezing for most of the night (the low was 27 degrees), causing ice to form on many obstacles, making them so treacherous that TM closed some until morning, and forcing 40% of the competitors to quit and many others to huddle in their tents until sunrise (the course was nearly empty overnight). While 27 degrees might not sound so bad, keep in mind that we were getting completely submerged in cold water multiple times each lap, so were constantly wet.

I wasn't immune to the cold, as it sucked my energy and forced me to walk 8 of the 12 laps, but thanks to a thick 5mm wetsuit and gloves, Arcteryx ski jacket/shell and pants, and four layers of headgear, I was able to maintain my core temperature and keep walking (and walking and walking...) (though my fingers and toes got quite chilled at times – two weeks later, my toes are still numb!). I learned my lessons well from last year's WTM when I didn't get my full wetsuit on in time and didn't have a jacket or pants to wear over my wetsuit, so got crushed by the cold around midnight (though I still got 55 miles and finished 5th in the 50+ age group and top 11% overall; see: www.tilsonfunds.com/WTM17.pdf).

My Team

For the third year in a row, I was racing and sharing a tent/pit area with my buddy Mark James, a fellow geezer (he's a month younger than me) and former Navy SEAL and professional triathlete. Here's a picture of us with our pit crew, Steve Fazekas (on the left). He and his wife, Alice Fisher, a friend of mine from high school who lives in the area, were absolutely heroic in supporting Mark and me all 24 hours – we would have been toast without them!



Here's a picture of me an hour before the start started with the race MC, Sean Corvelle, who is beloved among Mudders for his inspirational pre-race speeches and words of encouragement throughout:



Here's a picture of the Mudder Village, where all racers get a 10x10 spot for their tent. The course runs right through it, so after every lap it was quick and easy to get back to your tent to eat, drink, change clothes, use the Port-a-Potties, etc.:



Here's a picture of Mark and me with our friend Tom Millerick, who ran the first two laps with me:



Race Description

The race started at noon sharp and 1,207 individual competitors plus 24 teams set out up the hill and under Mudderhorn (going over it was the last obstacle):



All of the obstacles were closed for the first ~90 minutes to allow the field to spread out over the entire course, and then they opened on a staggered basis. This allowed us to bank some easy miles – but also tempted us to burn ourselves out too early... It also made it hard to know what gear to wear, since we didn't know when we were going to start getting wet. (Some folks were in full wetsuits at the start of the race, which was a big mistake, as they were totally overheating.)

I started way back in the pack so got caught up on lots of traffic jams going through the woods on the first lap (and wasn't pushing myself at all), so was in 722nd place after one lap – in the bottom 41% (and the bottom 10% of folks who did 50 miles or more – 271st of 299). Thus, I was only halfway through my second lap when I hit my first obstacle, Underwater Tunnels, which required going into a lake and ducking my head under three sets of barrels:



This was quickly followed by another full-submersion obstacle, Cage Crawl (this picture is from another race):



Here's a picture of Tom and me coming into the pit after lap 2 and me a lap or two later:



I got pretty chilled from these two obstacles, so after lap 2 I went in for a 23-minute pit stop to put on my medium weight (3mm) “shorty” wetsuit.

On lap 3, only a few obstacles were open and I was able to keep jogging, losing Tom about halfway through, as he wasn't feeling well and slowed to a walk. But my stomach wasn't right and I had to make a five-minute detour into the woods, struggling to get my rear-zip wetsuit off by myself (I took a heavy-duty prescription anti-diarrheal pill after this lap, which solved this problem for the rest of the race, thankfully! It didn't, however, solve my pee problem – see below).

When I got back to the tent, Mark was there, having already lapped me! He was on pace to whomp me by 15 miles, like he did last year (70 miles to my 55). I was happy for him, but the competitive side of me thought, “Rats! There goes any chance of winning the 50+ age group...”

I slow-jogged most of lap 4 as well, nailed every obstacle (the toughest were Funky Monkey and The Gauntlet), and finished at 6pm, in 399th place of 1,129 racers, just as darkness was setting in. I knew it was going to quickly get very cold so I did my longest pit stop of the race, 39 minutes, to get my heavy-duty cold-weather gear on, consisting of a full-length thick wetsuit (5mm body; 4mm arms and legs), Arcteryx ski jacket/shell and mountaineering pants (waterproof and, more importantly, windproof), an extra layer on my head (the hood of the jacket), and 3mm neoprene gloves. The key difference with last year for me was adding the jacket and pants – in cold weather, a wetsuit isn't enough, as it's designed for underwater, not to block cold air/wind, which is what my jacket and pants did. (I saw a lot of folks with just wetsuits or adding only a cheapo \$15 Walmart windbreaker – and they paid a big price I suspect.)

I was feeling fatigued, was weighed down by the heavy gear, and was worried about rolling my ankle in the dark so I started walking the entire course starting on lap 5, which slowed me down to around two hours per lap. That was OK with me – I just wanted to survive and get 50 miles!

Offsetting my pathetically slow pace was that I was cruising through nearly every obstacle (~25 on each lap) – especially the 8 that had penalty walks associated with them – saving precious time and energy and conserving my grip strength, which is all-important in these races. My climbing skills and upper body strength were critical, resulting in me only doing 5 penalties in 25+ hours. Curses to the third leg of Gauntlet, which I got through the first time and failed the next two – those damn knobs! – before switching to the electric shock route when it opened at 8pm:



The only other obstacle I failed was Funky Monkey, which I nailed the first 5 times, then failed 3 of the last 4 as my grip faded a bit – here are pictures of me doing it at last year's WTM:



When I came into the pit after lap 6 just before 11pm, I found Mark huddled in a sleeping bag. He had finished lap 6 two hours earlier, but had gotten frozen during the lap and was trying to regain his core temperature. He didn't appreciate me taking a selfie of us!



This happened to him because he only had a 3mm wetsuit and didn't have the same windproof jacket and pants that I had, as you can see in this picture from the next morning:

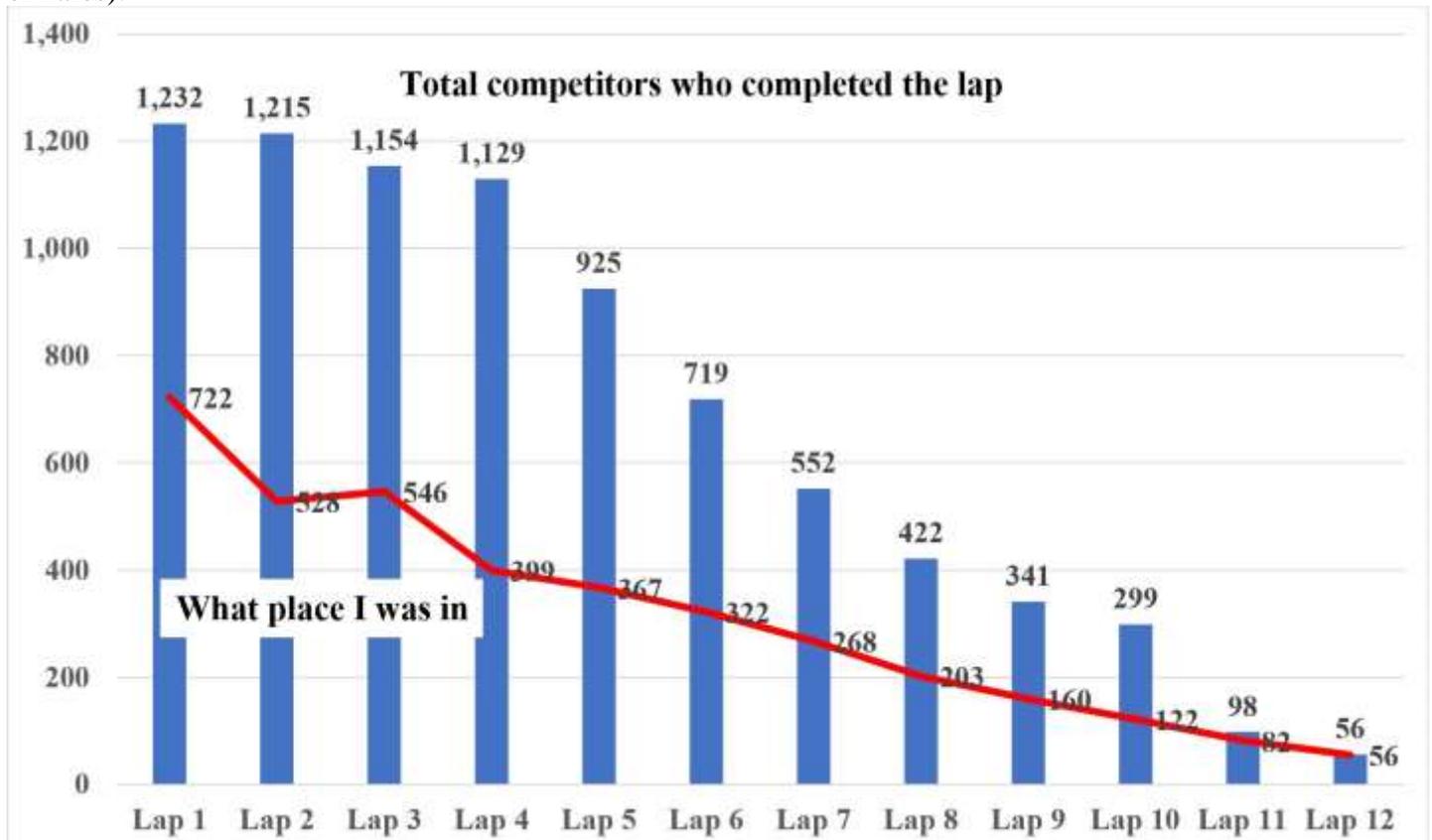


However, Mark didn't quit, to his enormous credit. After three hours in the pit from 9pm to midnight, he went out and did a 7th lap, got frozen again and, at that point, looked like someone from the Zombie Apocalypse and was huddled under the sleeping bag:



He had to take another three-hour pit stop from 2am to 5am, but then got back out there and cranked out three laps before noon, earning a well-deserved brown bib for 50 miles!

Mark's experience was typical, as evidenced by the plunge in the number of competitors who finished each lap. As this chart shows, 92% completed four laps, but only 34% completed eight (the red line shows what place I was in after each lap – by staying out on the course and plodding along, this tortoise ended up passing hundreds of hares):



The night was mostly a blur for me. My toes were frozen (they're still numb two weeks later) and my fingers were cold but not too bad once I switched to 5mm gloves and only took them off for one minute to do Twin Peaks and Funky Monkey. Adding a balaclava in the middle of the night (which I normally wear under my helmet when I'm skiing) helped keep my head and face warm. Most importantly, I was able to maintain my core temperature – so much so, in fact, that I never even needed to turn on the battery-powered vest I was wearing ([Quiksilver Mens Ps+Qs Heated Vest](#)) – I should have given it to Mark!



Here are some cool nighttime pics:





It was really beautiful as the sun came up:



For most of the night, I told myself that once I got 50 miles and earned my brown bib I'd stop, but once I finished lap 10 at 8:39am the sun was up, it was getting a bit warmer, and my competitive juices were starting to flow. I knew I had enough time to complete two more laps and figured (correctly) that 60 miles would be enough to win the 50+ age group and so off I went! (It turns out that 55 would have been enough, as I finished before the two other old guys who also did 55, but I didn't know this at the time.) Here's what I looked like as I started lap 11, with a nice, clean bib about to get very muddy:



I got a bit lucky on the timing of my last laps – while the race is noon Saturday to noon Sunday, if you start your final lap before noon, you have until 1:30pm to complete it so it's really a 25½-hour race. I needed almost all of that extra time. It was taking me a bit over two hours for me to walk a lap, so when I started my last lap at 11:20am, I only had 2:10 to complete the lap (there's zero credit for partial laps) so I knew I had to hustle and somehow found the energy to jog parts of the final lap and finished at 1:13pm, with 17 minutes to spare!

[Here](#) is Steve's short, grainy video of me crossing the finish line, and here are my lap and pit times – in 25 hours and 13 minutes, I spent 21:46 on the course and 3:26 in the pit (an average of 19 minutes after each lap):

Lap	Lap time	Pit time
Lap 1	1:01	1
Lap 2	1:12	23
Lap 3	1:30	12
Lap 4	1:37	39
Lap 5	1:57	23
Lap 6	1:59	27
Lap 7	2:09	8
Lap 8	2:14	32
Lap 9	2:11	7
Lap 10	1:56	20
Lap 11	2:08	14
Lap 12	1:52	
	21:46	206

Here's what my frozen, waterlogged feet looked like after the race:



My Pee Dilemma

This is sort of funny and crude, but it was no joke for me for about half of the 25+ hours I was out there: how to pee???

I was drinking plenty of fluids and had to pee about once a lap (every ~2 hours). For the first couple of laps, no problem: just head to the nearest tree. Then, for the next two laps with my shorty wetsuit on – again, no problem: just hit a port-a-potty at the pit. But starting soon after the sun went down and the temperatures plunged, two things changed:

- 1) I had to put on my full body wetsuit plus my ski jacket, which made it more time consuming to undress to use the port-a-potty; and
- 2) Of far greater concern, it was so cold out that in just the few minutes that my upper body was exposed, I got chilled to the bone and didn't recover my core temperature for 15-30 minutes (which got worse as the night went on, due to colder temperatures and my increasing vulnerability to any exposure).

So after a couple of times taking my wetsuit halfway off and getting chilled, I started thinking of alternatives – and came up with two:

- 1) Pee in an obstacle (ideally the lake!) and then open the top of my wetsuit to flush water through. This would be fast, but the water was so cold that I was worried about chilling myself even more than if I took my wetsuit off; or
- 2) Pee NOT in an obstacle and run the race with the lower part of my wetsuit soaked in rancid piss!

I'm not squeamish and was so cold – on the borderline of hypothermia and having to retreat to my tent, which I *really* didn't want to do (I doubt I would have ever reemerged, and the competitive side of me wanted to win the 50+ age division again!) – so I chose option 2 (the first time I'd ever peed myself).

Initially it felt great – the pressure in my bladder lessened and it was so nice and hot!

And then an instant later it started to burn like a son-of-a-bitch – unbeknownst to me until that moment, my privates and the inside of my legs had gotten badly chafed, so it felt like someone had poured acid on them! This what the inside of my legs looked like:



For about 10 minutes, I just gritted my teeth and kept on walking and eventually (thankfully!) the pain subsided.

But then (far too quickly it seemed!), I had to pee again...and choosing option 2 wasn't so easy because, unlike the first time, I knew the pain I'd be in for.

So at least 3-4 times through the middle of the endless, frigid night, I had to make the decision: at best, get super cold for at least 15-30 minutes (at worst, risk having to stop racing), or pour acid on my privates???

ARRRRHHHHHHHHH! This really tormented me all night long!

I ended up rationalizing to myself, "You're already in so much pain – what's a little more?" so I continued to choose option 2 (at least until the sun rose and the air warmed on my last two laps).

It's stories like this that make it particularly difficult to explain to my wife, daughters, parents and friends why I do this race every year (and love it) – LOL!

(At future races, to prevent this, I will: a) wear a two-piece wetsuit or one with a zipper around my crotch; b) make sure my compression underwear is pulled up tight; and c) use lots of BodyGlide/Gurney Goo.)

My Goals

I achieved all three of my goals:

1) Have fun. This was a given: what could be more fun than having 24 hours to horse around in a gigantic playground with more than 1,200 like-minded, friendly people?! Seriously! Some of my fondest memories from my childhood are when I was playing with my buddies and we'd go swim, hike, crawl around in the mud, climb everything in sight, etc. – so now I get to do this as a (sort of) adult!

2) Not get injured. This was going to be a tough, especially with my pulled hamstring, which I was worried would act up, as it had six days earlier, forcing me to call it quits after only one lap. But, miraculously, it didn't bother me at all. Beyond this, given that I don't like to run and therefore do minimal training for jogging/walking long distances, I kept expecting something else (Achilles, quads, hip flexors, etc.) to give out, but it never happened – in part, I suspect, because I was going so slowly and also because I was taking 800mg of ibuprofen (the prescription dosage – four tablets – of Advil/Motrin) every four hours before, during, and more than a week after the race. It's not a good idea for endurance athletes to do this, as it can cause kidney failure, but I wasn't pushing it – my breathing and heart rate were close to normal for 99% of the race.

3) Complete 50 miles and finish among the top 3 in the 50+ age group.

Race Statistics

- You had to finish your final lap after 8am to be considered a finisher of the full race and earn a black headband. Of the 1,207 individual starters, 725 finished and 482 were DNFs (40%).
- 81% of the competitors were men.
- 40% of men were DNFs vs. only 38% of women. You go girls!
- Only 18 individuals earned silver bibs (75 or more miles) (16 men and two women), a mere 1.5% of competitors/starters, about one-third the ~5% level of the last two WTMs.
- 72 people (64 men and 8 women) (6%) got 55-70 miles (not counting the 6 folks (5 men and 1 woman) who got 55 but were DNFs).
- 183 people (167 men and 16 women) (15%) got 50 miles (not counting 17 DNFs).
- Add all this up and only 273 people got 50 or more miles and finished after 8am – 23% of those who started the race, about half the level of the last two WTMs.
- Among those age 50+, there were 39 male finishers (of 80 who started) and 8 women (of 16 who started) – not surprising to see a higher (50%) attrition rate among us old geezers (it's tough being old!). The 47 of us who finished accounted for 3.9% of the starters and 6.5% of the finishers. Among the male geezers, I got 60 miles, two got 55, and 10 got 50 (16% got brown bibs). The top two 50+ females got 45 and 40 miles, respectively.
- The age range of the finishers was 19 (three young men and one young woman) to 64 (shout out to Don Manley, who finished his third lap at 1:04pm!). (I was one of only three 52-year-olds; there were only 27 people 52 and older who finished: 2.2% of starters and 3.7% of finishers). Yes, I'm proud to have been in the 98th percentile by age and finishing in the top 4.3% overall! (It helps offset the pain I endured for the two weeks after!)
- There were 18 teams (11 finished) and six relay teams (four finished). The top team was Atomic with 75 miles (Wesley Kerr and Evan Perperis) and the top relay team was Lindsay's Angels with 80 miles (Ryan Atkins and Lindsay Webster).

Someone posted the following charts with additional data:

2018 WTM Finisher Percentiles						
Miles	Finishers	DNF	Total	Sum Finishers	Finisher Percentile	Overall Percentile
100	2	0	2	2	99.7%	99.8%
95	0	0	0	2	99.7%	99.8%
90	9	0	9	11	98.5%	99.1%
85	3	0	3	14	98.1%	98.8%
80	2	0	2	16	97.8%	98.7%
75	10	0	10	26	96.4%	97.9%
70	5	0	5	31	95.8%	97.4%
65	7	0	7	38	94.8%	96.9%
60	22	0	22	60	91.8%	95.0%
55	38	6	44	98	86.6%	91.9%
50	183	17	200	281	61.5%	76.8%
45	31	7	38	312	57.3%	74.2%
40	52	27	79	364	50.1%	69.9%
35	79	43	122	443	39.3%	63.4%
30	104	57	161	547	25.1%	54.8%
25	109	97	206	656	10.1%	45.8%
20	46	57	103	702	3.8%	42.0%
15	24	100	124	726	0.5%	40.0%
10	3	46	49	729	0.1%	39.8%
5	1	24	25	730	0.0%	39.7%
0	0	0	0	730	0.0%	39.7%
	730	481	1211			

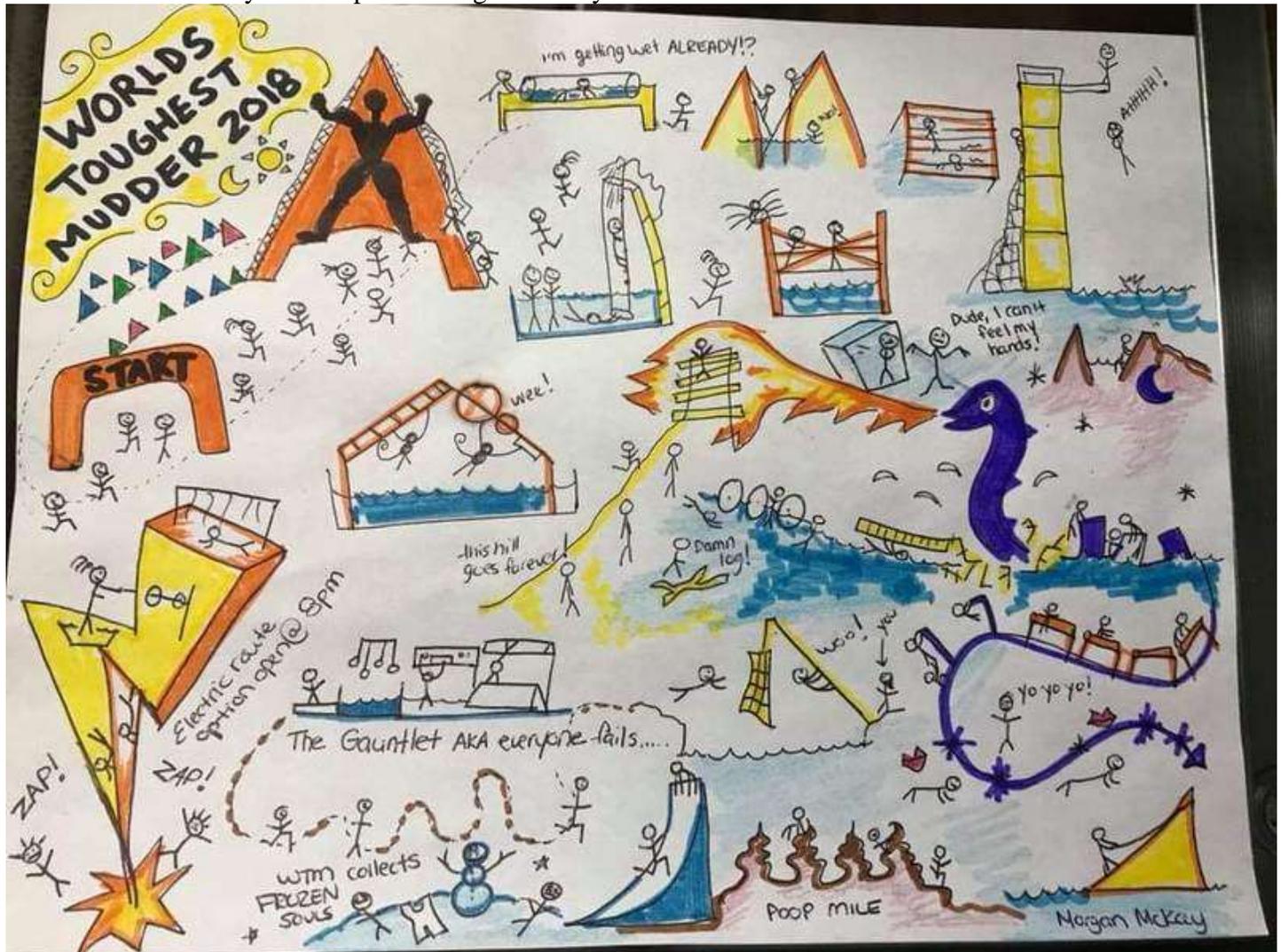
2018 WTM Mileage Statistics								
Miles	Finishers	DNF	Total	% of Finishers	% of DNF	% Total	% Finishers Overall	% DNF Overall
100	2	0	2	0.27%	0.00%	0.17%	0.17%	0.00%
95	0	0	0	0.00%	0.00%	0.00%	0.00%	0.00%
90	9	0	9	1.23%	0.00%	0.74%	0.74%	0.00%
85	3	0	3	0.41%	0.00%	0.25%	0.25%	0.00%
80	2	0	2	0.27%	0.00%	0.17%	0.17%	0.00%
75	10	0	10	1.37%	0.00%	0.83%	0.83%	0.00%
70	5	0	5	0.68%	0.00%	0.41%	0.41%	0.00%
65	7	0	7	0.96%	0.00%	0.58%	0.58%	0.00%
60	22	0	22	3.01%	0.00%	1.82%	1.82%	0.00%
55	38	6	44	5.21%	1.25%	3.63%	3.14%	0.50%
50	183	17	200	25.07%	3.53%	16.52%	15.11%	1.40%
45	31	7	38	4.25%	1.46%	3.14%	2.56%	0.58%
40	52	27	79	7.12%	5.61%	6.52%	4.29%	2.23%
35	79	43	122	10.82%	8.94%	10.07%	6.52%	3.55%
30	104	57	161	14.25%	11.85%	13.29%	8.59%	4.71%
25	109	97	206	14.93%	20.17%	17.01%	9.00%	8.01%
20	46	57	103	6.30%	11.85%	8.51%	3.80%	4.71%
15	24	100	124	3.29%	20.79%	10.24%	1.98%	8.26%
10	3	46	49	0.41%	9.56%	4.05%	0.25%	3.80%
5	1	24	25	0.14%	4.99%	2.06%	0.08%	1.98%
0	0	0	0	0.00%	0.00%	0.00%	0.00%	0.00%
	730	481	1211	100.00%	100.00%	100.00%	60.28%	39.72%

Additional Write-ups

I loved these write-ups of the race:

- Rea Kolbl, the woman who's won it the last two years: *How I Won World's Toughest Mudder Two Years In A Row*, www.theocrreport.com/how-i-won-worlds-toughest-mudder-two-years-in-a-row;
- Kris Mendoza, who won the men's race, did an awesome rap video about the race: www.facebook.com/kdoza04/videos/10155825525877611
- Erin Rost, a young woman who I met on the last lap (we walked the last mile together and really hit it off), who came out of nowhere to earn a silver bib (75 miles) and finish 2nd among women: www.facebook.com/585106915/posts/10155598676376916;
- Mark James: www.facebook.com/markojames/posts/10215720822887978;
- Jason Rulo: <https://assaultfitnesscom.wordpress.com/2018/11/15/the-return-of-worlds-toughest-mudder-and>
- Charles Hauptert: https://drive.google.com/file/d/15jvOxEfH8Pv_g36GCwPnFtu3NG_21RW4/view?fbclid=IwAR19Hlqw_LBBzRnEGFHsWq300uynLdrJ5CFaaFmgPULNWdiIBXW_9L5hQe1g

I also loved this funny race map that Morgan McKay did:



Appendix A: Q&A

Why do you do races like this?

I've always liked big challenges; they keep me motivated to get/stay in good shape; I really enjoy them – not the running, but the obstacles – and they're very social. I often do them with friends and family (my parents at ages 75+, wife, three teenage daughters and many cousins have all done races with me), plus I've made many new friends. It's a great group of people and there's something about shared suffering that bonds people!

What inspired you during the race?

The wheelchair racers and their support teams like this:



And Diana Codispoti, who is the first person with dwarfism (she's 4' 5") to compete in this race. She was on the course until the very end, finishing her fourth lap at 12:24pm. Here's a great article about her, [World's Toughest Mudder Race draws small entrant with big heart](#), and below are pics of a team of Mudders helping her get up Everest – that's Joel Forsyth reaching down from the top:



And Jon Copper playing the bagpipes:



How does this race differ from other endurance races?

I've never done any other endurance race, but from what I've read of them, these races are different because we had to contend with:

- The obstacles (see photos and description of each below). There were a bunch of new ones and I found all of them fun and challenging, but after 200+ of them, they take a lot out of you! Note that they tended to be very quick (if you completed them and avoided the penalty).
- Wild temperature swings, both within each lap and between laps. After every lap, racers can go back to their pit (tent area) to rest, eat, use the Port-a-Potties, and change into dry and warmer/cooler gear, but that wastes time and it can be very tricky figuring out what to wear for a given lap. Guess wrong, and you might freeze...or overheat...or both (in fact, both were possible on the same leg).
- Speaking of being wet, that was constant because five obstacles on every lap (six once The Stacks opened at midnight) required you to completely submerge yourself (plus on eight other obstacles, you either got partly submerged or, if you failed the obstacle, you fell into water, so some people were getting wet *a dozen times every lap*). This had a number of implications that made this race much more challenging than a typical endurance race:
 - a) It makes it very difficult to regulate your body temperature. In between water obstacles, you could get hot in your full wetsuit, but mostly we were cold from 6pm onward.
 - b) During the night you need to wear thick neoprene (3 or 5mm) scuba diving gloves to keep your fingers warm, which makes the many climbing/gripping obstacles extra difficult.
 - c) Every time you go into the water, hike/jog through mud/dirt, and crawl through mud, pebbles can get in your shoes, which forces you to run through the discomfort and hope it goes away, or take the time to stop and shake them out.
 - d) Your waterlogged feet can swell, making your shoes too tight or requiring you to change into a larger pair.
 - e) Trying to run a race while wearing a wetsuit can cause chafing; was constricting, making it harder to climb, jump, etc.; and added a lot of extra bulk and weight, which got really tiring as I hiked/jogged mile after mile. Ditto for my constantly wet shoes and socks.
- The course map says there was 663 feet of elevation gain (and loss) per lap, which is a lot of hiking up and down.
- The terrain was very unstable – a ton of mud and lots of rocks and roots going through the woods, which made it very difficult to jog at any pace, especially at night, as the risk of rolling your ankle was high.

How does this compare to an Ironman?

I don't know, as I've never done one (not even a half or an Olympic-distance one – someday!). Mark James, who (long ago) ran the Kona (Hawaii) Ironman 10 years in a row when he was a professional triathlete, told me that the 60 miles he did at the WTM two years ago was massively harder than any of the Ironmans because: a) it's twice as long (timewise); and b) you can't get into a rhythm like you can at an Ironman (biking for six hours straight, for example).

What conditioning/experience is needed?

None is required – and I saw a few seriously out-of-shape/overweight people out there. They have my total respect, as this is really hard even if you're in great shape.

But if you want to do well – say, complete 50 miles, as 23% of starters did – then you need: a) a *very* high level of fitness (this is 24 hours of pretty sustained effort, so as one benchmark, you should be able to run a marathon in under five hours; ideally four); b) a high degree of athleticism (in order of importance: balance/coordination, lower body strength, upper-body strength, and flexibility); and c) fearlessness.

How did you train for this?

Obviously the best way to train for a race like this is to do lots of TM and Spartan races (ideally multiple laps) during the season. Second best is to do long-distance trail runs/races. Unfortunately, I wasn't able to do much of either due to a very busy schedule, plus I worry about getting chronic injuries that all older runners seem to have. Thus, my training mostly consisted of hour-long (but typically very intense) workouts pretty much every day (and in the weeks before the race, twice a day).

In a typical week, I play hard pick-up basketball for 60-90 minutes once or twice, play a couple of hours of tennis, do a couple of group fitness classes and a ridiculously hard hour-long workout with a trainer once or twice (often wearing a 20-lb. weight vest), and ride my bike a few miles a day to get to and from meetings – but no long distances.

Then, maybe one weekend a month, I did some sort of race/challenge: a Tough Mudder or Spartan race (typically two laps) if there's one in the area (I'm not one of those folks who travels all over the country to do these races), a half-marathon trail race, I climbed three big mountains in the Dolomites (Tre Cime de Lavaredo; see [here](#), [here](#) and [here](#)) in July, etc. Thus, I was reasonably mentally and physically prepared, but this race took it to a whole new level.

While my running training was laughably inadequate (though to repeat what I noted above, I do think there's something to be said for not burning out your legs and getting plagued with injuries, especially at my age, by putting too many miles on your legs), I did work hard on building my grip and upper-body strength, which I think is the second most important area, as 2/3 of the obstacles demanded this. They were all somewhat different – climbing a wall or cargo net, doing rings and monkey bars, etc. – but they all boiled down to being able to grip something and pull your body up.

There's a simple test for this: how many consecutive pull-ups can you do? For a race like this, the answer should be at least 10. My max is 30, which was key to my race, as I only incurred five penalties during the entire race.

(For those of you who live in NYC and have an interest in a personal trainer, I highly recommend the two I use (once a week each): Richard Louis of FitSpace NYC (rplouisnyc@gmail.com) and Carlos Munoz at Definitions (munozcelo@aol.com). I also do regular group workouts at [Tone House](#), [Ripped Fitness](#), and [East End Row](#).)

In light of your” laughably inadequate” running training, why didn't your body break down?

- 1) I got lucky;
- 2) I walked all of the uphill and stopped jogging after four laps;
- 3) My workouts with my trainers are super intense – pretty much everything to failure – which I think has really toughened up my joints, muscles, ligaments and tendons (and my mind!); and
- 4) I've become a big fan over the past two years of shiatsu massage (I go to a place in NYC with a cult following called Salon de Tokyo). A little Chinese women (ask for Mimi), holding onto a bar in the ceiling, stands on my back and legs and applies every ounce of pressure onto one-inch areas. It's so painful! But I can hear and feel my tight joints and muscles loosening up.

What was the hardest part?

The hardest thing for me was to just keep on going for nearly 24 hours, especially after I got cold. Thankfully, I love obstacles – they keep me entertained. Had this been a 24-hour ultramarathon, I would have gone crazy from boredom and stopped.

What are the keys to success in this race?

- 1) Being in shape, both running/endurance and upper-body strength.
- 2) Staying warm.
- 3) Ingesting enough calories (~400/hour?) to keep your body going. This is hard because when you're exercising you often don't feel like eating – but if you wait until you feel hungry, it's too late: you can't recover and you're gonna bonk. Thus, it's critical to force-feed yourself at every pit stop, however crappy it makes your stomach feel. (You can train for this, though I didn't.)
- 4) Controlling your pace so you never get winded or overheated.
- 5) Using your (much stronger) legs rather than your arms on numerous obstacles, which preserves arm/grip strength (any rock climber will tell you how important this is). There's not much you can do other than be as fast as you can on pure grip/upper-body tests like Funky Monkey, The Gauntlet and Leap of Faith. But you can do Augustus Gloop, Ladder to Hell, T-boned, Skidmarked, Lumberjacked and Mudderhorn using 90% legs, with arms mainly for balance.
- 6) Being assertive in asking for assistance. I think some slower racers felt like they didn't want to bother the faster racers, who might resent being slowed down, but nothing could be further from the truth. We're all part of one big team and family, so every single person out there, even the elite racers going for max distance and prize money, is happy to help another Mudder. But don't assume that others know you want/need help – some people take pride in completing obstacles without assistance – so you need to ask!
- 7) Communicate clearly about what assistance you need. For example, I needed help every time on Everest, so when I was ready to run, I made eye contact with the people at the top, made sure they were ready for me, yelled “Two hands!”, and then held up both hands.
- 8) Knowing when to give up on an obstacle you were never going to complete (to save energy and preserve grip strength) – yet also doing every obstacle possible (to avoid time- and energy-sapping penalties).

Any tips on nutrition during the race?

I brought 5x as much food as I could possibly eat because you never know what you might crave during the race. You can't just consume energy drinks and gel – that's fine for short races, but won't work for long ones.

My main go-to “real food” was a rotisserie chicken that I consumed over the course of the race plus Dinty Moore stews, which are loaded with fat and calories – my pit crew had one piping hot for me after each lap. Also piping hot broth and chocolate Ensure Enlive (“all-in-one advanced nutrition shake” – a ton of protein and calories). Every leg I also ate a Snickers bar, either in the pit or out on the course. And when it wasn't too cold at the beginning and end of the race, I drank some Coke (I like the taste, find it refreshing, and it has caffeine).

How did you feel afterwards?

For the first week, I felt like a truck ran over every part of my lower body again and again (my upper body was fine). I had serious edema in my legs, which were all swollen – so much so that I went to the doctor the following Thursday, who had me get an ultrasound to make sure I didn't have any blood clots (I didn't). After a week, I was able to walk mostly normally and two weeks later I played basketball for the first time. I took 800mg of ibuprofen every four hours for the first week afterwards to manage the pain and inflammation, and I needed Ambien to sleep the first few nights as well.

Is there actually any danger?

For me, not on a relative basis. Riding my bike in NYC every day is 100x more dangerous than running a handful of TM and Spartan races each year, plus I do some pretty hard-core mountaineering and rock climbing (see: www.tilsonfunds.com/Tilsonadventures.pdf). But there have been serious injuries and even a couple of deaths. I saw a guy at the TM in New Jersey two and half years ago being rushed off the course in an emergency cart and heard the next day that he'd died of a heart attack. A year later, at the same race, my friend Ben slipped and fell climbing down the back side of an obstacle and broke his arm, requiring surgery:



At last year's WTM, one of the lead women slipped off Funky Monkey, fell into the side of the pool, and knocked herself out, ending her race. And there's plenty of opportunity to mess yourself up jumping 38' off The Stacks. If you land slightly wrong, you can break your tailbone (on one jump last year, I was leaning back a tiny bit and bruised it; and the female winner a few years ago, Amelia Boone, actually broke it – but kept on racing and won!).

This year, Ryan Meade fell going over Lumberjacked and knocked himself out – but after 29 minutes in the medical tent (you're disqualified at 30) he got back out there and got 35 miles!

The main problem this year was people getting hypothermic – apparently the medical tent (which was heated) was full of shivering folks trying to warm up. The worst case I heard of was Victoria Jackson Graham, who posted: "I ended up in the ICU on life support...hypothermia, 89-degree core temp, complete respiratory failure, and rhabdomyolysis that caused a heart arrhythmia...all of my gear cut off in the ambulance." This, despite having proper gear: "2xu base layer, a 4/5 wetsuit, and a wind breaker jacket and pants." She concluded: "They think I had such bad issues because my potassium and calcium levels were off before the race ever started, probably from diet and training. They have been addressed and fixed. I'll be back, just as soon as I figure out a way to swing all the costs!" RESPECT!!!

Of course horrible bruises and chafing are the norm – this is what one person posted:



In comparison, my legs looked fine!



What advice would you give to Tough Mudder for future WTMs?

1) People love getting recognition: patches, bibs, awards, etc. I think having a patch for 25 miles and a bib at 50 miles (which 23% of finishers achieved) is just right, but having the next bib at 75 miles (which only 1.5% achieved) is too much. I saw a lot of folks get 50 miles and then mentally or literally stop, even though they could have kept going for another lap or two, because they knew 75 was out of reach. Why not have a 60-mile bib? Also, why not have awards by age categories (selfishly speaking!)?

2) Make sure the electric shock obstacles actually shock people. Starting at 8pm, racers could skip five tough obstacles by taking the “High Voltage Course Route”, which consisted of three electric shock obstacles, but almost nobody was getting shocked, even when they hit the wires! (I hit the wires multiple times on Electroshock Therapy and never got a jolt.) And while it was great to see TM bring back the epic Operation obstacle, they made the hole twice as big, making it super easy. The one time I did get sloppy and hit the edge and got a shock, I barely felt it, in marked contrast to the same obstacle two years ago when the huge jolt caused me to shout “ARRRRRHHHHH” when I got hit.

3) Last year, the penalty walks were too long (especially Funky Monkey’s 20-30 minutes); this year, they were too short (Funky Monkey took maybe 3-5 minutes), especially for The Stacks, which anyone is capable of doing. If you don’t want to face your fears and skip it, fine – but that should be a half mile penalty.

C’mon TM, this is the World’s Toughest Mudder, not the World’s Easiest Mudder!

4) I loved the re-introduction of the Golden Carabiners (allowing one to skip a bunch of obstacles at two different points on the course) and thought giving one to everyone after their 5th lap made sense, but the other two ways to earn them – extra-hard routes on Funky Monkey and Leap of Faith – were too tough. I think only a few people earned them. I think the difficulty should have been set so that ~20-25% of people who were out there in the middle of the night could earn them, not 2-5%.

PS - Please don’t read this as a general criticism - this was a GREAT race overall and I loved the new obstacles!

How much does it cost?

Registration prices vary, but average ~\$550, but that’s just the start. If you don’t have the gear, you can easily drop \$1,000 on this, plus flights and hotel – not just for you, but your pit crew as well. It ain’t cheap! It saved Mark and me a ton of money to have a local pit crew who we could stay with, plus they had a lot of gear that we didn’t need to buy: wagon, tarp, tent, cooler, chairs, etc.

Are you doing it again?

Hell yes! The 2019 WTM will be back in Atlanta, but a week later (and maybe colder!), Nov. 16-17.

What does Susan think of this?

Not much. But she’s been endlessly loving and patient with me for more than 28 years of my foolish escapades – and I haven’t killed myself yet! And she knows from long experience that if she raised doubts/concerns, it would just give me more motivation! And she takes comfort in my large life insurance policy... ;-)

Appendix B: A Description of Each Obstacle

My friend Ryan Meade created an awesome 13-minute video, which captures nearly every obstacle and the spirit of the event! You can watch it [here](#). In addition, here are a few short videos that TM posted:

- Overview: https://m.facebook.com/story.php?story_fbid=10156819470482790&id=121520047789
- Overview (2): <https://www.facebook.com/toughmudder/videos/1955774587848271/>
- Men's and women's winners: <https://www.facebook.com/toughmudder/videos/307273343440136/>

Here's the course map – they're in the order of the clock/wheel, starting at the bottom (6pm) (note the two Golden Carabiner routes, the short penalty walks in red for eight obstacles, and the optional High Voltage Course Route, which opened at 8pm; The Stacks opened at midnight):



Hydrophobia

This was a new obstacle that involved climbing up into a tube, crawling through it (while in a few inches of red water, and then climbing down. It wasn't difficult, but it was quite awkward getting into and out of the tube – and the water was chilling. Video [here](#). That's Chris Betcher in the two pics on the right.



Twin Peaks

Another new obstacle that involved climbing up a tough wall (most people required a boost to get on it, as it started three feet off the ground), then rappelling down a steep wet wall, stepping over to the opposite wall (being tall really helped), grabbing the other rope, and climbing back up. Great fun for rock climbers like me, but most folks ended up in the drink and had to do a penalty walk. Video [here](#) (skip to 1:26).



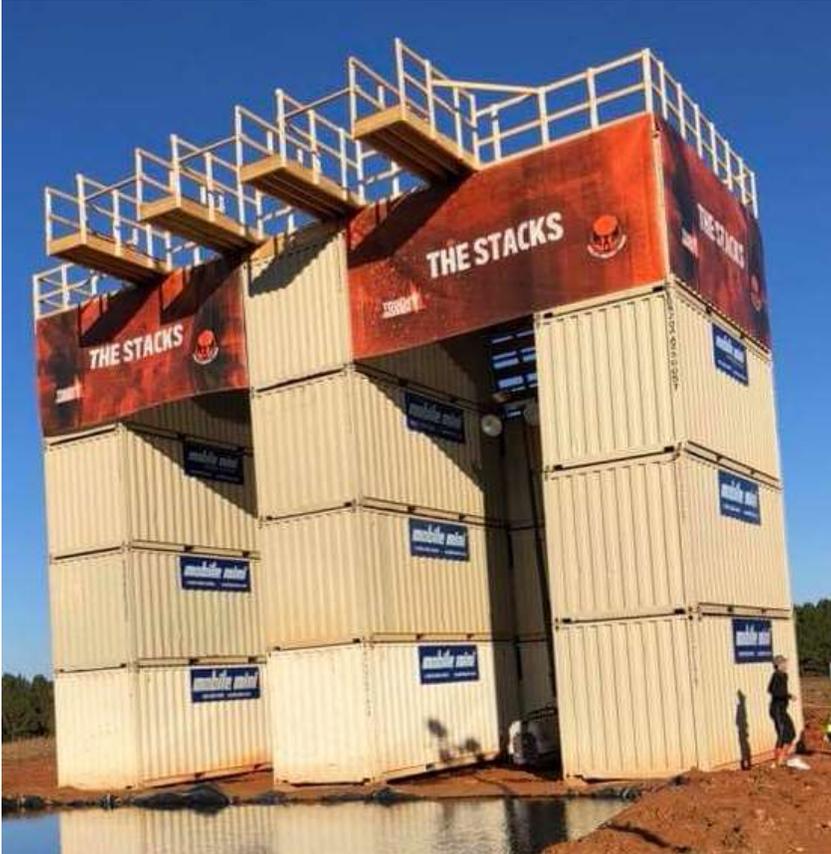
Spread Eagle

A new obstacle where you had to lie across two nylon straps and pull yourself across (though I saw some folks roll sideways). I observed a lot of people making this harder than it had to be.



The Stacks

This replaced the iconic obstacle from Vegas, The Cliff, a 35-foot drop into the lake. This time, TM used shipping crates to create an even higher obstacle (I read 38 feet) plus, unlike Vegas, you had to climb up the back, which wasn't easy so most folks took a penalty walk. I had a blast doing this every lap starting at midnight – but if you're afraid of the dark, heights and/or water, this is your ultimate nightmare. [Here](#) is a video of Joel Forsyth doing a back flip off it – mad props!



Here's the climb up the back:



The view from the top:



Here's the woman's winner, Rea Kolbl, jumping off:



Augustus Gloop 2.0

A slight variation on the old Augustus Gloop/Snot Rocket, this involves getting in a waist-deep pool of water, wading across, ducking your head into the tube (you could actually pull it out and avoid putting your head underwater), and climbing up it (using hand-/foot-holds) while a firehose poured a ton of water on your head. I think getting rid of the tube made it easier, and the water wasn't coming down the times I did it. Video [here](#).



Black Widow

This new obstacle involved walking across nylon straps over a pool of water while holding onto other straps. I never saw anyone fall. More fun for a rock climber! Video [here](#).



Here's Alexandra Walker, who finished 4th among women with 65 miles:



Funky Monkey – The Revolution

A classic, in which you go up a set of maybe a dozen monkey bars, then have to transition to a horizontal wheel and spin around on it and grab a big vertical wheel, swing down to a smaller vertical wheel and, finally, to a bar before getting to the landing platform. The key I discovered is to go up the money bars backwards, with only one hand on each bar, which gets me to the top quicker so I can finish before my grip gives out. These pics are from previous races:



I have a love-hate relationship with this obstacle. It's a great challenge and when I'm fresh and my grip strength is strong, I have no problem with it, but when I get tired, my grip strength often gives out right near the end and I fall, cursing loudly! Here is a pic from this year's race:



Ladder to Hell

This wasn't particularly hard (especially if you're tall) – but it was at the highest point of the course, after a long uphill, so it *felt* hard! Also, it got icy and slippery overnight.



Underwater Tunnels

Nothing hard here – just wade into the lake and duck your head under three sets of barrels. But it sure was cold! TM closed it overnight to try to reduce the hypothermia people were suffering.



Cage Crawl

A TM classic. The pits were filled to the top initially, which left very little room to come up and breath, which freaked a lot of people out. It was much easier once the water level went down a bit. Like Underwater Tunnels, TM closed this overnight.



Trench Warfare

An easy 100-foot crawl in soft sand. Video [here](#). This is Jolie Rodriguez:



Electroshock (part 1 of the High Voltage Course Route, which opened at 8pm)

Another TM classic – except it wasn't working – almost nobody got shocked!

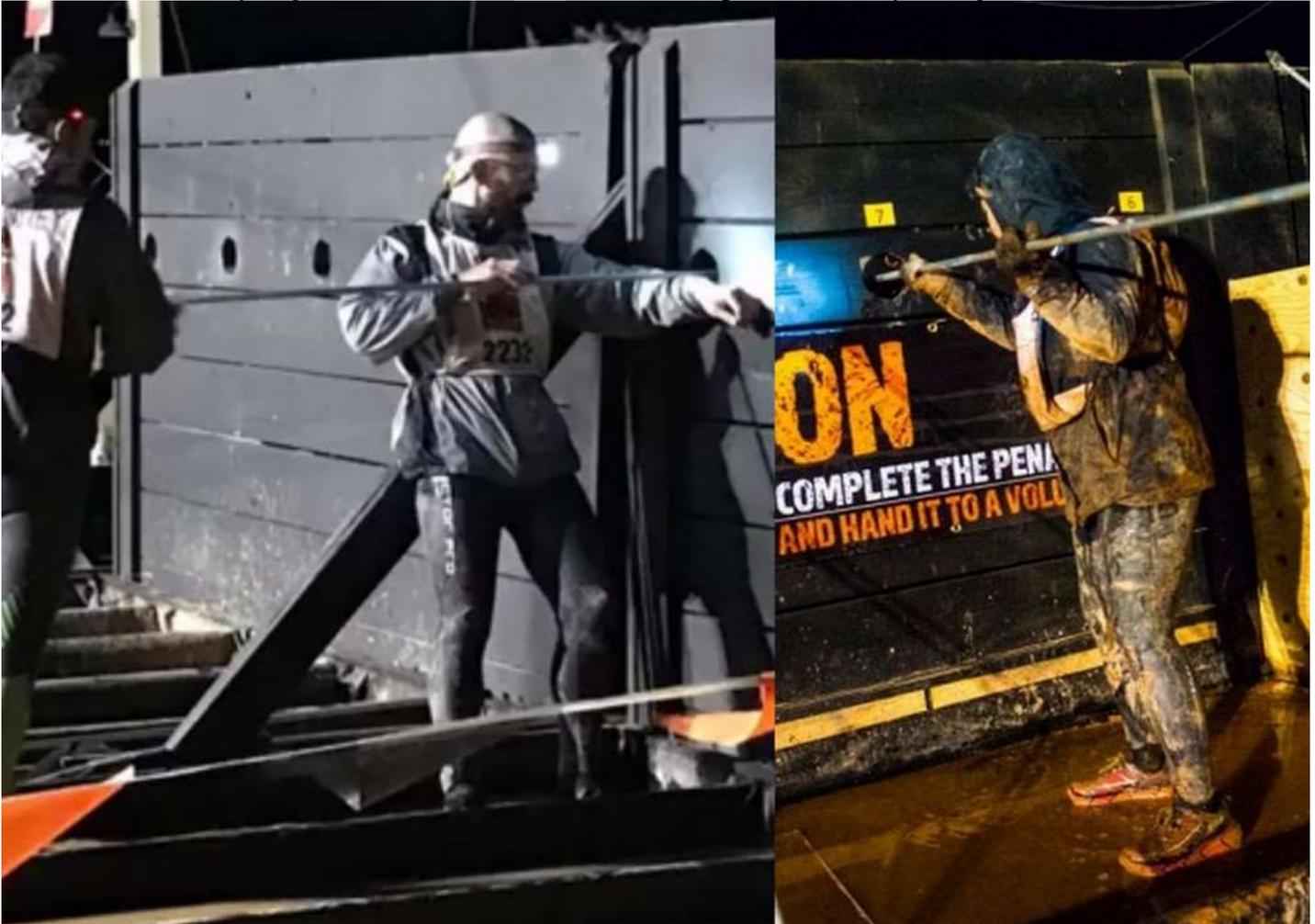


Entrapment (part 2 of the High Voltage Course Route)

A sand crawl under low wires that were supposedly electrified, except I didn't see anyone get shocked.

Operation (part 3 of the High Voltage Course Route)

TM brought back this epic obstacle from the 2016 WTM. You stand in a couple inches of water, pick up a 10-foot metal pole with a hook at the end, poke it through a hole, hook a rubber wristband hanging on a peg on a wall about six feet away, and then bring it back. Simple, right? Except there's one catch: if your pole touches the side of the hole, you get a shock. Video [here](#) and here are pics from two years ago:



This year, however, TM made it easier – the hole was twice as big and shocks (at least the one I felt) was a tiny fraction of what I remembered. Lame!

Quagmire

An easy walk into waist-deep water, up a small muddy hill, back into water and out. Yawn.

The Block Ness Monster

This one typically requires a bunch of people working as a team (though I was able to jump up and clamber over it by myself in the middle of the night and on the last lap, when no-one else was around). Everyone jumps into neck-deep water and pushes on the rotating, triangular-shaped thingie (I don't know what to call it). On each rotation, 1-2 people hold onto the top, are pulled over, and then grab the top and help keep it rotating so the others can get over. Then repeat this once more and you're done – great fun! Video [here](#).



The Gauntlet

A challenging new obstacle with four components (with three platforms to rest in between): a balance beam, rings to a rope, an upper-body-burner called Just the Tip (see pic below), and finally arching across a gap. I found all but Just the Tip easy – but if you failed any part you had to do the penalty walk. I got through it the first time, but my grip failed on those damn knobs the second and third time I tried it – GRRRR! Video [here](#).



Leap of Faith

This was a fun new obstacle, similar to Rope a Dope at last year's WTM, but instead of jumping to a rope, you instead grabbed a mesh net, climbed up and transitioned to a 45-degree down bar.



Everest 2.0

This is an iconic Tough Mudder obstacle, in which you run up a curved wall, grab the top, and pull yourself over (almost everyone needs help from Mudders at the top; *huge* thanks to Darth Vader, Jason Harley and the other guys who hung around at the top of the wall for nearly the entire race and helped countless fellow Mudders get up it). Video [here](#).



(Funny story: my then-76-year-old mother did a TM in New Hampshire with me in August 2016. Unfortunately, she is the world's slowest runner so when we came to Everest 2.0, she couldn't get within a country mile of our outstretched hands. She had given up and was walking around it when a woman at the top suggested that we form a human pyramid at the base so my mom could climb up on top of us and reach high enough so the people at the top could grab her. As you can see from [this video](#), it worked! Everyone was cheering her and giving her high-fives!)

Mud Mile 2.0

This was an epically good Mud Mile, with six deep, slippery trenches that required teamwork (at least until the sides got worn away and it became easy to do solo).



T-Boned

A high wall with a ledge that came out like a T. The first of three tough climbing obstacles that a lot of people struggled with (when they got icy overnight, TM closed them until dawn). My key insight was to step through the crack between the walls just to the left of this guy, rather than go over the top:



Skidmarked

An inverted wall. I didn't get a pic from this race, but here's one from another race:



Lumberjacked

You had to get over six logs each about five feet off the ground. The key was to climb the sides, but it was slippery (and, later, icy) and required good climbing skills or a helping hand.



Pyramid Scheme/Happy Ending

This is a slick, sloping wall that TM made easier this year by having ropes come down all the way, so no teamwork or even real exertion was required. Yawn.



Kiss of Mud 2.0

A quick crawl/roll under barbed wire. I long ago discovered that there's a hard way to do this (crawling) and an easy way (rolling). (You can see me doing so in my wife's short [video clip](#) from two years ago.) Yes, the latter can make you a little dizzy, but relative to crawling it's so much earlier and faster and you don't get scraped up. I don't know why most people haven't figured this out – try it, you'll like it! Here is a pic of me doing this obstacle last in 2016, when it was harder, plus a generic pic:





Mudderhorn

TM brought back Giant Wedgie from two years ago and made it harder, with a slick 10-foot wall to get up to the netting, which was pretty much impossible to do on your own – a final obstacle worthy of this race! As with Everest, *huge* thanks to the guys who hung around at the base of the wall and helped countless fellow Mudders get up it, including Chris Aranda, Nathan Herron and Ryan Cray. Videos [here](#) and [here](#).

