



The Weekend at a Glance

Friday	4:30pm-7pm	Packet Pickup	Medical Tent
Saturday	6am	Tent Setup begins. No Friday night camping.....	Tent City
	6:30am	Packet Pickup, Weigh-In & Timing Chip Pickup	Medical Tent
	7:50am	Pre-Race briefing	Start Line
	8am	6/12/24 hour Start.....	Start Line
	Noon	Weight Check for 6/12/24 hour	Medical Tent
	1pm	Short Course Opens for 6-hour	Short Course
	2pm	Finish for 6-hour	
	2:15pm	Awards for 6-hour.....	Tent City
	4pm	Weight Check for 12/24 hour	Medical Tent
	7pm	Short Course Opens for 12-hour	Short Course
	8pm	Finish for 12-hour	
	8pm	Weight Check for 24 hour.....	Medical Tent
	8:15pm	Awards for 12-hour	Tent City
	Midnight	Weight Check for 24 hour.....	Medical Tent
Sunday	4am	Weight Check for 24 hour.....	Medical Tent
	7am	Short Course Opens for 24-hour	Short Course
	8am	Finish for 24-hour	
	8am	Tent removal begins	Tent City
	8:30am	Post-Race Breakfast.....	Bandshell Stage
	8:30am	Awards for 24-hour	Bandshell Stage

Race Day Issues or Emergencies

Please contact one of these people – usually at the Timing Tent or the Medical Tent

- Bruce Leasure, Race Director 651-330-9355
- David Shannon, Race Director 763-360-5880
- Paulette Odenthal, Race Director 651-470-9337
- Ann McIntosh, Medical Director 612-600-8069

Things every racer should know

Please place your bib number on the front – not on your back and not on the side of your leg. If your shirt or jacket covers your bib number, please uncover your bib number when you approach the timing tent or the short course lap counters. Your lap counter reads your bib number when you are coming toward them.

Write important medical information on the back of your bib with indelible ink: Emergency contact info, drug allergies and preexisting conditions, In the event something happens, this information will assist our medical staff in helping you.

Please return your Timing Chip after your race is complete. Buckets are available at the main timing tent, at the short laps, and at the medical tent. Timing chips cost \$120 each.

24-hour racers must have a lighting system.

Race Dates: The first full weekend in June. Friday June 2,2023 thru Sunday June 4, 2023

Location: FANS Ultra Races uses the pedestrian path around Normandale Lake in Bloomington, MN. The race goes counterclockwise around the lake.

The path is open to the public during the race. Please be considerate of the public, other racers, and the geese.

Headphones: do not completely obstruct your hearing with headphones. When approaching the main timing tent on Lake Laps, or anywhere on Short Laps, please turn off your music.

Directions & Parking: From either direction on Interstate 494, use exit 8 for East Bush Lake Rd and turn south. Go straight through the stoplights and you will be on Chalet Road, which goes down the west side of Normandale Lake. There is a big parking lot on your right for you to use.

Tent City is directly east of the southern part of the big parking lot. Please do not pound stakes – hand push only if you must use stakes. There is an irrigation system in the ground.

You may start setting up your tent at the time listed in “The Weekend at a Glance”. Your tent should be down before you come to Sunday mornings breakfast.

Packet Pickup, Weigh-in, and Timing Chip Pickup are in the medical tent directly east of the middle of the big parking lot. When you pickup your timing chip, immediately place it around your ankle.

Live Results are provided during the race: <https://fansultraraces.org/LiveResults>. Your ankle bracelet is the link between you and the timing loops. There are timing loops around the course enabling us to provide live results for each lap of the Lake Course and each lap of the Short Course. When you complete a marathon on the Lake Course, we record your exact marathon time in the Live Results.

FANS Ultra Races uses a [USATF certified course MN19021RR](#) which contains both the Lake Course and the Short Course.

The Lake Course follows the asphalt pedestrian path around Normandale Lake in a counterclockwise direction. If you stay on an asphalt path and keep the lake on your left, you will not get lost. The starting line is adjusted so that completing 100 miles happens at the main timing tent. This makes the first lap of the Lake Course a little bit shorter than subsequent laps. The initial Lake Lap is 1.68 miles. Each Lake Lap thereafter will be 1.82 miles.

Please confirm your Lake Course lap count with your lap counter on each lap. It is better to correct lap counting problems early.

If you are stop doing Lake Course laps for any reason, please notify your lap counter at the main timing tent so that we know not to look for you somewhere on the course.

The Start Line is about ¼ mile clockwise around the lake from the medical tent (north, then east).

The Short Course is just north of the medical tent. In the last hour of each event (6/12/24 hour), the short course opens. You may use the short course if you want. It is nice to tell your lap counter at the main timing tent that you are going to switch to the short course, but it is not necessary.

- Simply continue counterclockwise around the lake, and you will encounter the middle of the short course. We count the distance from the lake loop lap line to the middle of the short course as your first short lap.
- Continue south 1/16th of a mile to a cone that marks the south end of the short laps. Turn around and come back to the middle to complete your second short lap.
- Continue north another 1/16th of a mile to another cone that marks the north end of the short laps. Turn around and come back to the middle to complete your third short lap.

- Repeat the previous 2 steps accumulating 1/8th of a mile each step until time runs out.

Weight Check every 4 hours: every 4 hours you must do a weight check at the medical tent. The medical staff compares your initial weight to your current weight. They use your trend in weight and their experience to recognize conditions early on – often hydration, electrolyte balance, or food absorption – and give advice on corrective action. If your weight change approaches 5% (gain or loss), the medical staff will make recommendations to reverse the trend. Please consider their suggestions carefully. If your weight changes by more than 7% (gain or loss), you will be pulled from the course by medical staff until they feel the situation has been corrected.

Award Presentation. See the “The Weekend at a Glance” for times and places.

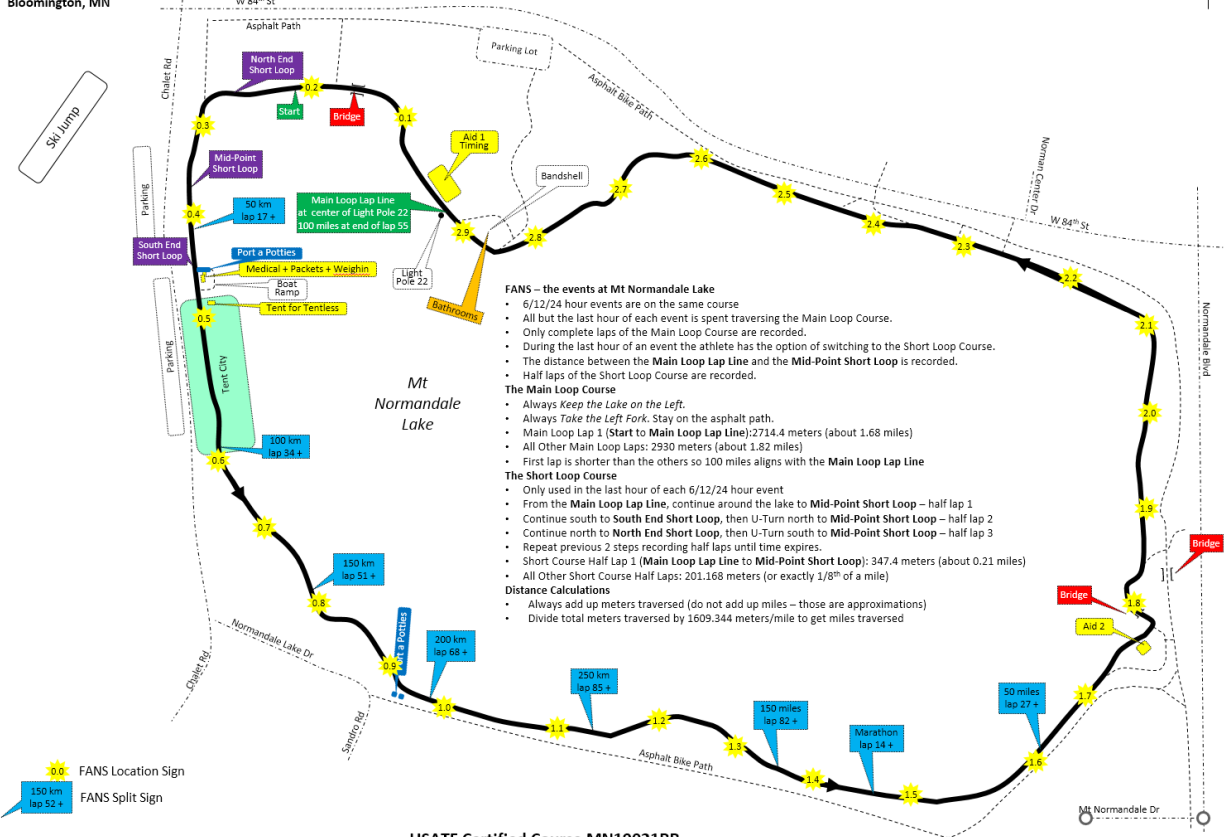
Sunday Breakfast begins at 8:30am on the Bandshell stage. All racers are welcome to attend.

Fundraising is not over at the start line! We encourage all racers, fundraisers, and otherwise to continue to drive donations to the FANS Scholarship Program on race day. Please post a link to your personal fundraising page, or to our general donation page <https://fansultraraces.org/Donate> . We find that sharing videos gets the best response, so if you are able to take a video (SAFELY!) during the race, please give that a try.

We love seeing our racers having a great day and enjoying some of the extra things that come along with the race such as enthusiastic cheering sections, fun camping sites, live music, and multiple photographers capturing the energy of race day. Please take it all in. 😊

Please contact us if you have any questions: info@fansultraraces.org

Course Maps and Lap Details



- FANS – the events at Mt Normandale Lake**
- 6/12/24 hour events are on the same course
 - All but the last hour of each event is spent traversing the Main Loop Course.
 - Only complete laps of the Main Loop Course are recorded.
 - During the last hour of an event the athlete has the option of switching to the Short Loop Course.
 - The distance between the **Main Loop Lap Line** and the **Mid-Point Short Loop** is recorded.
 - Half laps of the Short Loop Course are recorded.
- The Main Loop Course**
- Always *Keep the Lake on the Left*.
 - Always *Take the Left Fork*. Stay on the asphalt path.
 - Main Loop Lap 1 (**Start to Main Loop Lap Line**): 2714.4 meters (about 1.68 miles)
 - All Other Main Loop Laps: 2930 meters (about 1.82 miles)
 - First lap is shorter than the others so 100 miles aligns with the **Main Loop Lap Line**
- The Short Loop Course**
- Only used in the last hour of each 6/12/24 hour event
 - From the **Main Loop Lap Line**, continue around the lake to **Mid-Point Short Loop** – half lap 1
 - Continue south to **South End Short Loop**, then U-Turn north to **Mid-Point Short Loop** – half lap 2
 - Continue north to **North End Short Loop**, then U-Turn south to **Mid-Point Short Loop** – half lap 3
 - Repeat previous 2 steps recording half laps until time expires.
 - Short Course Half Lap 1 (**Main Loop Lap Line to Mid-Point Short Loop**): 347.4 meters (about 0.21 miles)
 - All Other Short Course Half Laps: 201.168 meters (or exactly 1/8th of a mile)
- Distance Calculations**
- Always add up meters traversed (do not add up miles – those are approximations)
 - Divide total meters traversed by 1609.344 meters/mile to get miles traversed

0.0 FANS Location Sign
150 km lap 52 + FANS Split Sign

USATF Certified Course MN19021RR
Measured by: Bruce Leasure 651-330-9355
Measured on: 19 May 2019

FANS Ultra Races 2023 -- Lake Loops

Laps	Km	Miles
1	2.7	1.7
2	5.6	3.5
3	8.6	5.3
4	11.5	7.1
5	14.4	9.0
6	17.4	10.8
7	20.3	12.6
8	23.2	14.4
9	26.2	16.3
10	29.1	18.1
11	32.0	19.9
12	34.9	21.7
13	37.9	23.5
14	40.8	25.4
15	43.7	27.2
16	46.7	29.0
17	49.6	30.8
18	52.5	32.6
19	55.5	34.5
20	58.4	36.3
21	61.3	38.1
22	64.2	39.9
23	67.2	41.7
24	70.1	43.6
25	73.0	45.4
26	76.0	47.2
27	78.9	49.0
28	81.8	50.8
29	84.8	52.7
30	87.7	54.5
31	90.6	56.3
32	93.5	58.1
33	96.5	59.9
34	99.4	61.8
35	102.3	63.6
36	105.3	65.4
37	108.2	67.2
38	111.1	69.0
39	114.1	70.9
40	117.0	72.7
41	119.9	74.5
42	122.8	76.3
43	125.8	78.2
44	128.7	80.0
45	131.6	81.8
46	134.6	83.6
47	137.5	85.4
48	140.4	87.3
49	143.4	89.1
50	146.3	90.9

← Marathon

← 50km

← 50miles

← 100km

Laps	Km	Miles
51	149.2	92.7
52	152.1	94.5
53	155.1	96.4
54	158.0	98.2
55	160.9	100.0
56	163.9	101.8
57	166.8	103.6
58	169.7	105.5
59	172.7	107.3
60	175.6	109.1
61	178.5	110.9
62	181.4	112.7
63	184.4	114.6
64	187.3	116.4
65	190.2	118.2
66	193.2	120.0
67	196.1	121.8
68	199.0	123.7
69	202.0	125.5
70	204.9	127.3
71	207.8	129.1
72	210.7	131.0
73	213.7	132.8
74	216.6	134.6
75	219.5	136.4
76	222.5	138.2
77	225.4	140.1
78	228.3	141.9
79	231.3	143.7
80	234.2	145.5
81	237.1	147.3
82	240.0	149.2
83	243.0	151.0
84	245.9	152.8
85	248.8	154.6
86	251.8	156.4
87	254.7	158.3
88	257.6	160.1
89	260.6	161.9
90	263.5	163.7
91	266.4	165.5
92	269.3	167.4
93	272.3	169.2
94	275.2	171.0
95	278.1	172.8
96	281.1	174.6
97	284.0	176.5
98	286.9	178.3
99	289.9	180.1
100	292.8	181.9

← 150km

← 100miles

← 200km

← 150miles

← 250km

FANS Ultra Races 2023 -- Short Laps

Short Laps	Km	Miles
1	0.35	0.22
2	0.55	0.34
3	0.75	0.47
4	0.95	0.59
5	1.15	0.72
6	1.35	0.84
7	1.55	0.97
8	1.76	1.09
9	1.96	1.22
10	2.16	1.34
11	2.36	1.47
12	2.56	1.59
13	2.76	1.72
14	2.96	1.84
15	3.16	1.97
16	3.36	2.09
17	3.57	2.22
18	3.77	2.34
19	3.97	2.47
20	4.17	2.59
21	4.37	2.72
22	4.57	2.84
23	4.77	2.97
24	4.97	3.09
25	5.18	3.22

Short Laps	Km	Miles
26	5.38	3.34
27	5.58	3.47
28	5.78	3.59
29	5.98	3.72
30	6.18	3.84
31	6.38	3.97
32	6.58	4.09
33	6.78	4.22
34	6.99	4.34
35	7.19	4.47
36	7.39	4.59
37	7.59	4.72
38	7.79	4.84
39	7.99	4.97
40	8.19	5.09
41	8.39	5.22
42	8.60	5.34
43	8.80	5.47
44	9.00	5.59
45	9.20	5.72
46	9.40	5.84
47	9.60	5.97
48	9.80	6.09
49	10.00	6.22
50	10.20	6.34

Short Laps	Km	Miles
51	10.41	6.47
52	10.61	6.59
53	10.81	6.72
54	11.01	6.84
55	11.21	6.97
56	11.41	7.09
57	11.61	7.22
58	11.81	7.34
59	12.02	7.47
60	12.22	7.59
61	12.42	7.72
62	12.62	7.84
63	12.82	7.97
64	13.02	8.09
65	13.22	8.22
66	13.42	8.34
67	13.62	8.47
68	13.83	8.59
69	14.03	8.72
70	14.23	8.84
71	14.43	8.97
72	14.63	9.09
73	14.83	9.22
74	15.03	9.34
75	15.23	9.47

Lap 1 gets you here. Each subsequent half lap is 1/8th of a mile.

How Things Work

The Lake Loop Course begins at the Start (green rectangle on the map). It's between the big parking lots and the Aid 1 & Timing tent. Keep an eye out for the sign when you first walk up to the timing tent on race morning. This position of the start lets the 100-mile split to be located at the main timing and lap counting area near the bandshell after completing 55 Lake Loop Laps. The initial long lap is 1.68 miles. Each long lap thereafter will be 1.82 miles.

Race direction is counterclockwise (keep the lake on the left). At path junctures in the park, always stay on the path closest to the lake. The FANS course will be marked with directional arrows and/or cones. Additionally, there are course location signs every 100 meters.

The course is on an asphalt path and has about 25 feet of elevation gain/loss per mile. Most elevation change is subtle, but there are a few sharper inclines and declines, so be prepared for that especially at night.

The park will be open to the public, and you should come to the race expecting to encounter some pedestrian traffic, dog walkers, and geese. Please remember that we are visitors at this park and do your part to make this Day at the Lake a pleasure for everyone.

This is an urban event with some city-related background light, but a lighting system with sufficient batteries is required for nighttime, as most of the course is not lit. Lanterns will be placed on the ground in the darkest areas, but please be self-reliant and plan ahead for nighttime visibility.

We use a dual entry timing system, chip and manual lap counting. Chip timing provides the ability for live results to be posted online during the race: <https://fansultraraces.org/LiveResults>

Be mindful of chip reader locations and make effort to approach, cross, and clear the line by at least 15 feet before stopping. Never cross backwards. A chip reader located at the Lake Lap line is just before the timing tent at light pole 22. Another chip reader is located at the short lap line (the midpoint of the short lap course). There is an additional chip reader at the marathon split point.

The manual lap counting for the Lake Laps is done in the timing tent by our amazing lap counter volunteers. As you approach the tent, the lap counters will need to see your bib number clearly. Please make sure your bib is on the front of your body and will not be obstructed by clothing. If on your shorts or pants, attach it to your right leg, facing forward.

With each lap, make contact with your lap counter and confirm the number of completed laps. If at any time you think that there has been an error, tell your lap counter what is wrong, and they will follow up on the issue while you are doing your next lap. The key is good communication!

During the final hour of all races, the short course will be available to you. The short course is a 1/8th mile segment on the west side of the lake, north of the boat launch. On either end of the short course there is a cone where you turn around, and at the midpoint there is chip reader. Mind the chip reader and pass over it cleanly without stopping. Please notify your Lake Loop lap counter when you decide to move to the short course.

The manual lap counting for Short Laps is done at the midpoint of the short lap course. Your bib number is recorded when you pass that point in either direction. Please make sure your bib is on the front of your body and will not be obstructed by clothing. If on your shorts or pants, attach it to your right leg, facing forward.

The 6-hour competitors may begin this short course at 1:00 pm Saturday, the 12-hour competitors at 7:00 pm Saturday, and the 24-hour competitors at 7:00 am Sunday. Most racers choose to do long laps

until it is no longer feasible to complete another long lap before the race is done. Reminder, there is no credit for partial long laps – if you aren't sure, move on to the short course.

Any participants who arrive late for the start will be directed to start the race at the same location as the on-time start. Check in at the medical tent to get your Packet, do your initial weigh-in, and get your timing chip. The time lost by starting late cannot be made up.

Weigh-in before the race is required. The medical tent is very close to the parking lot, so we recommend doing it first thing when arriving or just after you set up your camp. If you miss weigh in before the race starts, you need to stop right away after starting the race to get a weight. Our medical volunteers will be looking for you!

The primary aid station (Aid 1) will be located near the bandshell and shares the large tent with Timing. Aid #1 will have an array of beverages and food that will vary with the time of the day: Gatorade, defizzed pop, water, fruit, sweet and salty snacks, and sandwiches, and more. During the evening, we'll have pizza to lift your spirits and soup to nourish you overnight.

The secondary aid station (AID 2) is located near the waterfall in the southeast side of the lake and has a limited selection of drinks. Feel free to take a moment to enjoy the falls from time to time. The course has generous shaded sections along with stretches of unshaded parts.

Medical support will be available throughout the race at the Medical Tent on the west side of the lake at the Boat Launch to assist in problems typically associated with ultras.

The FANS race puts safety ahead of records. After dark, you should consider pairing up with another runner/walker or asking a friend to accompany you. The path is not lit and tired athletes can be vulnerable; a lighting system is required.

If a situation arises that make you feel less than safe, let the race directors, the medical director, any lap-counting or aid station volunteer know immediately. Everything possible will be done to correct the situation.

Weather: The normal high and low temperatures for race weekend are 78° and 59°F. (record high: 94° in 1955, record low: 42° in 1934; sunrise is 6:32 am, sunset 7:58 pm). In the 30+ years of the in-person FANS race we've had every kind of unpleasant weather except snow. Even a perfect Minnesota summer evening can quickly turn cold and threatening when one's body is depleted of most of its energy. Eat and drink regularly and be ready for any kind of weather. Hypothermia is not fun, and let's face it, it's *Minnesota*.

Thunder and lightning represent an immediate life-threatening situation to racers, volunteers, and every person at the lake. The Race Directors or an appointee have the authority to suspend or even call off the race for the safety of everyone involved.

If advised to take shelter, do so immediately in one of the following locations.

- Bandshell near the timing tent (preferred location)
- Your vehicle (next best)
- Your tent (last option, not the best)

All announcements pertaining to the resumption or cancellation of the race will be made at the Lake Loop Lap counting tent. The race will be restarted based on information given at that lap counting tent. If the race is restarted, it will begin at the lap counting tent in a counterclockwise direction. Regardless of the length of the suspension, the end time of the race will not change.

Camping is allowed only in the area labeled Tent City on the map between Saturday at 6:00AM and Sunday at 8:15am. Please take down your camp immediately following the race and before breakfast

and awards. Friday night camping is not allowed. TENT STAKES MUST BE PRESSED IN BY HAND AND MUST BE AT LEAST 8 FEET FROM THE SIDEWALK. The park has an irrigation system and we will do no harm if this guideline is followed.

This is a public park and our race area will not be guarded or secured, so we suggest you do not leave valuables in your tent or stowed race gear.

When setting up your tent, please orient your space so it is deep rather than wide. The space along the path is very limited.

NO CAMPFIRES are permitted, but camping stoves or small portable grills are OK. Please be a good Scout and leave your campsite cleaner than it was when you set it up. Thanks!

A “Tent for the Tentless” will be available near the boat launch (near medical) where you may place your belongings if you so choose. We do not want people crossing the road any more than necessary, so please don’t use your car as a home base – use the Tent for the Tentless instead.

Who will get the Best Campsite award this year?!?

We need to fill around 150 volunteer slots. If a family member or friend is coming with you and would be available to pitch in, let us know by e-mail or phone before the race or even by contacting someone at the volunteer check-in desk on race day. We *always* need help on the fourth shift, 1:30 am to 8:00 am. Or better yet, please visit <https://www.fansultraraces.org/Volunteer/> to sign up in advance! All volunteers receive a T-shirt, and prize drawings for a variety of gift certificates and other cool stuff are held each hour.

Awards and Celebrations

Awards Ceremonies are held shortly after the conclusion of each race. The 6-hour and 12-hour awards are presented between the Medical tent and Tent City. The 24-hour awards are presented at the post-race breakfast on Sunday morning.

The post-race breakfast is held at the Bandshell beginning at 8:30am-9:30am on Sunday. All racers, families, crew, and volunteers are invited at no charge. People have asked if we charge for breakfast and we’ve always had a policy that this is a thank-you to our participants and their friends. However, if someone wishes to make a donation to help defray expenses (and increase the amount given to the scholarship fund), we sure won’t say no! <https://fansultraraces.org/Donate>

We will celebrate the 2023 FANS scholars for whom the race is held. We encourage everyone to come to this post-race event to celebrate the accomplishments of every athlete. Knowing that *everyone* will be tired, we will get started promptly and move along quickly. There will be no long-winded speeches. We promise!

FANS Awards

For the 24-hour event, awards will be given to the top five male runners, top five female runners and the top three walkers regardless of age or gender.

For the 12-hour race, awards will be given to the top three male runners, top three female runners, and the top walker regardless of age or gender.

For the 6-hour race, awards will be given to the top male and female runners.

In their packets, all participants receive medals for mounting mileage tiles (sent after the race, obviously) and T-shirts.

Director's Awards are given to those adding something special to the race weekend.

Special shirts will be awarded to solo runners who complete 100 or more miles in the 24-hour event or 100 km or more in the 12-hour event. Those reaching 500, 1,000, 1,500, 2,000, 2,500 or 3,000 cumulative miles in the FANS race will receive truly special commemorations.

RRCA MINNESOTA STATE CHAMPIONSHIP 24 HOUR AWARDS

All 24-Hour racers are eligible for RRCA Minnesota State Championship Awards, which includes a RRCA State Championship medal. A total of 8 Awards will be issued for the top male and female in each category: overall, 40+, 50+, and 60+. Only one RRCA award per person.

RISK FACTORS AND WHAT TO WATCH OUT FOR AS A RACER

The FANS Ultra Races is a tough event (physically and mentally), and participation presents many medical risks, several of which can be extremely serious or even fatal. Participate in this event at your own risk. See your physician for a physical exam (including stress EKG) before the run. You must train for ultras and should be knowledgeable about stress factors and effects.

Weight loss will be one of the most important physiological criteria that medical personnel will be evaluating during the race. A 3% body weight loss indicates serious dehydration may be imminent. A 5% body weight loss indicates depletion of body fluids, with consequent gastro-intestinal and muscular skeletal dysfunction, and should be a sign to the racer to slow down and take more fluids. If you lose 5% or more of your body weight, you will be required to stop and drink fluids until your weight loss is less than 5%. Upon re-entering the race, you will be closely watched. A 7% weight loss could be grounds for immediate withdrawal.

It is important that you recognize the potential physical and mental stress that may evolve during participation in this race. You may be subject to extreme heat and cold, hypothermia, dehydration, hypoglycemia, disorientation, hyponatremia, and total mental and physical exhaustion. You must understand your own limitations, continuously monitor yourself, and know where to draw the line. Adequate physical and mental conditioning prior to the race is mandatory! **Be careful and be responsible.** The ultimate goal, after all, is to become an Old Runner. Some of the risks involved are listed below.

- **Injuries from Falling** can occur from running at the edge of the asphalt path or bumping into someone, or tripping over a dog leash. The course will be shared throughout the race with pedestrians who may not even be aware there is a race going on. Do more than your share to avoid collisions. Exercise more care at night.
- **Renal Shutdown** (kidney failure) can cause permanent impairment of kidney function and even death.
- **Heat Stroke** can cause death, kidney failure, brain damage. Be aware of the symptoms of impending heat illnesses which are nausea, vomiting, headache, dizziness, fainting, irritability, lassitude, weakness and rapid heartbeat. Preceding these symptoms may be a decrease in sweating and the appearance of goose bumps on the skin, especially on the chest. **Use of some drugs can increase the risk of heat stroke.** The faster the pace, the more heat is produced. Train in the heat, wear light-colored clothing and maintain a proper pace. If it is hot on race day, adjust your goals accordingly.
- **Effects of Hypothermia (cold)** can begin as the evening temperature dips, sometimes into the 50's. This, combined with rain and depleted energy reserves after 12+ hours, makes hypothermia a potentially serious problem. The major risk is a lowered core body temperature which may lead to

confusion and lack of physical coordination. Have access to warm clothes such as sweatshirt, pants, hat, gloves, etc.

- **Dehydration** can lead to many problems, so be aware of your fluid intake and don't rely solely on water. Depletion of salts and electrolytes can lower the digestive system's ability to absorb liquids. Eating, especially salty foods, is part of staying hydrated. FANS will provide plenty of salt at Aid #1 to help you avoid this problem. We recommend you read the new fluid-replacement guidelines for long distance runners issued in April, 2003 by USA Track & Field (USATF). Especially for those completing a marathon in more than four hours, USATF recommends consuming 100% of fluids lost due to sweat while racing, rather than drinking as much as possible. Read the guidelines and related information at <https://www.usada.org/athletes/substances/nutrition/fluids-and-hydration/>
- **Hyponatremia:** Low sodium levels (hyponatremia) in ultrarunners have been associated with severe illness requiring hospitalization. It is important to use fluids containing electrolytes to replace the water and salts lost during exercise. DRINKING ONLY WATER IS NOT ADVISABLE, as water intoxication and possibly death may result. This problem may, in fact, worsen after the race, as the non-electrolyte-containing fluid which has been accumulating in the stomach is absorbed. Potassium and calcium replacement is also important, although these levels change less with fluid loss and replenishment. The best way to achieve proper electrolyte and fluid balance is to hydrate with fluids containing proper amounts of electrolytes. Potassium, while present in many electrolyte-replacement solutions, may also be found in fruit, such as bananas or oranges. Beer or other alcoholic beverages should not be taken at any time during the race. Electrolyte-containing fluids should be continued after the race until the gastrointestinal tract is fully functional, which may take several hours. Once the gut is working and adequate hydration has occurred, the normal balance of thirst, hunger, digestion and kidney filtration will maintain the proper balance of fluids and electrolytes.

LISTEN TO YOUR BODY, ENJOY YOURSELF, THE SCENERY and EACH OTHER! HAVE A SAFE RACE!